

YESLER TERRACE REDEVELOPMENT



April 2011

prepared by the
Seattle Housing Authority and
City of Seattle Human Services Department



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April 12, 2011

Re: Yesler Terrace Redevelopment Final Environmental Impact Statement (FEIS)

Dear FEIS Recipient:

Attached, please find a copy of the Final Environmental Impact Statement (FEIS) for the proposed Yesler Terrace Redevelopment, issued by the Seattle Housing Authority (SHA) and the City of Seattle Human Services Department (City HSD) on behalf of the U.S. Department of Housing & Urban Development (HUD). The City HSD serves as Responsible Entity for proposal review under the National Environmental Policy Act (NEPA); SHA serves as the Lead Agency for review under the Washington State Environmental Policy Act (SEPA). The FEIS is a joint NEPA-SEPA document. This letter provides information about the FEIS and the opportunity for public review of the document.

The FEIS addresses the potential environmental impacts of the proposed redevelopment of Yesler Terrace to a mixed use residential community on an approximately 39 acre area on the southern slope of the First Hill neighborhood in Seattle, Washington. Five redevelopment alternatives consisting of a wide range of densities, heights, and uses are evaluated by the draft Environmental Impact Statement (DEIS). These alternatives included a range of approximately 1,500 to 5,000 residential units, as well as a range of no new office space to 1.2 million square feet of new office space. The DEIS also evaluated a no action alternative that presumes continuation of existing conditions at Yesler Terrace. Based upon information provided in the DEIS, public and agency input, and additional analysis, a Preferred Alternative was developed that represents a further refinement of the DEIS Alternatives, and includes additional site area. The Preferred Alternative includes approximately 5,000 housing units; 900,000 square feet (SF) of office/hotel use; 88,000 SF of neighborhood commercial; 65,000 SF of neighborhood services (including the existing Yesler Terrace Community Center); 6.5 acres of public open space; 9.4 acres of semi-private and private open space; and 5,100 parking spaces within or under buildings.

The following elements of the environment are analyzed for the Preferred Alternative by the FEIS: earth; air quality; water; plants and animals; climate change and greenhouse gas emissions; environmental health; noise; land use; relationship to plans and policies; aesthetics, light and glare, and shadows; historic resources; cultural resources; transportation; utilities; public services; socioeconomics; and environmental justice. For each of these elements under the Preferred Alternative, the FEIS identifies probable significant environmental impacts, measures intended to mitigate these impacts, and any significant unavoidable adverse impacts that may be anticipated. The FEIS also responds to comments received on the DEIS from agencies, organizations, and interested parties.

In general terms, some of the key environmental issues and options facing decision makers are:

- Land Use: determining the appropriate types of land use for the site, and where specific land uses should be located on the site;
- Aesthetics: determining the appropriate heights and locations of buildings for proposed redevelopment alternatives, and the design measures that address height, bulk, and scale;
- Transportation: determining whether the existing street layout should be retained for proposed redevelopment alternatives or whether certain internal streets should be eliminated and new streets dedicated. The goal of a new street layout would be to improve connections between Yesler Terrace and the surrounding community.; and
- Socioeconomic: determining the appropriate mitigation measures to address potential displacement. Residents and other tenants would be required to relocate under proposed redevelopment alternatives. Depending on the phasing of construction, some residents and tenants could potentially move from their existing locations into new locations on the site. However, others could be displaced from the site until construction is completed, and some could choose not to return to the redeveloped community.

SHA is the project proponent. SHA proposes that future redevelopment of the portion of the Yesler Terrace site west of Boren Avenue be designated by the City of Seattle as a Planned Action pursuant to SEPA. It is anticipated that the City will adopt a Yesler Terrace Planned Action Ordinance (PAO) in response to completion of this FEIS. The PAO, if adopted, will reflect a decision that adequate environmental review has been completed for the identified redevelopment elements, and that further environmental review under SEPA will not be necessary if it is determined that future development is consistent with the PAO.

Copies of the FEIS, or Notice of its Availability, were distributed to those identified in the distribution list of the FEIS (Chapter 8). The FEIS can also be reviewed at the:

Seattle Public Library - Central Library

Documents and Information Technologies divisions
1000 Fourth Avenue
Seattle, WA

Seattle Public Library - Douglas Truth Branch

2300 E. Yesler Way
Seattle, WA

Seattle Public Library - International District/Chinatown Branch

713 Eight Avenue S.
Seattle, WA

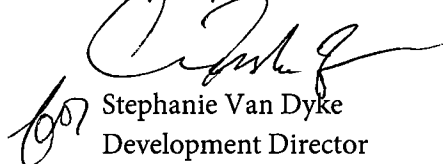
Seattle Public Library - Capitol Hill Branch
425 Harvard Avenue E.
Seattle, WA

The document may also be reviewed, and downloaded, online at:
www.seattlehousing.org/redevelopment/yesler-terrace. A limited number of printed copies may be purchased at the Seattle Housing Authority office at 120 Sixth Ave N., Seattle, WA 98109-1028. To obtain a copy of the FEIS in electronic format, please contact Ryan Moore of the Seattle Housing Authority at (206) 615-3548 or rmoore@seattlehousing.org.

Under SEPA, following issuance of the FEIS it is anticipated that the SHA Board of Commissioners will adopt a resolution approving a Development Plan for Yesler Terrace. Prior to Board action, the public is welcome to comment on the proposed project by mailing, faxing, or e-mailing comments to: Stephanie Van Dyke, Development Director of the Seattle Housing Authority, YTEISComments@seattlehousing.org, P.O. Box 19028, Seattle, WA 98109-1028, (f) 206-615-3539.

Thank you for your interest and participation in this environmental review.

Very truly yours,


Stephanie Van Dyke
Development Director

Enclosure

FACT SHEET

PROJECT TITLE	Yesler Terrace Redevelopment
JOINT SPONSORS	Seattle Housing Authority (SHA), and City of Seattle Human Services Department (HSD) on behalf of the U.S. Department of Housing and Urban Development (HUD)
PROPOSAL	Redevelopment of Yesler Terrace to create a mixed-income, mixed use community to better serve existing and future residents.
LOCATION	The Yesler Terrace site is located in the City of Seattle's First Hill and Central Area Neighborhoods. The site is generally bounded by Interstate 5 (I-5) on the west; Alder Street and E Fir Street on the north, 14 th Avenue on the east and S Main Street on the south. A 36.6-acre site area was analyzed in the DEIS. The site area was expanded in this FEIS to include an approximately 2.3-acre area east of 12 th Avenue (referred to herein as the East of 12 th Sector).
DRAFT EIS	<p>A Draft Environmental Impact Statement (DEIS) was issued in October 2010 that addressed the probable significant adverse impacts that could occur as a result of the Proposed Actions (as identified on page ii, below).</p> <p>For purposes of environmental review, five redevelopment alternatives (Alternatives 1, 1A, 2, 3 and 4) and a No Action Alternative were analyzed in the DEIS.</p> <p>Alternatives 1, 1A, 2 and 3 represent a range of densities and intensities of uses that the site could accommodate under a new zoning designation for the area west of Boren Avenue. Under Alternative 4, the existing City of Seattle Comprehensive Plan and Lowrise-3 zoning designation would govern future development of the area west of Boren Avenue. For the area east of Boren Avenue, all five of the redevelopment alternatives assume property redevelopment under existing zoning designations.</p> <p>The No Action Alternative represents a continuation of the site in its present configuration and condition.</p> <p>The range of DEIS alternatives created an envelope of potential development for analysis of probable significant environmental impacts under the State Environmental Policy Act (SEPA) and the National Environmental Policy Act (NEPA).</p>

FINAL EIS

Based on the information provided in the DEIS, public input, and additional analysis, SHA has developed a Preferred Alternative for analysis in this Final Environmental Impact Statement (FEIS). The Preferred Alternative represents a further refinement of DEIS Alternatives 1-4 presented in the October 2010 DEIS. The Preferred Alternative is intended to be a high density, sustainable development that features a mix of uses that are complimentary to the existing First Hill and Central Area neighborhoods and the adjacent downtown district; a street network that integrates and connects the site to the surrounding neighborhoods; and, a system of parks and open space. The level of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for Alternatives 1-4 in the DEIS. Redevelopment under the Preferred Alternative would primarily incorporate elements of DEIS Alternatives 2 and 3.

As described in Section 2.3 of the Draft EIS, the EIS fulfills requirements for a Planned Action environmental review process under SEPA. Under that process, environmental review is conducted at the planning stage, rather than being conducted in connection with individual permit applications. If the impacts of the development included in a permit application are within the range of impacts analyzed in the EIS, and the development adheres to the mitigation measures required by the Planned Action Ordinance, then further environmental review is not required for the permit application.

The Draft EIS and Final EIS together constitute the EIS for the proposal.

PROPOSED ACTIONS

The EIS analyzes the following Proposed Actions:

- Decision by SHA on which alternative to pursue and implement;
- Possible City of Seattle Comprehensive Plan changes;
- Zoning changes that would be necessary in order to accommodate the mixed use redevelopment, including a Land Use Code text amendment and a change to the Official Land Use Map (legislative rezone);
- Planned Action Ordinance adoption by City of Seattle;
- Possible Development Agreement between the City of Seattle and SHA;
- Preliminary and Final Plat approvals by City of Seattle;
- Street Vacation and dedication approvals by City of Seattle;

- Future local, state and federal permits and approvals that would be required for construction and development of the Yesler Terrace community;
- Release of Funds by HUD; and,
- Construction and operation of buildings and facilities within the Yesler Terrace community.

It is anticipated that redevelopment of Yesler Terrace would take 15 to 20 years to complete.

RESPONSIBLE ENTITY (NEPA)	City of Seattle HSD
LEAD AGENCY (SEPA)	Seattle Housing Authority
NEPA CERTIFYING OFFICER	Dannette R. Smith Director, City of Seattle HSD 700 Fifth Avenue, Suite 5800 P.O. Box 34215 Seattle, WA 98124-4215
SEPA RESPONSIBLE OFFICIAL	Stephanie Van Dyke Development Director Seattle Housing Authority 120 Sixth Avenue N. P.O. Box 19028 Seattle, WA 98109-1028
CONTACT PERSON FOR FINAL EIS	Anne Fiske Zuniga Sr. Development Program Manager, Yesler Terrace Seattle Housing Authority 120 Sixth Avenue N P.O. Box 19028 Seattle, WA 98109-1028 Kristen Larson Project Funding and Agreements Coordinator City of Seattle HSD 700 5 th Avenue, Suite 5800 P.O. Box 34215 Seattle, WA 98124-4215
FINAL ACTION	Seattle Housing Authority - Adoption of a Development Plan by SHA Board of Commissioners City of Seattle HSD - Request Release of Funds from HUD with Environmental Certification. City of Seattle - It is anticipated that the Yesler Terrace Redevelopment EIS will be used by the City of Seattle in its review of the Proposed Actions and applications for

permits and approvals for the Yesler Terrace Redevelopment.

PERMITS AND APPROVALS

Preliminary investigation indicates that the following permits and/or approvals could be required for the Proposed Actions. Additional permits/approvals may be identified during the review process associated with future implementing development projects.

Agencies with Jurisdiction

- ***Federal***

- City of Seattle HSD Record of Decision (ROD), on behalf of HUD
- City of Seattle HSD Request for Release of Funds from HUD, with environmental certification
- HUD Release of Property
- HUD Noise Waiver
- NHPA Section 106 Review
- Notice of Intent to Remove Asbestos
- Effect Determination under the Endangered Species Act from US FWS and NOAA-NMFS
- US Army Corps Of Engineers Jurisdictional Determination and permitting (wetlands)
- Section 404 Permit (if necessary)
- NPDES Construction General Permit

- ***State of Washington***

- Dept. of Ecology Construction Stormwater General Permit
- Dept. of Ecology Coastal Zone Management Consistency Review (possible)
- Dept. of Ecology Underground Storage Tank Removal

- ***City of Seattle***

- **Seattle City Council**

- Planned Action Ordinance
- Possible Comprehensive Plan Amendment
- Land Use Code Text Amendment for New Zone
- Amendment to Official Land Use Map (Legislative Rezone)
- Street Vacation and Dedication Approvals
- Final Plat Approval
- Possible Development Agreement
- Landmark Designation Ordinance for the Steam Plant

- Seattle Hearing Examiner
 - Preliminary Plat Approval

Department of Planning and Development

- Permits/approvals associated with implementation of individual projects, including: Master Use Permits
- Grading Permits
- Shoring Permits
- Building Permits
- Electrical Permits
- Mechanical Permits
- Occupancy Permits
- Demolition Permits
- Comprehensive Drainage Control Plan, Inspection and Maintenance Schedule, and Construction Stormwater Control Plan Approvals
- Design Review Board Approval
- Implementation of the Planned Action Ordinance for Individual Projects
- Sign Permit(s)
- Environmental Critical Areas Review/Approval

Other City Departments

- Street Use Permits
- Utility Relocations, Licenses and Permits
- Landmarks Preservation Board Review for alterations to the exterior of the Steam Plant, as required by the Incentives and Controls Agreement
- Business Licenses

Seattle-King County Department of Health

- Plumbing Permits

Puget Sound Clean Air Agency

- Asbestos/Demolition Notification Permits
- Notice of Abatements

**FINAL EIS AUTHORS AND
PRINCIPAL CONTRIBUTORS**

The *Yesler Terrace Redevelopment Final Environmental Impact Statement* has been prepared under the direction of the Seattle Housing Authority and City of Seattle HSD. Research and analysis were provided by the following consulting firms:

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Seattle Housing Authority
120 Sixth Avenue N
P.O. Box 19028
Seattle, WA 98109-1028

**DATE OF FINAL EIS
ISSUANCE**

April 13, 2011

**AVAILABILITY OF THE
DRAFT EIS AND FINAL EIS**

This FEIS, or Notice of its Availability, has been distributed to agencies, organizations and individuals noted on the Distribution List contained in Chapter 8 of this document. Copies of this FEIS, along with the DEIS, are available for review at the Seattle Housing Authority and the City of Seattle HSD (see above) and at the following Seattle Public libraries:

- Downtown Central Library (1000 Fourth Ave.)
- Douglas Truth Branch (2300 E Yesler Way)
- International District / Chinatown Branch (713 Eighth Avenue S)
- Capitol Hill Branch (425 Harvard Avenue E)

Additional copies may be purchased at the Seattle Housing Authority Central Office for the cost of reproduction.

The document may also be reviewed online at:
www.seattlehousing.org/redevelopment/yesler-terrace

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Chapter 1 - SUMMARY

CHAPTER 1

SUMMARY

1.1 Content and Organization

This document is the Final Environmental Impact Statement (FEIS) for the Yesler Terrace Redevelopment Project. The FEIS describes and assesses the identified environmental impacts of the Preferred Alternative following consideration of public and agency comments on the Draft Environmental Impact Statement (DEIS). This FEIS also includes updates to the analysis of the DEIS alternatives, and all substantive comments received on the DEIS and responses to those comments.

This FEIS, together with the DEIS, comprehensively analyzes the probable significant environmental impacts of the Proposed Actions. The FEIS and the DEIS together constitute the EIS on the proposal.

This FEIS consists of one volume and is divided into nine chapters. Technical appendices are provided on a CD at the back of this document and are also available online on the Seattle Housing Authority's (SHA) website (www.seattlehousing.org/redevelopment/yesler-terrace/eis/).

- **Chapter 1** presents a summary of the environmental process, changes since the DEIS issuance, and the impacts, mitigation measures, and significant unavoidable adverse impacts of the Preferred Alternative.
- **Chapter 2** presents the Preferred Alternative and compares its key features to the DEIS Alternatives.
- **Chapter 3** analyzes the impacts, mitigation measures, and significant unavoidable adverse impacts from the Preferred Alternative for each element of the environment.
- **Chapter 4** provides an update to the analysis of the DEIS Alternatives based on new information that was not available at the time of DEIS issuance.
- **Chapter 5** provides general responses to comments made in three Key Topic Areas: Replacement of Existing Units and Tenant Relocation, Transportation and Parking, and Indirect Land Use Impacts.
- **Chapter 6** provides a copy of each comment letter received on the DEIS, as well as responses to each comment.
- **Chapter 7** contains an Errata Sheet providing corrections to the DEIS, including typographical errors, minor changes and clarifications.
- **Chapter 8** contains the FEIS Distribution List.
- **Chapter 9** presents the FEIS List of Preparers.

1.2 Introduction

This chapter provides a summary of the Yesler Terrace FEIS. It briefly describes the Preferred Alternative and provides an overview of the probable significant environmental impacts, mitigation measures and significant unavoidable adverse impacts of the Preferred Alternative. See **FEIS Chapter 2** for a more detailed description of the Preferred Alternative, and **FEIS Chapter 3** for a detailed presentation of probable significant impacts, mitigation measures and significant unavoidable adverse impacts associated with the Preferred Alternative.

The Yesler Terrace Redevelopment EIS addresses the probable significant adverse impacts that could occur as a result of the following Proposed Actions:

- Decision by SHA on which alternative to pursue and implement;
- Possible City of Seattle Comprehensive Plan changes;
- Zoning changes that would be necessary in order to accommodate the mixed use redevelopment, including a Land Use Code text amendment and a change to the Official Land Use Map (legislative rezone);
- Planned Action Ordinance adoption by City of Seattle;
- Possible Development Agreement between the City of Seattle and SHA;
- Preliminary and Final Plat approvals by City of Seattle;
- Street Vacation and dedication approvals by City of Seattle;
- Future local, state and federal permits and approvals that would be required for construction and development of the Yesler Terrace community;
- Release of Funds by HUD; and,
- Construction and operation of buildings and facilities within the Yesler Terrace community.

At the time the DEIS was prepared and issued, a Preferred Alternative had not been determined. Accordingly, a range of alternatives were addressed in the DEIS that represented an overall envelope of potential redevelopment that the site could accommodate (Alternatives 1-4 in the DEIS) and a No Action Alternative. The DEIS alternatives functioned to provide representative levels of redevelopment that could be achieved on the site, and are summarized in Chapter 2 of the DEIS.

Based on the information provided in the DEIS, ongoing public and agency input, additional analysis and master planning, and work by SHA and the City, as well as other agencies, groups and stakeholders, SHA and the City of Seattle's Human Services Department (HSD) have developed a proposal for the Preferred Alternative which is analyzed in this FEIS. The mix of uses and level of redevelopment called for in the Preferred Alternative are within the range of redevelopment addressed under DEIS Alternatives 1 - 4. This Preferred Alternative would be consistent with the applicant's objectives as well as the purpose and need of the proposal, as described below (and in Section 2.4 of the DEIS).

Objectives of the Proposal

The Yesler Terrace planning process has included extensive public input and participation, culminating in a set of guiding principles, planning concepts, definitions and implementation strategies. These principles, concepts, definitions, and strategies, used together with other relevant documents such as local and regional plans and policies, serve as a foundation for the objectives identified below. For purposes of SEPA (WAC 197-11-440) the following are the primary objectives for the Proposal.

- To redevelop an approximately 38.9-acre public housing site into a higher density, mixed use (including residential, office, hotel, neighborhood commercial, and neighborhood service uses), mixed income neighborhood based on a range of site conditions and factors, including environmental, land use, economic and market considerations and future redevelopment opportunities;
- Create a vibrant, diverse and environmentally sustainable community that integrates uses, activities and incomes and enhances the livability of the Seattle community;
- Preserve and expand a broad spectrum of low income housing opportunities, including the replacement of the existing 561 low income housing units;
- Support and encourage the transition to self-sufficiency of low income residents by providing economic opportunities throughout the long-term redevelopment process;
- Develop low income housing adjacent to the Downtown Seattle core and other major employers and institutions;
- Reconnect the Yesler Terrace community with surrounding neighborhoods, including First Hill, Squire Park and Little Saigon, with an improved street and pedestrian network;
- Foster positive interactions throughout Yesler Terrace and the community at large, regardless of social, economic or cultural distinctions by employing creative urban design and architectural techniques, while avoiding segregation by income, race or other differences, and providing access to public amenities;
- Take advantage of the close proximity to Downtown Seattle by encouraging pedestrian, mass transit and other non-motorized transportation systems;
- In conjunction with the City of Seattle, design and implement an integrated, economically and environmentally responsible infrastructure and public amenity network that will support the community for the long-term and stimulate private investment;
- Incorporate sustainable development practices as part of the design, construction and operation of the community;
- Enhance the community's economic vitality by creating an environment that is attractive to a wide range of employment opportunities and businesses;
- Ensure that the redevelopment is both financially feasible and financially sustainable;
- Continue to coordinate with federal, state and local agencies, tribes, organizations, institutions, residents, community stakeholders, the private sector and others to facilitate redevelopment planning and implementation; and,
- Work cooperatively with the City of Seattle to adopt the necessary land use approvals, including amending the Seattle Land Use Code and applying a new zone designation to Yesler Terrace, to provide for redevelopment of the site with residential, office, hotel, retail, and community service uses, and phased development with flexibility to respond to market factors over time. Land use approvals may also include amendments to portions of the Seattle Comprehensive Plan.

Purpose and Need of the Proposal

Purpose

Based on SHA's mission, the purpose of the Yesler Terrace Redevelopment Proposal is to redevelop the Yesler Terrace community into a mixed-income, mixed use community that meets the objectives stated previously in **FEIS Section 1.2.1**.

Need

Yesler Terrace is over 70 years old. More than one-fifth of the 561 housing units were built during World War II as temporary defense housing. Although Yesler Terrace is noteworthy as one of the country's oldest public housing communities, SHA has determined, through separate analysis, that it is no longer a cost-effective or physically efficient way of providing quality affordable housing to its residents. Further information on why retention or modernization of existing housing structures is not consistent with the Proposal Objectives is in DEIS Section 2.8.7, under No Action Alternative. Key issues on the site include:

- Aging sewer and water infrastructure as some mains date back to pre-Yesler Terrace and service lines have extensive leaks and blockages. Some housing units have been taken off-line because of side sewer failure;
- Mold problems due to water intrusion through building foundations, combined with poor ventilation;
- Major rodent infestations that will not be successfully exterminated with the gaps in the existing buildings and many underground abandoned pipes;
- Building lifespan is near the end (typical 80 year lifespan) and buildings do not meet current fire, seismic and other building codes;
- Site accessibility is substandard due to age and older grading approach. This is a difficult site to move around on for seniors and disabled as well as those with small children;
- The site layout does not provide visual security for residents to their front door, their access and their parking. Parking is often a half block away and the pedestrian corridors are narrow and have frequent blind spots;
- The neighborhood is difficult to police effectively because of its awkward layout with many dead-end streets and sidewalks;
- The open spaces, play areas, and community gardens are hidden, making them hard to reach and creating safety issues;
- Critical site design deficiencies, such as lack of physical connectivity, that separate Yesler Terrace from the surrounding neighborhoods; and,
- Lack of supporting commercial uses onsite that would decrease the distance residents would have to travel to procure goods and services, and, potentially, provide employment opportunities.

Based on the above-stated Purpose and Need, SHA is advancing the Yesler Terrace Redevelopment Proposal.

1.3 Environmental Review Process and Next Steps

DEIS Issuance

The DEIS was issued October 19, 2010 with public comments due December 13, 2010. During the DEIS public comment period, 43 written comment letters and e-mail correspondence were received from 10 public agencies, 5 organizations and 28 individuals. Two additional comment letters were received after the comment period closed. Each comment letter/e-mail is numbered and included in **FEIS Chapter 6**, together with responses to those comments. **FEIS Chapter 5** includes a summary of key topic areas that were the subject of multiple comment letters.

On November 30th, 2010, a public hearing was held to give the public an opportunity to provide oral comments on the DEIS. No comments were received at the meeting.

Next Steps

The Yesler Terrace EIS will be used by SHA (along with other considerations, analyses and public input) to formulate a proposed Development Plan for the Yesler Terrace Redevelopment. That Plan will include a description of the SHA-approved development, the measures to mitigate environmental impacts that SHA is committed to, and a description of the strategies for phasing of the development. Following SHA action on the Development Plan, the Seattle City Council will consider a package of legislation to regulate aspects of the development (see **FEIS Chapter 2** for details).

Prior to submittal of permit applications to the City or other agencies, SHA will review the proposed development for consistency with the SHA-approved Development Plan. Once approved by SHA, permit applications for infrastructure improvements, construction projects and building redevelopment activities within the site will be submitted to the City and/or other agencies over the long-term buildout period. The City will determine whether each project is consistent with applicable regulations as well as the Planned Action Ordinance, and whether the environmental impacts for these projects are within the range of impacts analyzed in the EIS. If so, further environmental analysis will not be required under SEPA and the City will make decisions on permits according to the appropriate process. For projects that require other state and federal permits, the appropriate agencies will review such projects and make decisions on the permits according to their applicable processes. These agencies will also utilize this EIS related to those specific projects. When applicable approvals have been obtained from the City and agencies, and redevelopment projects would commence on the site.

The Yesler Terrace EIS and public and agency input on the EIS will be used by HSD to prepare a Record of Decision (ROD) for the proposed development on behalf of HUD, in accord with HUD regulations implementing NEPA. The ROD will state the decision; identify all alternatives considered by HSD in reaching its decision, including the environmentally preferable alternative or alternatives and all factors balanced by HSD in making its decision; state whether all practicable means to avoid or minimize environmental harm from the alternative selected were adopted, and if not, why not; and adopt a monitoring and enforcement program where applicable for any mitigation. Following preparation of the ROD, HSD may submit a Request for Release of Funds and environmental certification to HUD, and HUD may approve the Request, releasing any federal HUD funds to the proposed development.

1.4 Changes Since DEIS Issuance

Preferred Alternative

Based on the information provided in the DEIS, public and agency input, and additional analysis, SHA and HSD have developed a Preferred Alternative¹ for analysis in this FEIS. The Preferred Alternative represents a further refinement of Alternatives 1-4 presented in the October 2010 DEIS. The Preferred Alternative is intended to be a high density, sustainable development that features a mix of uses that are complimentary to the existing First Hill and Central Area neighborhoods and the adjacent downtown district; a street network that integrates and connects the site to the surrounding neighborhoods; and, a system of parks and open space. The level of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for Alternatives 1-4 in the DEIS. Redevelopment under the Preferred Alternative would primarily incorporate elements of DEIS Alternatives 2 and 3.

The Preferred Alternative represents a further refinement of the EIS Alternatives in the DEIS in the following key areas:

- Redevelopment density and mix of uses
- Road system
- Historic buildings
- Expansion of the site boundary (East of 12th Sector)
- Extremely low income replacement units and potential phasing

The Preferred Alternative represents an assumed 5.47 million SF of housing-based/mixed use redevelopment built over the assumed 20-year buildout horizon (see **FEIS Figure 2-7**). Land uses under the Preferred Alternative would include approximately:

- 5,000 residential units (4,750 residential units in the West of Boren Sectors and East of Boren Sector, 250 residential units in the East of 12th Sector) comprising 4.3 million SF of residential space;²
- 900,000 SF of principal-use office space (a portion of this could be lodging use);
- Approximately 88,000 SF of neighborhood commercial³ space (including 9,000 SF of neighborhood commercial in the East of Boren Sector and 4,000 SF of neighborhood commercial in the East of 12th Sector);
- Approximately 65,000 SF of neighborhood service space (including the Yesler Community Center and Steam Plant);

¹ NEPA does not require identification of a preferred alternative in the DEIS, if there is no alternative preferred by the agencies preparing the DEIS at the time of the DEIS, but does require identification of the preferred alternative in the FEIS, to understand the agencies' orientation.

² The number of residential units is based on taking the total residential square footage and applying estimated unit sizes. If unit sizes change over time (for example if studio or one bedroom units become smaller), the total number of residential units could increase. However, the total residential square footage would not increase.

³ Neighborhood commercial uses are those uses allowed in the NC zones (SMC 23.47A.004).

- 6.4 acres of public open space (including the existing 1.4-acre Yesler Community Center parcel, and a 1.7-acre Commons Park west of the Community Center) and 10.8 acres of semi-private open space; and,
- 5,100 parking spaces within/under buildings, plazas and landscaped courtyards.

It is assumed under the Preferred Alternative that four existing on-site buildings (the Steam Plant, the City-owned Yesler Community Center, the Baldwin Apartments building and the Urban League building) would be retained.

A detailed description of the Preferred Alternative can be found in **FEIS Chapter 2**.

Expanded Project Area

Since issuance of the DEIS, further analysis has determined that the provision of replacement housing for the existing 561 onsite housing units would be facilitated by expanding the site area (see **FEIS Chapter 5**). For purposes of this FEIS analysis, the 2.3-acre East of 12th Sector has been added to the FEIS Site boundary (see **FEIS Figure 2-4** for an illustration of the FEIS sector boundaries). Two properties in the East of 12th Sector, the King County Archive site and the Urban League property, are not currently owned by SHA. A partnership or other transaction would have to occur to accommodate the Proposed Actions in the East of 12th Sector; preliminary discussions with the property owners/agencies have been initiated.

The DEIS Alternatives assumed that redevelopment would occur within the 36.6-acre DEIS Site boundary (comprised of the NW, NE, SE, SW and East of Boren Sectors). The Preferred Alternative assumes redevelopment would occur within the 38.9-acre FEIS site, which is comprised of the 36.6-acre DEIS Site as well as the 2.3-acre East of 12th Sector.

This FEIS assumes that 250 housing units (including 70 replacement units) would be located within the new East of 12th Sector. Approximately 200 of these units would be new and approximately 50 would be provided through rehabilitation of the existing onsite Baldwin Apartments building and Urban League building. The East of 12th Sector would also accommodate 4,000 SF of neighborhood commercial uses, 150 parking spaces and 1.3 acres of parks and open space area.

An analysis of the East of 12th Sector was not included in the DEIS as the East of 12th Sector was not part of the site at that time. In addition to an analysis of the Preferred Alternative within the DEIS site, this FEIS presents an analysis of the existing conditions in the East of 12th Sector (**FEIS Section 2.3.2**); assumptions of the Preferred Alternative in the East of 12th Sector (**FEIS Section 2.6.3**); affected environment, impacts, mitigation measures and significant unavoidable adverse impacts associated with redevelopment in this Sector (**FEIS Chapter 3**); and, cumulative environmental impacts of the FEIS Site (DEIS Site and the East of 12th Sector) (**FEIS Chapter 3**).

If SHA is unsuccessful in negotiating a partnership/purchase with King County and/or the Urban League of Metropolitan Seattle for the redevelopment of the East of 12th Sector, the units proposed for these properties would be accommodated within the DEIS Site. DEIS Alternative 3 analyzed the impacts for providing all 5,000 units within the DEIS Site; therefore, if these properties are not available, then the impact of providing those units (that were originally allocated to the East of 12th Sector under the Preferred Alternative) within the DEIS Site has

already been analyzed under DEIS Alternative 3. If SHA identifies other potential sites for replacement units in the immediate neighborhood⁴ in response to being unable to complete an acquisition/agreement with King County or the Urban League for the respective sites, it would undertake supplemental environmental review in order to determine potential impacts, if any. However, in accordance with the Guiding Principles, no sites outside of the immediate neighborhood would be considered.

Additional Information

FEIS Chapter 4 contains updates to the information and analysis of the DEIS Alternatives provided in the October 2010 DEIS. The updated analysis of the DEIS Alternatives 1-4 was either conducted since the issuance of the DEIS and/or responds to specific comments received during the DEIS public comment period. Changes and clarifications within this chapter are presented for the following Sections of the DEIS:

- Section 3.3, Water Resources
- Section 3.4, Plants and Animals
- Section 3.5, Climate Change, Greenhouse Gas Emissions and Energy
- Section 3.7, Noise
- Section 3.10, Aesthetics
- Section 3.13, Transportation
- Section 3.14, Utilities

1.5 Summary of Environmental Impacts

Proposed redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1 - 4. As a result, the probable significant impacts of the Preferred Alternative would be expected to be within the range of impacts described in the DEIS. **FEIS Table 1-1** presents the key probable significant environmental impacts for each element of the environment evaluated for the Preferred Alternative. This summary table is not intended to be a substitute for the complete discussion of each element that is contained in **FEIS Chapter 3**.

⁴ Immediate neighborhood would be bounded by Alder Street and Remington Court to the north, 14th Avenue to the east, Jackson Street to the south, and Interstate 5 to the west.

**Table 1-1
PREFERRED ALTERNATIVE IMPACT SUMMARY**

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
3.1 Earth			
<i>Construction</i>			
Grading	<p>Based on the preliminary grading concept, the following site grading quantities could be required for proposed redevelopment</p> <ul style="list-style-type: none"> - Cut - 614,200 cubic yards - Fill - 41,100 cubic yards <p>The amount of grading assumed for the DEIS Site is within the range assumed for DEIS Alternatives 1-4; no significant impacts would be anticipated.</p>	<p>Based on the preliminary grading concept, the following site grading quantities could be required for proposed redevelopment</p> <ul style="list-style-type: none"> - Cut - 24,000 cubic yards - No fill required <p>No significant impacts would be anticipated.</p>	<p>Based on the preliminary grading concept, the following site grading quantities could be required for proposed redevelopment</p> <ul style="list-style-type: none"> - Cut – 638,200 cubic yards - Fill – 41,100 cubic yards <p>The amount of grading assumed for the FEIS Site is within the range assumed for DEIS Alternatives 1-4; no significant impacts would be anticipated.</p>
Steep Slopes/Landslide Hazards	<p>The steep slope/slide prone area along the southern portion of the site would be graded and redeveloped with new building construction. Substantial slope and stabilization design and other construction measures would be implemented to address potential impacts associated with grading this area.</p> <p>Steep slope/landslide hazards under the Preferred Alternative would be similar to DEIS Alternatives 2 and 3; no significant impacts would be anticipated.</p>	<p>No steep slope or slide prone areas are located in the East of 12th Sector.</p>	<p>Impacts would be the same as the DEIS Site.</p>

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Temporary Excavations	<p>Similar to the DEIS Alternatives 1-4, temporary excavations under the Preferred Alternative would be required for the installation of structures and infrastructure. Without mitigation, these excavations could have a potentially adverse effect on immediately adjacent existing and future structures, utilities and other improvements.</p> <p>No significant impacts would be anticipated.</p>	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Construction Dewatering	<p>Similar to DEIS Alternatives 1-4, dewatering may be required during Preferred Alternative construction to control groundwater flow into certain excavations, particularly during spring and winter months, which could cause some ground settlement and potentially damage nearby structures. Site-specific analyses would be required during design to determine the appropriate measures to control the potential impacts of dewatering.</p> <p>No significant impacts would be anticipated.</p>	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Foundations	<p>Similar to DEIS Alternatives 1-4, foundation support for most structures would likely be provided by conventional spread footings and mat foundations, although drilled shaft foundations could be used for some high-rise buildings.</p> <p>No significant impacts would be anticipated.</p>	<p>Foundation support for most structures would likely be provided by conventional spread footings and mat foundations.</p> <p>No significant impacts would be anticipated.</p>	Impacts would be similar to the DEIS Site.
Seismic Hazards	<p>The entire Puget Sound region, including the Yesler Terrace site, is located within a seismically active area. With incorporation of appropriate building design and other geotechnical measures, no significant impacts to building/site stability and safety would be expected.</p>	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	No significant impacts would be anticipated.		
Erosion Hazards	Similar to DEIS Alternatives 1-4, site grading and construction associated with redevelopment could cause erosion of exposed soils which could potentially result in on and off-site transport of sediment. Proper use of temporary erosion and sedimentation control measures and BMPs would be implemented to reduce the potential for impacts. No significant impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
	No significant earth-related impacts (i.e. landslide and erosion impacts) would be anticipated.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
<i>Cumulative Impacts</i>			
	No significant cumulative impacts would be anticipated.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
3.2 Air Quality			
<i>Construction</i>			
Dust	Site preparation and construction could generate dust from: grading; excavation; building and infrastructure demolition; and, construction of new buildings and infrastructure. Such activities would contribute to temporary localized increases in ambient concentrations of suspended particulate matter. Measures to provide reasonable controls of emissions of dust would be implemented, and construction activities would not be expected to significantly impact air quality.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Hazardous Materials Disposal	Demolition of existing buildings would require the removal and disposal of building materials that could contain asbestos and lead based paint. Demolition contractors would be required to comply with EPA and PSCAA regulations related to the safe removal and disposal of such materials and no significant air quality impacts would be expected.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Construction Equipment and Vehicle Emissions	Construction equipment and vehicles would emit air pollutants that would slightly and temporarily degrade local air quality, especially during earthwork activity. Standard construction measures would be implemented and no significant impacts would be expected.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Construction Odors	Some construction activities would temporarily cause odors, particularly during paving operations using tar and asphalt. Measures to provide reasonable controls of emissions of construction odors would be implemented and, construction activities would not be expected to significantly impact air quality.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
Traffic	The primary emissions generating activity associated with redevelopment would be increased traffic traveling to and from the site. Increased traffic would not be expected to result in any significant air quality impacts.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Site Suitability	Modeling indicates it is possible that concentrations of most selected toxic air pollutants (TAPs) currently exceed the acceptable source impact level health-risk guidelines. Existing levels of most TAPs considered and especially diesel particulate matter (DPM) exceed the risk guideline many times over, because these guidelines are quite low. Modeling of future conditions suggests concentrations of traffic-related TAPs would be lower, but would still exceed most of the risk guideline levels considered. These findings suggest there is a potential increased health risk due to long-term exposure to TAPs from transportation sources near the project site – and on any similarly exposed areas near major roadways.	Air quality in this sector generally complies with applicable health standards most of the time, but the area (as is the DEIS Site) is subject to somewhat elevated levels of some air contaminants due to the numerous transportation sources in the vicinity. Short-term (e.g., 1-hour) concentrations of pollutants from transportation sources such as NO ₂ are lower in	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
		the East of 12 th Sector compared with the portions of the site near I-5, due to the increased distance from I-5.	
3.3 Water Quality			
<i>Construction</i>			
Onsite Water Resources	Under the Preferred Alternative, the two potential existing wetlands in the SW Sector at the base of the existing steep slope would be impacted either with fill activities or impacts to wetland hydrology. Mitigation would be provided, if required, to offset habitat functions adversely impacted by the Preferred Alternative.	No wetlands or other water resources have been identified in the East of 12 th Sector.	Impacts would be the same as the DEIS Site.
Temporary Stormwater Quality and Flow Controls	During construction, potential short-term impacts to water resources could occur due to the release of sediment from grading activities and pollutants from construction equipment. With implementation of required temporary erosion, sediment control, spill prevention, flow control measures, and best management practices, no significant impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
Permanent Stormwater Control System	Following redevelopment, impervious surface area onsite would increase relative to existing conditions (from approximately 58 percent to 74 percent impervious surfaces). A permanent stormwater control system would be installed per applicable regulations.	Following redevelopment, impervious surface area would decrease relative to existing conditions (from 81 to 72 percent impervious surfaces). A permanent stormwater control system would be installed, similar to for the DEIS Site.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Right-of-Way Improvements	Where full street improvements occur as part of redevelopment, separate stormwater drainage and sanitary sewer conveyance systems are proposed.	Half street improvements are proposed on 13 th Avenue. GSI flow control elements in this sector would connect to the existing combined sewer.	Impacts would be similar to the DEIS Site.
Green Stormwater Infrastructure (GSI)	Preliminary stormwater modeling indicates that it is feasible to control the DEIS Site's stormwater runoff using comprehensive GSI facilities. If the extent of assumed GSI facilities is not feasible, then stormwater vaults/tanks could be used onsite.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Cumulative Impacts</i>			
Combined Sewer Systems	Increased demand on combined sewer systems from the Preferred Alternative together with other development in the site vicinity could require improvements, extensions or connections to the existing infrastructure (including flow control measures) to accommodate growth.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>First Hill Streetcar</i>	The proposed First Hill Streetcar alignment could affect the horizontal layout, location and connections to facilities.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
3.4 Plants and Animals			
<i>Construction</i>			
Plants - Built and Vegetated Area	Overall, the amount of built area would increase to 75 percent (as compared to 58 percent under existing conditions) and the amount of vegetated area would decrease to 25 percent (as compared to 42 percent under existing conditions). The relative change in unvegetated and built area would be similar to DEIS Alternatives 1-3; no significant impacts would be anticipated.	Overall, the amount of built area would decrease to 73 percent (as compared to 95 percent under existing conditions) and the amount of vegetated area would increase to 27 percent (as compared to 5 percent under existing conditions).	Overall, the amount of built area would increase to 75 percent (as compared to 58 percent under existing conditions) and the amount of vegetated area would decrease to 25 percent (as compared to 42 percent under existing conditions).

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
		No significant impacts would be anticipated; the amount of vegetated area would increase from existing conditions.	The relative change in unvegetated and built area would be similar to DEIS Alternatives 1-3; no significant impacts would be anticipated.
Plants - Exceptional Trees	Of the 22 existing "exceptional trees" as defined by the City, approximately 7 would be retained and 15 would be removed. The number of exceptional trees retained under the Preferred Alternative would be higher than DEIS Alternatives 1-4. No significant impacts would be anticipated.	No exceptional trees were identified on this sector.	Impacts would be the same as the DEIS Site; no significant impacts would be anticipated.
Plants – Existing Tree Canopy	The amount of existing tree canopy would be reduced from 23.5 percent under existing conditions to 3.7 percent due to tree removal to accommodate redevelopment and removal of a significant number of unhealthy or hazardous trees. The amount of existing tree canopy retained under the Preferred Alternative would be higher than DEIS Alternatives 1-4; no significant impacts would be anticipated.	The existing amount of tree canopy would decrease from 20 percent under existing conditions to 18.8 percent under the Preferred Alternative.	The amount of existing tree canopy would be reduced from 23.5 percent under existing conditions to 4.7 percent due to tree removal to accommodate redevelopment and removal of a significant number of unhealthy or hazardous trees. The amount of existing tree canopy retained under the Preferred Alternative would be higher than DEIS Alternatives 1-4; no significant impacts would be anticipated.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Plants – Projected Tree Canopy	The 25-year projection for onsite tree canopy coverage under the Preferred Alternative would be 23.4 percent; higher than is assumed for DEIS Alternatives 1-4.	The 25-year projection for onsite tree canopy coverage under the Preferred Alternatives would be 56 percent.	The 25-year projection for onsite tree canopy coverage under the Preferred Alternative would be 25.2 percent; higher than is assumed for DEIS Alternatives 1-4.
Wetlands	See the discussion under Section 3.3, Water Resources.		
Wildlife	Existing wildlife species that currently use the site are adapted to urban environments, could be disturbed/displaced due to construction activities (i.e. from habitat removal and noise); no significant impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Wildlife-Migratory Birds	Potential nesting sites in existing buildings would be removed to accommodate redevelopment. Nests would be removed after birds have fledged; therefore, no significant impacts would be anticipated.	No potential nesting sites were identified within the East of 12 th Sector.	Impacts would be the same as the DEIS Site.
<i>Operation</i>			
Wildlife	The reduction in vegetated area would result in a small reduction in habitat and fewer animals at the site; however, due to the small reduction and the adaptive ability of the onsite urban wildlife impacts would not be considered significant.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Cumulative Impacts</i>			
	Impacts to plants and animals associated with the Preferred Alternative together with proposed offsite development in the site vicinity would result in the removal of trees, wildlife and habitat, but due to the highly urbanized nature of these sites, no significant impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
	The First Hill Streetcar right-of-way would run through the Yesler Terrace site and could require the removal of 2 onsite	No impacts to the East of 12 th Sector from the First	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	exceptional trees. Removal of these trees would be a cumulative impact with the Yesler Terrace Redevelopment. These potential impacts would not be significant, because the site is already highly urbanized and animals in the site vicinity are adapted to the urban environment.	Hill streetcar would be anticipated.	
3.5 Climate Change, Energy and Greenhouse Gas Emissions			
Climate Change	No disproportionate impacts from global climate change to the Yesler Terrace Redevelopment would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Greenhouse Gas Emissions (construction-related, transportation and operations emissions)	Redevelopment would result in an increase in greenhouse gas emissions over the lifespan of the project and on an annual basis. Emissions would likely be greater than under existing conditions but would be reduced by potential sustainable design features. Increasing housing opportunities in close proximity to transit, and co-location of housing and jobs, can be considered beneficial impacts in terms of overall greenhouse gas emissions from the transportation sector.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Energy	A worst-case (all electric) energy analysis indicates that up to 30,703 megawatts per year (an average of 3.51 megawatts) could be required for the redeveloped site. This represents a 0.3 percent of the current total system demand for Seattle City Light. Actual energy use would be lowered with implementation of proposed sustainable design features. No significant impacts would be anticipated.	A worst-case (all electric) energy analysis indicates that up to 1,324 megawatts per year (an average of 0.15 megawatts) could be required for the redeveloped site.	A worst-case (all electric) energy analysis indicates that up to 32,028 megawatts per year (an average of 3.66 megawatts) could be required for the redeveloped site. Impacts would be similar to those assumed for the DEIS Site; no significant impacts would be anticipated.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
3.6 Environmental Health			
<i>Construction</i>			
Disturbance/ Release of Pollutants and Hazardous Materials	<p>The potential exists for certain environmental health-related impacts to occur during construction including:</p> <ul style="list-style-type: none"> - Generating air pollutants as a result of dust from demolition, earthwork and/or emissions from construction vehicles; - Accidental spills of construction-related chemicals; and/or, - Exposure of asbestos-containing materials or lead-based paints. <p>With implementation of required health and safety measures, no significant impacts would be expected.</p>	<p>Impacts would be similar to the DEIS Site.</p> <p>In addition, illegal dumping has occurred in an area immediately adjacent to the west boundary of the King County Archives site. The presence of soil or groundwater contamination could present a health risk to construction workers during redevelopment.</p> <p>With implementation of required health and safety measures, no significant impacts would be expected.</p>	<p>Impacts would be greater than those analyzed under DEIS Alternatives 1-4 on the DEIS site but would not be anticipated to be significant.</p>
Lead Concentrations in Soils	<p>Redevelopment activities would occur in areas where lead concentrations in the soil may be above the MTCA Method A soil cleanup levels for unrestricted land uses. Development and compliance with a site-specific health and safety procedures (in compliance with federal, state and local regulations) would minimize the potential health risks for residents and workers on the site.</p>	<p>No lead concentrations in soils were identified in the East of 12th Sector.</p>	<p>Impacts would be similar to the DEIS Site.</p>
Dewatering	<p>Dewatering may be needed for construction of underground structures and utilities, depending on the depth of excavation. Monitoring and treatment of the dewatering discharges would</p>	<p>Impacts would be similar to the DEIS Site.</p>	<p>Impacts would be similar to the DEIS Site.</p>

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	be conducted, as necessary, to limit impacts to receiving waters.		
Steam Plant Demolition	The Steam Plant facility would be retained and adaptively reused. Adaptive reuse of the steam plant would require identification and analysis of any existing hazardous or toxic materials. Abatement of any identified materials would occur as part of the construction permits approved by the City. With mitigation, no significant impacts would be anticipated.	Does not apply.	Impacts would be the same as the DEIS Site.
<i>Operation</i>			
	No significant impacts would be anticipated.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
<i>Cumulative Impacts</i>			
	No significant cumulative impacts would be anticipated.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
3.7 Noise			
<i>Construction</i>	Noise from demolition and construction activities has the potential to impact nearby onsite and offsite receivers, particularly sensitive uses such as residences and the Harborview Medical Center. The temporary nature of construction coupled with restriction to daytime hours minimizes the potential for significant impacts from construction activities and equipment.	Impacts would be similar to the DEIS Site. Measures would need to be taken during construction to ensure that construction-related noise received in adjacent areas does not exceed the Seattle construction noise limits.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
Traffic & Road Alterations	Outside of the immediate project area, traffic volumes on area roadways are not projected to increase significantly (i.e., not more than double). In addition, no substantial road alterations are expected to be required. Overall, neither project-related traffic nor project-required road alterations would be expected to result in any significant noise impacts.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
HVAC & Mechanical Equipment	HVAC and mechanical equipment associated with new buildings on the project site could emit noise audible at off-site locations. However, noise from all such equipment would be required to comply with the applicable Seattle noise limits and no significant noise impacts to surrounding uses would be expected.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Site Suitability	Portions of the site have sound levels classified as “unacceptable” under HUD noise criteria for residential uses, due to the presence of I-5 and other major roadways. Buildings subjected to exterior sound levels above 65 dBA Ldn would require acoustical design and construction techniques and materials intended to reduce interior levels to 45 dBA Ldn or less. With proper construction materials, techniques and installation, it is anticipated that interior noise levels could be effectively mitigated for residential uses.	Model-predicted day-night sound levels at ground-level within the East of 12 th Sector indicate that traffic noise levels would be considered “acceptable” (i.e., would not require special review or approvals or construction materials, techniques) under HUD noise criteria.	Impacts would be similar to the DEIS Site.
3.8 Land Use			
<i>Construction</i>			
	Site preparation and building/infrastructure development over the buildout period could result in temporary impacts to onsite and offsite adjacent existing land uses including: dust from clearing, grading and demolition; emissions from construction vehicles and equipment; soil erosion from removal of vegetation; increased noise levels; light and glare; and increased construction-related traffic. Overall, due to the temporary and periodic nature of construction, no significant impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
Displacement of Existing Uses - Residential	All existing residential structures would be demolished over time and the residents would be temporarily or permanently displaced and offered relocation assistance. All residents living at Yesler Terrace at the time of relocation who maintain	No existing residential uses are located on the East of 12 th Sector.	Impacts would be similar to those anticipated for DEIS Alternatives 1-4; no significant impacts would

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	<p>their eligibility for low income housing would be offered the opportunity to return to the redeveloped Yesler Terrace site as new units become available.</p> <p>Impacts would be similar to those anticipated for DEIS Alternatives 1-4; no significant impacts would be anticipated.</p>		be anticipated.
Displacement of Existing Uses - Non-Residential	<p>The Seattle Parks Department Yesler Community Center and playground use would remain.</p> <p>While the existing Steam Plant building would remain, its associated storage and maintenance facilities uses would be displaced.</p> <p>All other existing non-residential tenants leasing space on the Yesler Terrace site would be temporarily or permanently displaced. Permanent displacement could occur due to potential changes in SHA's use of the site or economic factors. Some tenants could move directly into redevelopment neighborhood services/ commercial or office space without being temporarily displaced.</p> <p>Impacts would be similar to those anticipated for DEIS Alternatives 1-4; no significant impacts would be anticipated.</p>	<p>The existing King County Archives buildings would be demolished. The existing Urban League and Baldwin Apartments buildings would be rehabilitated. The existing uses in these buildings would be displaced and would be required to relocate.</p> <p>No significant impacts would be anticipated.</p>	Impacts would be slightly greater than those analyzed under DEIS Alternatives 1-4 on the DEIS site but would not be anticipated to be significant.
Conversion of Land Uses	<p>Redevelopment of the site would result in the conversion of the site from a low-rise, multi-family residential community into a dense urban mixed use neighborhood.</p> <p>No significant adverse impacts would be anticipated.</p>	<p>Redevelopment of the East of 12th Sector would result in the transition of the site from industrial, warehouse and office uses to residential and neighborhood services uses.</p> <p>No significant adverse impacts would be anticipated.</p>	Impacts would be slightly greater than those analyzed under DEIS Alternatives 1-4 on the DEIS site but would not be anticipated to be significant.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Changes in Density	The average residential density across the site would be 245 dwelling units per acre as compared to 24 units per acre under existing conditions.	The average residential density across the site would be 110 dwelling units per acre.	The average residential density across the site would be 231 dwelling units per acre.
Changes in Activity Levels	Activity levels on the site would substantially increase as a result of the 7,800 residents and 3,300 employees as well as the dense nature of the redevelopment. The general nature of the new site activity would be consistent with an urban mixed use neighborhood.	Activity levels on the site would substantially increase as a result of the 475 residents and 7 employees as well as the dense nature of the redevelopment. The general nature of the new site activity would be consistent with an urban mixed-use neighborhood.	Activity levels on the site would substantially increase as a result of the 8,275 residents and 3,307 employees as well as the dense nature of the redevelopment. The general nature of the new site activity would be consistent with an urban mixed-use neighborhood.
Relationship to Onsite Uses	Proposed residential, office/lodging, neighborhood commercial and neighborhood services uses would be compatible with the existing Yesler Community Center and Steam Plant uses assumed to remain.	No onsite uses would remain.	Impacts would be the same as the DEIS Site.
Relationship to Surrounding Uses - Land Use	Proposed residential, office/lodging, neighborhood commercial and neighborhood services uses would be compatible with the existing offsite uses; no significant impacts would be anticipated.	Proposed residential and neighborhood services uses would be compatible with the existing offsite uses; no significant impacts would be anticipated.	Proposed onsite uses would be compatible with offsite uses; no significant impacts would be anticipated.
Relationship to Surrounding Uses - Height, Bulk and Scale	Considerable height differences in proposed onsite and adjacent offsite uses in some locations could be perceived as a significant impact without implementation of appropriate mitigation measures.	The height, bulk and scale of the proposed onsite development would be greater than under existing conditions	Impacts would be slightly greater than those analyzed under DEIS Alternatives 1-4 on the DEIS site but would not

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
		but would generally be compatible with adjacent development	be anticipated to be significant.
<i>Cumulative Impacts</i>			
	<p>The mix of uses assumed for the DEIS Site under the Preferred Alternative would be intended to provide a wide range in order to accommodate site residents and employees; this could lessen the pressure for new offsite development. However, some new commercial development in the area could be indirectly stimulated, including in areas such as Little Saigon. The increase in intensity of development on the site under the Preferred Alternative could result in requested zoning changes in the areas adjacent to the site.</p> <p>Redevelopment of Yesler Terrace could potentially result in changes to adjacent and nearby areas in the form of displacement of businesses, low income individuals, and/or the services that support them due to increased property values and/or rents.</p> <p>Little Saigon would experience incremental growth and development over time. This growth would occur with or without redevelopment of Yesler Terrace.</p> <p>Future development in the area would contribute to cumulative employment/population growth and intensification of land uses in this portion of the City.</p>	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
3.10 Aesthetics, Light, Glare and Shadows			
<i>Construction</i>			
Aesthetic Character	Construction activities would be ongoing on portions of the site for extended periods of time and could temporarily affect the aesthetic character of the site and surrounding area. Measures to control air, noise, light intrusion and other construction related disturbances could lessen aesthetic impacts.	Impacts would be similar to the DEIS Site, although construction activities would also include renovation of two existing buildings.	Impacts would be similar to the DEIS Site.
Light and Glare	New temporary sources of light and glare associated with infrastructure and building construction, construction equipment and lighting of the job site, would be introduced to the site during construction activities over the long-term buildout of the site. Construction lighting and glare could potentially be noticeable in certain areas proximate to the site. While noticeable, such lighting is not expected to cause significant impacts.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
Visual Character	The visual character of the site would change to a higher density, mixed use development with high-rise and mid-rise buildings in the West of Boren Sectors, and mid-rise buildings in the East of Boren Sector. The overall quality of building design would likely be higher compared to existing site conditions. It is assumed that building design, construction and materials would be coordinated through adoption and implementation of consistent design standards over the long-term buildout period. This would result in positive impacts relative to the visual character of the site.	The visual character within this sector would reflect the transition of the King County Archive property from the low-rise industrial/warehouse buildings to a denser, mid-rise multifamily residential development. The Urban League building footprint would remain intact but the uses would transition from an office building to a mixed-use building (residential and neighborhood commercial). The	Impacts would be as described for the DEIS Site and East of 12 th Sector

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
		Baldwin Apartments building footprint would remain intact and the building would be reactivated with residential uses.	
City Protected Public Viewpoints	No significant impacts to City protected views would be anticipated.	No significant impacts to City protected views would be anticipated.	No significant impacts to City protected views would be anticipated.
Height Bulk & Scale	See Land Use above under Relationship to Surrounding Uses - Height, Bulk and Scale.	See Land Use above under Relationship to Surrounding Uses - Height, Bulk and Scale.	See Land Use above under Relationship to Surrounding Uses - Height, Bulk and Scale.
Light and Glare	New stationary and mobile sources of light and glare would be added to the site from increased residential density and new land uses including neighborhood commercial and office/lodging development. Relative to existing conditions, overall light and glare levels on the site would be greater, but would be typical of urban development and no significant impacts would be anticipated.	New stationary and mobile sources of light and glare would be added to the site from new residential and neighborhood commercial uses. The overall character of light and glare within the redeveloped sector could be greater than existing uses, but would likely be similar to surrounding residential uses to the east and north.	Impacts would be the same as described for the DEIS Site.
Reflected Solar Glare Impacts to I-5 and Boren Avenue	Under the Preferred Alternative building orientations, no glare impacts (i.e. impacts that could impair a driver's vision) would be expected to occur on I-5 within motorists' cone-of-vision. On Boren Avenue, glare could impact a driver's vision at 4:00	Impacts to I-5 and Boren Avenue would be as described for the DEIS Site.	Impacts to I-5 and Boren Avenue would be as described for the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	PM on December 21 st . With appropriate mitigation measures, no significant impacts would be anticipated.		
3.11 Historic Resources			
<i>Construction</i>			
	During construction, the potential exists for structural instability/undermining and temporary dirt and unintended damage to the nearby historic properties within the APE. With implementation of construction monitoring and dust control measures, significant impacts would not be anticipated.	Impacts would similar to the DEIS Site.	Impacts would similar to the DEIS Site.
	The existing Steam Plant building, a designated Seattle Landmark, and National Register eligible resource, would be retained and adaptively re-used. No significant impacts would be anticipated.	The existing Urban League/St. George Hotel, a National Register eligible resource, would be retained and adaptively re-used. No significant impacts would be anticipated.	Impacts would be slightly greater than those analyzed under DEIS Alternatives 1 and 4 (due to the adjacency of additional historic resources in the expanded APE), but would be less than those analyzed under DEIS Alternatives 2 and 3, which assumed demolition of the Steam Plant. Impacts are not anticipated to be significant.
<i>Operation</i>			
	No impacts to historic resources would be anticipated from operation of Yesler Terrace.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
<i>Cumulative Impacts</i>			
	Redevelopment could have an unintended impact on small-scale offsite historic buildings as a result of increases in property values in the area that could create pressure for	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	<p>redevelopment. Vulnerable historic resources include those that are not already recognized by listing in a historic register, but may be eligible for local designation and the protection that it affords. Smaller-scale, one- and two-story buildings in would be particularly vulnerable to demolition for redevelopment.</p> <p>The First Hill Streetcar Project could result in potential impacts to on-site historic resources (the Yesler Terrace Steam Plant) or to off-site listed or potentially eligible resources including structural instability, undermining or temporary dirt/unintended damage.</p>		
3.12 Cultural Resources			
Impacts to Archaeological Resources	No impacts would be anticipated. The site has a low probability for containing archaeological resources.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
3.13 Transportation			
<i>Construction</i>			
	Construction-related traffic would occur in stages until redevelopment at the site is complete, and would likely be most noticeable during demolition and major earthwork stages. Construction employees would also generate traffic and parking demand. A Construction Management Plan would be prepared, and no significant impacts would be anticipated.	Construction-related traffic would likely be most noticeable during the demolition of the King County Archive building. Construction employees would also generate traffic and parking demand. A Construction Management Plan would be prepared, and no significant impacts would be anticipated.	Impacts would be the same as the DEIS Site.
<i>Operation</i>			
Trip Generation Impacts	The Preferred Alternative would generate a net increase of 13,750 total daily trips for the DEIS Site, including:	The Preferred Alternative would generate a net	The Preferred Alternative would generate a net

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	<ul style="list-style-type: none"> - AM Peak Hr. Trips: 1,064 - PM Peak Hr. Trips: 1,129 	<p>increase of 620 total daily trips for the East of 12th Sector, including:</p> <ul style="list-style-type: none"> - AM Peak Hr. Trips: 44 - PM Peak Hr. Trips: 47 	<p>increase of 14,370 total daily trips for the site, including:</p> <ul style="list-style-type: none"> - AM Peak Hr. Trips: 1,108 - PM Peak Hr. Trips: 1,176
Transit Trips (including trips on bus routes, Sound Transit's Link light rail system, and the future First Hill Street car line)	A net increase of approximately 9,860 total daily transit trips, including 908 PM peak hour trips, would occur for the DEIS site.	A net increase of approximately 220 total daily transit trips, including 17 PM peak hour trips, would occur for this sector.	A net increase of approximately 10,080 total daily transit trips, including 925 PM peak hour trips, would occur for the site.
Intersection Levels of Service (LOS) Impacts	A LOS analysis was not conducted solely for the DEIS Site for the Preferred Alternative. See the FEIS site column for LOS impacts for the entire site under the Preferred Alternative.	Development within the East of 12th Sector would add very little delay to area intersections. Each of the nearby intersections are projected to operate at LOS C or better without or with the proposed project.	The additional project traffic would increase vehicle delay at 7 intersections that would operate at LOS E or F without the site redevelopment and would degrade the following intersections to LOS E or F: <ul style="list-style-type: none"> - 9th Avenue/Alder Street (F) - 8th Avenue/Yesler Way (F) - Broadway/E James Street (E)

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
			<ul style="list-style-type: none"> - 12th Avenue/E Yesler Way ((E) - Boren Avenue/James Street (E) - 9th Avenue/Jefferson Street (E) - Broadway/Boren Avenue (E) <p>With implementation of appropriate mitigation measures, no significant adverse impacts are anticipated.</p>
Site Access and Internal Circulation	The circulation infrastructure across the site would be comprehensively reconfigured to provide a more connected street grid network internally and to/from the surrounding community. In order to achieve the reconfiguration, certain street vacations and new street dedications would be necessary.	The East of 12th Sector was assumed to be accessed via one driveway on 13th Avenue, which would operate at LOS A during both the AM and PM peak hours.	Impacts would be the same at the DEIS Site.
Non-Motorized Facilities	Pedestrian facilities and connections would be improved throughout the site, and the circulation infrastructure across the site would be comprehensively reconfigured to provide a more connected street grid network internally and to/from the surrounding community. Extensive pedestrian and bicycle improvements would be made throughout the Yesler Terrace site, including street frontage improvements as well as connecting paths throughout the site. New connections would also be made to areas beyond Yesler Terrace, including south towards S Jackson Street, improving pedestrian access to the International District.	The rate of pedestrian flow generated by this sector is far lower than the highest intensity flow projected for the project cumulatively, which analysis showed would be well accommodated by the proposed 6-foot sidewalks that would allow projected pedestrian activity to	Impacts would be the same as the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
		operate at LOS A. Thus, no adverse impacts are identified.	
Traffic Safety	The project would increase traffic volumes through the 6 th Avenue/James Street intersection, which exceeds City of Seattle criteria for a high-collision location (with an average of 15 collisions per year). However, Yesler Terrace project traffic entering this intersection is not expected to result in a significant impact to safety conditions.	New traffic generated by this sector at the one high collision location identified in the DEIS (6th Avenue/James Street) would be far less than 1 percent of total entering traffic during the peak hours, and is not expected to have significant effect on operations. Thus, traffic generated by the East of 12 th Sector is not expected to result in significant adverse safety impacts.	Impacts would be the same as the DEIS Site.
3.14 Public Utilities			
<i>Construction</i>			
	During construction, existing water mains and services would continue to service the site, or temporary bypass service would be implemented until the new water distribution system was complete and operational.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
<i>Operation</i>			
Water Demand	Water demand for redevelopment would increase to an estimated: <ul style="list-style-type: none"> - 1,263,800 gallons per day (gpd) under average daily demand (ADD); - 2,527,600 gpd under maximum daily demand (MDD); and, - 4,581 gallons per minute (gmp) under peak hourly demand (PHD). 	Water demand would increase to an estimated: <ul style="list-style-type: none"> - 51,200 gpd under ADD; - 102,400 gpd under MDD; and, - 184 gmp under PHD. 	Water demand would increase to an estimated: <ul style="list-style-type: none"> - 1,301,000 gpd under ADD; - 2,602,000 gpd under MDD; and, - 4,775 gmp under PHD.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Water System Improvements	All existing public water mains on and in the vicinity of the site would be adequate to meet the estimated peak hourly demand and fire hydrant flow.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
Sanitary Sewer Flows	Sewer flows for proposed redevelopment would increase to an estimated: <ul style="list-style-type: none"> - 1,639,000 gallons per day (gpd) under average daily flow (ADF) - 7.61 cubic feet per (cfs) second under peak hourly flow (PHF). 	Sewer flows would increase to an estimated: <ul style="list-style-type: none"> - 71,000 gpd under ADF - 0.33 cfs under PHF. 	Sewer flows would increase to an estimated: <ul style="list-style-type: none"> - 1,710,000 gpd under ADF - 7.94 cfs under PHF.
Sewer System Improvements	Existing combined sewer mains would be reused where existing mains have sufficient capacity. A new combined sewer main would be located in 8 th Avenue that connects to the existing combined sewer main at Yesler Way, and a new combined sewer main would be located in S Main Street to provide sewer service to the SW and SE Sectors. The existing downstream combined sewer system may have limited capacity to handle the proposed redevelopment at a few locations, and combined sewer overflows (CSOs) could occur during heavy rainfall events. A hydraulic analysis would be conducted during the design phase to determine the capacity of the existing system and any needed improvements.	No public sewer improvements are assumed in this sector, because there is existing capacity in the system and side sewer connections are available.	Impacts would be the same as the DEIS Site
Electrical	See 3.5 Energy for a summary of energy impacts on the DEIS Site	See 3.5 Energy for a summary of energy impacts in the East of 12 th Sector	See 3.5 Energy for a summary of energy impacts on the FEIS Site
<i>Cumulative Impacts</i>	It is assumed that any necessary improvements, extensions or connections to existing utilities associated with the Preferred Alternative together with other redevelopment in the	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	site vicinity would be made in compliance with applicable City of Seattle regulations, and no significant cumulative impacts would be anticipated.		
3.15 Public Services – Park, Recreation and Open Space			
<i>Construction</i>			
	Construction activity could result in temporary and periodic increases in dust and noise levels which could affect the use of onsite and adjacent offsite SHA and City-owned parks and open space facilities. These impacts would be periodic and temporary in nature and would not be anticipated to be significant.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
<i>Operation</i>			
	The existing onsite Yesler Playfield would be displaced to accommodate redevelopment. Existing playfield users would need to relocate to other offsite City-owned facilities.	Not applicable	Impacts would be the same as the DEIS Site.
	The four existing onsite P-Patches would be displaced to accommodate redevelopment. New P-Patch Community gardens could be provided in locations across the site. Specific locations and amounts of P-Patch area would be determined during future design and permitting phases.	Not applicable	Impacts would be the same as the DEIS Site.
	The seven existing onsite small play areas would be displaced as development occurs. New play areas would be developed as existing facilities are displaced.	Not applicable	Impacts would be the same as the DEIS Site.
	Approximately 15.9 acres of parks and open space would be provided onsite including: <ul style="list-style-type: none"> - 14.5 acres of Project parks, open space and recreational facilities: 5.0 acres of public open space, 9.5 acres of semi-private open space, and private open space in the form of balconies and courtyards. - The existing 1.4 -acre Yesler Community Center and play area 	Approximately 1.3 acres of parks and open space would be provided onsite including: <ul style="list-style-type: none"> - 1.3 acres of semi-private open space, and private open space in the form of balconies and 	Approximately 17.2 acres of parks and open space would be provided onsite including: <ul style="list-style-type: none"> - 15.8 acres of Project parks, open space and recreational facilities: 5 acres of public open space,

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector courtyards.	FEIS Site
			10.8 acres of semi-private open space, and private open space in the form of balconies and courtyards. - The existing 1.4 -acre Yesler Community Center and play area
<i>Cumulative Impacts</i>			
	<p>Development of the First Hill Streetcar would be adjacent to onsite uses and could cause air quality and noise impacts to adjacent onsite parks and open space resources; these impacts would be temporary and periodic in nature and would not be anticipated to be significant.</p> <p>Once the First Hill Streetcar project is operational in 2013, the alignment would run through the Yesler Terrace Redevelopment site bringing new visitors to the area from other parts of the City. An increase in the use of onsite and nearby offsite parks and open space areas could be experienced.</p> <p>The displacement of the existing Yesler Playfield would also reduce the number of sports fields in the area available for league rental and informal use contributing to the City-wide existing high demand for field time during evening and weekend hours. As only one league is currently renting the field for use, the impact of the displacement of the field to the existing sportsfield shortage would not be significant.</p>	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.
3.15 Public Services – Schools			
<i>Construction</i>			
	No new schools are anticipated to be constructed to accommodate new student enrollment; therefore, no	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	construction impacts would be anticipated.		
<i>Operation</i>			
	Approximately 929 new students (464 elementary, 195 middle school and 270 high school students) would be generated under this alternative. The number of new students generated from the Yesler Terrace Redevelopment would likely exceed the forecast available capacity at the three attendance area schools assigned to the site.	Approximately 100 new students (50 elementary, 21 middle school and 29 high school students) would be generated under this alternative. The number of new elementary and middle school students generated could be accommodated within existing available capacity but the number of high school students generated would likely exceed the forecast available capacity at Garfield High School.	Approximately 1,029 new students (514 elementary, 216 middle school and 299 high school students) would be generated under this alternative. The number of new students generated from the Yesler Terrace Redevelopment would likely exceed the forecast available capacity at the three attendance area schools assigned to the site.
<i>Cumulative Impacts</i>			
	No cumulative impacts would be anticipated.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
3.15 Public Services – Fire and EMS			
<i>Construction</i>			
	Calls for Fire/EMS Services could increase due to incidents related to on-site construction activities (i.e., construction-related accidents or injuries) and for inspection of specific construction projects onsite. Existing Fire Department staffing and equipment are expected to be sufficient to handle any increased service needs during site construction, and no significant impacts are anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
	Increases in the on-site population and employment with the Yesler Terrace redevelopment would be incremental and would be accompanied by increases in demands for all types of services provided by the Fire Department, including fire protection, BLS and EMS. The Fire Department indicates that they have sufficient capacity and resources to absorb potential increased calls related to fire suppression, rescue and salvage services and EMS.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Cumulative Impacts</i>			
	No cumulative impacts from nearby offsite projects would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
3.15 Public Services – Police			
<i>Construction</i>			
	During construction, there could be an increase in demand for police services due to construction site theft and vandalism. Existing Police Department staffing and equipment are expected to be sufficient to handle increased service needed for onsite construction activities.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
<i>Operation</i>			
	Increases in the on-site population and employment would be accompanied by increases in demand for police service; however, the exact number of incremental new calls cannot be quantified. Likely impact to police workload can be mitigated by SHA's funding in the near term for dedicated police staff and full implementation of the Neighborhood Policing Plan, which will add officers to the force. As well, the design and layout of the site, increased residential density, increased activity levels, and improved site lighting should contribute to safety improvements.	Changes in the use of the site, including the introduction of a residential population to this sector, could be accompanied by increases in demand for police service. Additional safety problems and need for police service would not be expected to be significant for similar reasons as identified for the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Cumulative Impacts</i>			
	No cumulative impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
3.15 Public Services – Solid Waste			
<i>Construction</i>			
	Solid waste would be generated by both demolition and construction activities. To the extent feasible, construction-generated solid-waste would be recycled or composted.	Impacts would be the same as the DEIS Site.	Impacts would be the same as the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
<i>Operation</i>			
	Solid waste generated under the Preferred Alternative would be greater than under existing conditions and is estimated to be approximately 3.567 tons per year. Solid waste management services may be provided by SHA Solid Waste Division or other providers depending upon logistical and economic conditions	Solid waste generated under the Preferred Alternative would be greater than under existing conditions and is estimated to be approximately 172 tons per year. Solid waste management services may be provided by SHA Solid Waste Division or other providers depending upon logistical and economic conditions	Solid waste generated under the Preferred Alternative would be greater than under existing conditions and is estimated to be approximately 3,739 tons per year. Solid waste management services may be provided by SHA Solid Waste Division or other providers depending upon logistical and economic conditions
<i>Cumulative Impacts</i>			
	No cumulative impacts from nearby offsite projects would be anticipated.		
3.15 Public Services – Community Services			
<i>Construction</i>			
Community Service Providers	During construction, it is possible that some community service organizations and programs located on the site could move directly into redeveloped space without having to move offsite, it is also possible that some organizations and programs would need to relocate offsite during construction. Some organizations could choose to permanently relocate offsite due to the inconveniences associated with a temporary move. It is assumed that other similar rental properties are available in Seattle which could accommodate the onsite community service providers. As well, the 8,467 SF Steam Plant in the NW Sector would be retained and could be adaptively reused for community services uses. Some organizations and programs could move directly into this building without having to leave the site.	It is assumed that the Urban League would permanently relocate within the surrounding area prior to redevelopment.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Residents' Access to Services	Redevelopment could temporarily disrupt residents' access to community services which are based on the site, due to the need for some residents to temporarily relocate offsite during construction. SHA's proposed relocation plan specifically addresses the need to maintain service connections for residents as part of relocation assistance.	The East of 12 th Sector does not presently contain active housing units, and there is no residential community in this area of the site.	Impacts would be similar to the DEIS Site.
Community Access to Services	Some community service programs/organizations, such as the Yesler Community Center, based onsite that are available to the wider community (i.e. beyond Yesler Terrace residents) would continue to be available and accessible throughout the redevelopment construction process. Other programs/ services could be either temporarily or permanently relocated from the site. Depending on where in the community these programs relocated, they could be more or less accessible to the community.	Depending on where in the community the Urban League relocates, the organization could be more or less accessible to the community members would access these services. It is assumed that the organization would inform clients of their changed location to assure and maintain public accessibility.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
	Approximately 65,000 SF of neighborhood services space would be provided onsite and the Yesler Community Center would be retained. Neighborhood services uses could include (but are not limited to) police, education, library, social services, non-profits, government funded health agencies, and SHA offices open to the public. It is possible that additional and/or different social service providers or organizations to those based onsite currently, would locate on the site. All current SHA programs which are provided at Yesler Terrace would likely be continued within the redeveloped site. The retention of the Steam Plant for community services uses could reduce disruption to community service providers, Yesler Terrace residents and	No neighborhood services space would be developed in the East of 12 th Sector. Residents of the site living within this sector would have access to all services and organizations available within the larger site area on the DEIS Site, which is located one-half block to the west.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	the community, by allowing some programs/services to move directly from their current locations into the adaptively reused building.		
3.16 Socioeconomics			
<i>Construction</i>			
	Construction activities would result in new temporary, periodic construction employment opportunities during the approx. 20-year site buildout.	Impacts would be similar to the DEIS Site, although construction activities would generally be less intense and shorter in duration in this sector.	Impacts would be similar to the DEIS Site.
	Although a phasing schedule is not finalized, it is likely that the East of Boren Sector, and potentially the East of 12 th Sector, would be redeveloped first to provide some early replacement housing for existing residents. Temporary and/or permanent relocation within the site boundary would be expected to reduce disruptions to existing residents and community bonds. However, some temporary offsite tenant relocation could still be required. All residents would be offered relocation assistance in compliance with the federal Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970. All existing low-income housing would be replaced onsite, and all residents who maintain eligibility for low income housing would have the opportunity to return to the redeveloped site.	No residential or community cohesion impacts would result from construction activities, because there is no existing residential population within the East of 12 th Sector.	Impacts would be similar to the DEIS Site.
	Any necessary temporary offsite relocation of residents during construction could temporarily impact community cohesion; however, a phased construction process could help to minimize these impacts. Permanent impacts could result because some residents could choose to permanently leave the site.	No residential or community cohesion impacts would result from construction activities, because there is no existing residential population within the East of 12 th Sector.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Indirect Impacts	During periods of high construction activity, surrounding businesses could temporarily experience indirect impacts to revenues from construction traffic, rerouting of traffic, utilities service disruptions, and limited access. These impacts would be regulated by City code. Some business could also experience an increase in business due to increased numbers of construction workers in the area.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
Community Cohesion and Public Well Being	Changes to the existing site demographics and economic diversification of the onsite community would occur. Public well being would be enhanced via improved building design, pedestrian access, vehicular access and aesthetic character. Redevelopment would provide updated neighborhood services space, increased neighborhood services space and neighborhood commercial uses could provide residents with amenities within walking distance of their homes, as well as with space for social networking opportunities. Office/lodging and neighborhood commercial uses could also provide residents with access to employment opportunities.	A mixed income residential community would be introduced to the East of 12 th Sector. Redevelopment is intended to achieve the same quality of character and design as would be provided on the DEIS Site. Although this sector is not physically connected to the DEIS Site, it is located only a half block the east of the East of Boren Sector, and approximately 2 blocks from the West of Boren Sectors. Residents would be within walking distance of the DEIS Site, and all of the amenities contained within this larger site area.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Housing	<p>Total residential units on the DEIS Site would increase from 561 extremely low income units to 5,000 units with a mix of incomes, including:</p> <ul style="list-style-type: none"> - 491 extremely low income units - 250 very low income units - 856 low income units - 3,153 market rate units 	<p>Total active residential units within the East of 12th Sector would increase from 0 to 250 units, including:</p> <ul style="list-style-type: none"> - 70 extremely low income units - 40 very low income units - 94 low income units - 46 market rate units 	<p>Total residential units on the FEIS Site would increase from 561 to 5,000 units, including:</p> <ul style="list-style-type: none"> - 561 extremely low income units - 290 very low income units - 950 low income units - 3,199 market rate units
Population	<p>The permanent, on-site residential population could increase to approximately 7,799 residents. Population characteristics (age, gender, ethnicity and income) would likely shift to be more reflective of the site vicinity and the City, due to the diversity of the housing stock which would be developed.</p>	<p>The permanent residential population in this sector could increase from 0 to 475 residents.</p>	<p>The permanent, on-site residential population could increase to approximately 8,274 residents. Population characteristics would likely shift as described for the DEIS Site.</p>
Employment	<p>Redevelopment would increase employment on the DEIS Site by providing space for up to 3,291 jobs related to office, lodging, neighborhood commercial and neighborhood services uses. Most existing jobs based onsite could be temporarily or permanently displaced, except for the Yesler Community Center, which would be retained. Also, a portion of the ground level extremely low income housing units would be configured to meet the requirements for in-home daycare businesses, allowing this existing business use to continue on the redeveloped site.</p>	<p>Redevelopment would reduce employment within this sector to approximately 7 employees from the 32 existing employees based in the Urban League building and the King County Archive facility.</p>	<p>Redevelopment would increase employment on the FEIS Site by providing space for up to 3,266 jobs related to office, lodging, neighborhood commercial and neighborhood services uses.</p>
Indirect Impacts	<p>Redevelopment would result in increased density and an economically diversified population. This could result in</p>	<p>Impacts would be similar to the DEIS Site.</p>	<p>Impacts would be similar to the DEIS Site.</p>

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	increased spending for goods and services in nearby areas.		
<i>Cumulative Impacts</i>			
	Redevelopment of the site along with planned and potential development in the site area would add to the cumulative population, employment and housing growth in the City of Seattle and the First Hill neighborhood in particular. Increased spending for goods and services could occur in nearby neighborhoods. Redevelopment of the site could contribute to broad changes in adjacent and nearby areas in the form of the displacement of businesses and/or low income individuals. While possible, such impacts would also be dependent on other conditions, such as favorable market/ economic conditions, local plans and zoning, political support and other broad development trends that are already in progress.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
3.17 Environmental Justice			
<i>Construction</i>			
	Construction noise would be subject to applicable City of Seattle noise limits, and noise mitigation measures could be implemented to reduce the extent to which on and offsite receivers are affected by construction noise. No disproportionate adverse impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
	Construction activities could affect air quality due to emissions from construction-related sources and equipment and dust from construction activities including grading, sloping and filling. Some construction phases would also cause odors, particularly during paving operations using tar and asphalt. Overall, with implementation of the controls required for the various aspects of construction activities and consistent use of best management practices, construction would not be expected to significantly affect air quality. No disproportionate adverse impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
Hazardous Materials Abatement	Residents would be relocated from buildings prior to any hazardous materials abatement and would not be exposed to contaminants during remediation activities. No disproportionate adverse impacts would be anticipated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
<i>Operation</i>			
Site-Related Health Hazards	Redevelopment of the site would eliminate site-related health hazards which are associated with Yesler Terrace's aging buildings and infrastructure. Specifically, demolition and redevelopment would eliminate mold problems caused by water intrusion through building foundations and poor ventilation. Also, a major rodent infestation associated with old steam pipes would be corrected by removal of this infrastructure which is no longer in use. Sewer and water infrastructure problems would be improved and sidewalks and planters would be improved to meet or exceed current City of Seattle standards. Existing site-related health hazards related to lead-based paint, asbestos and lead contaminated soils would be eliminated.	Impacts would be similar to the DEIS Site.	Impacts would be similar to the DEIS Site.
Air	No significant air impacts are expected as a result of redevelopment due to increased traffic on area roadways. However, certain toxic air pollutants associated with roadways in the vicinity of the Yesler Terrace site would exceed health-based standards to the degree that there is a potentially elevated health risk in long-term residency near busy roads. These conditions would not be expected to result in a disproportionately high and adverse impact to low income or minority populations, due to the anticipated equitable distribution throughout the site of low income and market rate housing.	Air quality conditions would essentially be the same as described for the DEIS Site, however, short-term (e.g. 1-hour) concentrations of pollutants from transportation sources such as NO ₂ are probably lower in the East of 12 th Sector compared with the portions of the site near I-5.	Impacts would be similar to the DEIS Site.
Noise	No significant noise impacts are expected as a result of redevelopment. However, portions of the site have sound levels classified as "unacceptable" under HUD noise criteria	Noise conditions in the East of 12 th Sector are within the HUD	Impacts would be similar to the DEIS Site.

	DEIS Site (NW, NE, SE, SW and East of Boren Sectors)	East of 12th Sector	FEIS Site
	for residential uses. Special building materials and techniques would need to be employed to reduce the transmission of noise from outside to inside spaces for all residential buildings nearest the western edge of the site that would not have intervening buildings obstructing sound transmission from I-5. With implementation of such measures to control the interior sound environment, no significant noise impacts would be anticipated. No disproportionate or adverse impacts to low-income or minority populations would be expected.	“acceptable” range, and no disproportionate or adverse impacts to low-income or minority populations would be expected.	
3.18 Wind			
Impacts to Harborview Medical Center Heliport Operations	Under the Preferred Alternative, a minimal change in winds would occur in the vicinity of the helipad. No significant impacts to heliport operations are anticipated with implementation of appropriate mitigation measures.	Does not apply.	Impacts would be the same as the DEIS Site.
Pedestrian Wind Impacts	Based on qualitative analysis, winds would be reduced along 9 th Avenue and increase along Alder Street. No significant impacts to pedestrian comfort are anticipated with implementation of appropriate mitigation measures.	Does not apply.	Impacts would be the same as the DEIS Site.

1.6 Preferred Alternative Mitigation Measures and Significant Unavoidable Adverse Impacts

Earth

The following required/proposed and other possible mitigation measures would address potential impacts to geologic conditions resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Required/Proposed Mitigation Measures

- Appropriate foundation support systems would be determined during the design and permitting of specific infrastructure and building projects.
- Site-specific seismic analyses would be conducted during design and permitting, in accordance with City of Seattle Municipal Code requirements.
- (MODIFIED) The design of infrastructure and buildings would incorporate seismic provisions of the current version of the Seattle Building Code (International Building Code with Seattle amendments).
- Site-specific analyses of development planned adjacent to or within the steep slope/slide-prone areas in the southern portion of the site would be conducted during the design and permitting phase. These analyses would identify appropriate methods of slope stabilization and other measures to prevent potential landslide impacts (see DEIS Appendix D for details).
- The existing drainage tunnels below the slide area in the southern portion of the site would be protected during construction or improved with appropriately designed new infrastructure. Drainage provisions would include measures to collect and route both groundwater and surface water runoff away from slide-prone areas for discharge to appropriate downslope locations.
- During construction, a temporary erosion and sedimentation control plan (TESCP) and Best Management Practices would be implemented to control erosion. These measures would be consistent with City of Seattle regulations, and could include the following:
 - Limit areas of exposure;
 - Schedule earthwork during drier times of the year;
 - Retain existing vegetation where possible;
 - Seed or plant appropriate vegetation on exposed areas as soon as earthwork is completed;
 - Route surface water through temporary drainage channels around and away from disturbed soils or exposed slopes;
 - Intercept and drain water from any surface seeps, if encountered;
 - Use silt fences, temporary sedimentation ponds, or other suitable sedimentation control devices to collect and retain possible eroded material;

- Cover exposed soil stockpiles and exposed slopes with plastic sheeting, as appropriate;
 - Use straw mulch and erosion control matting to stabilize graded areas and reduce erosion and runoff impacts to slopes, where appropriate;
 - Temporarily cease work under certain, limited circumstances, if weather conditions warrant, and
 - Rock pads or truck washing stations to limit excess soil materials from entering the right-of-way.
- Temporary shoring systems would be installed to address the potential for impacts associated with construction excavations. The design and construction of excavation shoring systems would include an evaluation of nearby adjacent structures and utilities (e.g. the I-5 retaining wall located along the west side of the site, adjacent building foundations, and/or existing drainage tunnels), and incorporate measures to limit impacts to these structures/utilities.
 - Site-specific investigations and analyses would be conducted during the design and permitting process in order to identify appropriate measures to address the potential need for and impacts of excavation dewatering. These measures could include site-specific design and control of dewatering systems, minimizing the extent and duration of dewatering, and monitoring for settlement.
 - As necessary, groundwater discharged during construction could be monitored to assess the water quality and need for treatment, to comply with applicable state and local requirements (see DEIS Section 3.6, Environmental Health for details).
 - Fill from grading activities would be designed to prevent settlement impacts to adjacent structures. As appropriate, monitoring could be conducted during construction to verify that no significant settlement occurs.
 - Excavated soil not reused onsite as structural fill (if determined to be suitable for that purpose), would be transported offsite and disposed of at an appropriate disposal location in accordance with all applicable local, state and federal regulations.
 - Foundation construction impacts could be mitigated by proper design and construction of temporary excavation shoring and dewatering systems. Ground elevation surveys could be conducted in conjunction with pre- and post-construction inspections and photographic surveys of structures or facilities located near foundation construction activities.
 - A permanent stormwater control system would be installed and maintained, in accordance with City of Seattle regulations (see **FEIS Section 3.3** and DEIS Section 3.3 and DEIS Appendix F for further information).

Other Possible Mitigation Measures

- The following measures could be employed to address potential impacts during drilled shaft installation of deep foundation support of structures:

- Casings could be installed to control caving of soils during drilled shaft installation for deep foundation support of structures;
- Vibration monitoring and ground elevation surveys could be conducted near construction activities;
- Spoils generated during drilled shaft installation could be disposed of in accordance with applicable local, state, and federal requirements.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated in this FEIS, no significant unavoidable adverse earth-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Air Quality

The following required/proposed and other possible mitigation measures would address potential air quality impacts associated with the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

Construction contractors would be required to comply with all relevant federal, state and local air quality rules.

(MODIFIED) In addition, best management practices (BMPs) would be implemented to reduce emissions related to the construction phase of the project. Possible management practices for reducing the potential for air quality impacts during construction include measures for reducing both exhaust emissions and fugitive dust. The Washington Associated General Contractors brochure Guide to Handling Fugitive Dust from Construction Projects and the PSCAA suggest a number of methods for controlling dust and reducing the potential exposure of people to emissions from diesel equipment. A list of some of the possible control measures that could be implemented to reduce potential air quality impacts from construction activities follows:

- Use only equipment and trucks that are maintained in optimal operational condition.
- Require all off-road equipment to have emission reduction equipment (e.g., require participation in Puget Sound Region Diesel Solutions, a programs designed to reduce air pollution from diesel, by project sponsors and contractors).
- Use car-pooling or other trip-reduction strategies for construction workers.
- Implement restrictions on construction truck and other vehicle idling (e.g., limit idling to a maximum of 5 minutes).
- Spray exposed soil with water or other suppressant to reduce emissions of PM and deposition of particulate matter.
- Pave or use gravel on staging areas and roads that would be exposed for long periods.

- Cover all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck bed), to reduce PM emissions and deposition during transport.
- Provide wheel washers to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of particulate matter on area roadways.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind blown debris.
- Stage construction to minimize overall transportation system congestion and delays to reduce regional emissions of pollutants during construction.

Other Possible Mitigation Measures

- (NEW) SHA could incorporate the use of additional filters on building air intake units to partially reduce exterior-to-interior infiltration of particulate matter.
- (NEW) SHA could incorporate inoperable windows and eliminate balconies on buildings near I-5 in order to reduce occupant exposure to particulate matter.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated and supplemented in this FEIS, no significant unavoidable adverse air quality-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Water Resources

The following required/proposed and other possible mitigation measures would address potential impacts to water resources resulting from the Yesler Terrace Redevelopment Preferred Alternative on the FEIS Site. All mitigation measures listed below are the same as those identified in the DEIS, with slight changes in wording for clarification (shown as MODIFIED) and a new possible mitigation measure related to de-watering (shown as NEW), since no new significant adverse impacts have been identified in this FEIS.

Required/Proposed Mitigation Measures

Construction

- Temporary erosion and sedimentation control measures and BMPs would be utilized during construction in accordance with the City of Seattle Drainage Code (see DEIS Appendix F for a list of specific BMPs that could be used).
- A Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented as required by the City's Drainage Code.
- Construction entrances, wheel washes, street cleaning, and other BMPs would be used to prevent tracking of soils beyond the project limits.

- BMPs for concrete work would include the following:
 - Cement trucks wash water would not be disposed of onsite, but would be returned to the off-site batch plant for recycling as process water; and,
 - New concrete work would be covered and protected from rainfall until cured.
- (MODIFIED) The generation of dissolved zinc and copper would be minimized through prohibitions on the use of unsealed external copper and galvanized metal, except where required by Code and/or necessary for public safety and/or where no feasible alternative exists. Zinc and copper source controls would extend to rooftops, which would be constructed of inert materials so that water quality treatment facilities for metals removal would not be required.
- Measures to control any impacts of excavation dewatering on groundwater could include: site-specific design and careful control of dewatering systems, minimizing the extent and duration of dewatering, and re-infiltration of extracted groundwater (see DEIS Appendix D for details).
- (MODIFIED) If it is determined that wetlands are located onsite, and impacts to these wetlands are necessary for redevelopment, the project would comply with applicable requirements (i.e. in the Seattle Municipal Code Title 25; see **FEIS Section 3.4, Plants and Animals**, for details).

Operation

- (MODIFIED) Detailed hydraulic modeling, using EPA's SWMM5, of the stormwater drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment to determine the capacity of the existing system and any necessary improvements to the City's and site's drainage and wastewater infrastructure. Improvements could include: additional green stormwater infrastructure (GSI) and stormwater flow control facilities onsite, and/or upsizing of downstream combined sewer pipes.
- The design and construction of the permanent stormwater control system, including conveyance and green stormwater infrastructure (GSI) flow control facilities, would be in accordance with the City's Drainage Code.
- (MODIFIED) Increases in impervious surface area would be mitigated by providing flow control for stormwater runoff. The flow control facilities would reduce the peak stormwater discharge from the site relative to existing conditions and could help reduce combined sewer overflows (CSOs), which can occur during heavy rainfall events.
- A Stormwater Operation and Maintenance Plan would be prepared for both public and private stormwater systems.

Other Possible Mitigation Measures

- Specialized products, such as Chitosan or Electrocoagulation (sediment coagulation agents), and other water quality treatment systems could be used during construction if warranted and approved by the City.

- (NEW) If the combined sewer facilities, where construction de-watering would be discharged, are determined to be at capacity, additional construction de-watering storage with flow control could be provided.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated/modified in this FEIS, no significant unavoidable impacts to water resources would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Plants and Animals

The following required/proposed and other possible mitigation measures would address potential impacts to plants, animals and habitat resources resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

The following mitigation measures are recommended to reduce potential impacts to plants, animals, and their habitat during and after the construction phase.

- (NEW) Incorporate techniques that could preserve or prevent existing exceptional trees from being damaged or destroyed, which would potentially minimize the quantity of exceptional trees that require mitigation. Prevention and preservation are considered mitigation techniques. Also, incorporate design techniques that could increase tree survivability over time. Techniques could include:
 - a. Incorporate creative site planning and architectural design.
 - i. Set the lower levels of the buildings away from the trees and their critical root zone (CRZ) (a cantilever or balcony effect).
 - ii. Design the edges or portions of buildings and underground structures to avoid trees and their CRZ.
 - iii. Install porous pavement (concrete, asphalt, pavers, or cells) or landscape areas in urbanized areas that will potentially assist in tree preservation.
 - iv. Design sidewalks, roads, streets, and other impervious hardscape elements such that they avoid trees and their CRZ.
 - v. Locate existing overhead and proposed utilities underground, to the extent practicable, to avoid maintenance pruning and removal of trees in conflict with overhead utilities.
 - vi. Consider future growth patterns of trees so that they will not need to be pruned to prevent harm to architectural features.

- b. Incorporate practical and creative landscape design and installation practices.
 - i. New trees and other plant material should be installed in areas that will not conflict with the health of the remaining trees.
 - ii. New trees and other plant material should be installed such that they do not conflict with each other or architectural features.
 - iii. Consider the vertical and horizontal layering of the vegetation as it grows over time. A varied vertical and horizontal layering is ideal.
 - iv. Design should consider incorporating elements of Seattle's Green Stormwater Infrastructure (GSI)/Green Factor program.
- c. Implement construction methods and sequencing to preserve trees proposed to be retained onsite. Examples include:
 - i. Install chain-link fencing around trees before mobilization to prevent damage from construction activities.
 - ii. Locate root systems visually or by other means (such as using underground radar equipment) to determine where construction activities should not occur.
 - iii. Consider the following when selecting vegetation species for the site:
 - 1. Invasive species, noxious weeds, and/or vegetation that contain allelochemicals that cause detrimental effects to other vegetation should not be planted within or near the project boundaries.
 - 2. Native plants have a higher chance of surviving regional weather conditions and are more suited for attracting native animals.
 - 3. Certain trees are considered harmful to hardscape surfaces. Trees that should be avoided in areas that have hardscape within the CRZ at maturity include, but are not limited to species of maples, American elm, tulip tree, pin oak, sweetgum, ash, cottonwood, and willows (Rindels 1995).
 - 4. Native evergreen species are ideal (especially evergreen conifers) for Low-Impact Development (LID) concepts in terms of assisting in matching pre-existing conditions and mimicking the hydrologic cycle.
- (NEW) A 1:1 or greater replacement ratio for all exceptional trees damaged or destroyed during construction activities is required by the City. Mitigation techniques that could potentially assist in matching or exceeding the 1:1 replacement ratio for exceptional trees damaged or destroyed during construction activities include:
 - a. Install trees at a 1:1 or greater ratio within the project boundaries (first priority).
 - b. Install trees at a 1:1 or greater ratio within the project boundaries and in off-site areas or areas adjacent to the project site, assuming that off-site mitigation is acceptable.

- (MODIFIED) For exceptional trees that cannot be preserved in place, transplant within the project area as a means of preservation. Transplanting should only occur if feasible and per the direction of the City.
- Nest removal for species protected under the Migratory Bird Treaty Act should occur outside of nesting season after birds have fledged.
- (MODIFIED) Install native plants, as possible, and remove invasive plants, in accordance with Washington State Executive Order 13112, to provide habitat for native animals.
- (MODIFIED) If potential wetlands are permanently impacted, mitigation is required. If the USACE does not take jurisdiction, the City's mitigation requirements under its critical areas regulations (SMC 25.09.160.C.3) for unavoidable impacts to wetlands would apply. Potential mitigation techniques for Category IV wetlands under City regulations include:
 - Construct a wetland of equal function to the lost wetland function.
 - Plant an area of native vegetation equal or greater in size to the area of the developed wetland, and remove invasive species in the area to be planted.
 - Construct a bioengineered/infiltration facility, such as a bioretention cell or bioretention plant, that replicates the hydrologic and/or water quality benefit of the developed wetland. This facility shall be designed according to the requirements of Chapters 22.800 through 22.808 of the Stormwater Code and associated Director's Rules.
 - Construct a green roof or roof garden that replicates the hydrologic and/or water quality benefit of the developed wetland. These facilities shall be designed according to the requirements of Chapters 22.800 through 22.808 of the Stormwater Code and associated Director's Rules.
- (NEW) If mitigation is required by the USACE for impacts to wetlands, the potential wetlands are within the Duwamish-Green River Watershed, and any offsite mitigation could include areas within the Duwamish-Estuary Subwatershed. Mitigation could consist of any combination of wetland creation, restoration, enhancement, and/or preservation on one or more sites within the subwatershed. Mitigation ratios vary depending on the type of wetland impacted and mitigation strategy undertaken. In this case, the following could apply as taken from the USACE/Ecology joint guidance (Ecology et al., 2006) on wetland mitigation in Washington State:
 - a. 1.5:1 Re-establishment or Creation
 - b. 3:1 Rehabilitation only
 - c. 1:1 Re-establishment or Creation and 1:1 Rehabilitation
 - d. 1:1 Re-establishment or Creation and 2:1 Enhancement
 - e. 6:1 Enhancement
 - f. Preservation of existing wetlands is also a recognized mitigation strategy. Ratios of mitigation credit provided by preservation vary between 10:1 and 20:1 and are determined on a case-by-case basis. Preservation ratios depend on the significance

of the preservation project and the quality of the wetland resources lost. Preservation is used only after the other mitigation strategies have been considered and is approved on a case-by-case basis by the agencies.

If mitigation is required by the USACE, the mitigation ratios cited in SMC 25.09.160E5a would apply for City critical area approval. In the case of the potential wetlands onsite, these ratios would include:

- i. 1.5:1 Restoration or Creation
- ii. 6:1 Enhancement

Per Ecology/USACE guidance, "restoration" includes re-establishment and rehabilitation as described above. If restoration were used, in whole or in part, as a mitigation strategy, the higher mitigation ratio between City and USACE standards would be applied (e.g. 3:1 for Rehabilitation only).

- ~~• If the potential wetlands onsite are determined to be "waters of the U.S.," pursuant to the CWA, the project would comply with the Army Corps of Engineers' regulations for any impacts to these wetlands.~~
- ~~• Construction methods and sequencing would be implemented to preserve exceptional trees proposed to be retained onsite, including:
 - ~~— Install chain link fencing around exceptional trees before mobilization to prevent damage from construction activities;~~
 - ~~— Locate root systems visually or by other means (such as using underground radar equipment) to determine where construction activities should not occur;~~
 - ~~— Remove or replace impervious areas near exceptional trees with permeable surfaces to provide more water to root systems; and,~~
 - ~~— Preserve trees that have a preservation value lower than moderate and are adjacent to an exceptional tree because removing the tree would harm the trees intended for preservation during construction activities.~~~~

Possible Mitigation Measures

The following mitigation measures are recommended to reduce potential impacts to plants, animals, and their habitat during and after the construction phase.

- (MODIFIED) Incorporate techniques that could preserve or prevent existing valuable trees from being damaged or destroyed. Prevention and preservation are considered mitigation techniques. Also, incorporate design techniques that could increase tree survivability over time. Techniques include all items listed as mitigation techniques for exceptional trees, with the exception of any discussion regarding a 1:1 or greater mitigation ratio.
- (NEW) Exceed a 1:1 replacement ratio for all exceptional trees damaged or destroyed during construction activities. Also, meet or exceed a 1:1 ratio for valuable trees damaged or destroyed during construction activities. Mitigation techniques that could potentially assist in exceeding a 1:1 replacement ratio for exceptional trees and meeting or exceeding a 1:1 ratio for valuable trees include:

- Install tree quantities that exceed the required 1:1 ratio within the project boundaries, such as a 2:1 replacement ratio.
- Install tree quantities that exceed the required 1:1 ratio within the project boundaries and in off-site areas or areas adjacent to the project site in an effort to increase tree populations and create canopy beyond the project area, assuming that off-site mitigation is acceptable.
- (NEW) For valuable trees that cannot be preserved in place, transplant within the project area as a means of preservation. Transplanting should only occur if feasible and per the direction of the City.
- (MODIFIED) Establish a thorough landscape maintenance program during and after construction to ensure the vegetation remains healthy and free of invasive/undesirable plants.
- (MODIFIED) Apply arboriculture practices to all plants to ensure a prolonged and healthy tree life.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and this FEIS, no significant unavoidable adverse impacts to plants, animals or habitat resources would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Energy – Climate Change and Greenhouse Gas Emissions

The following possible mitigation measures would address potential impacts to climate change, greenhouse gas emissions and energy resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Possible Mitigation Measures

The following possible mitigation measures would address potential impacts to climate change, energy use and greenhouse gas emissions from the Yesler Terrace Redevelopment. The following provides a list of broad categories of potential sustainable features that could be incorporated in the final redevelopment site to offset potential impacts from climate change, greenhouse gas emissions and energy use. Through continued planning efforts, such as development of the "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics that was issued December 12, 2010, SHA will continue to refine this list to identify specific potential sustainable features that would be appropriate to include in the redevelopment.

- **Natural Drainage and Green Roofs** – Green roofs can provide additional open space, opportunities for urban agriculture and decreased energy demands by reducing the cooling load for the building. Green Stormwater Infrastructure (GSI) would be developed for flow control and water quality treatment to the maximum extent feasible.

- (MODIFIED) **Tree Protection** –Protection of existing trees, as feasible, and careful attention to new tree planting could help provide stormwater management, habitat value, noise buffering, air purification, carbon sequestration, and mitigation of the urban heat island effect.
- (MODIFIED) **Urban Agriculture** – New P-patch Community Gardens and rooftop gardens could be provided within the site for residents to grow food. A farmer’s market could be established for residents to sell locally grown food, and small micro-retail spaces and food vendor carts could also be allowed where value-added food products could be sold.
- **Native Plants** – Native plants are adapted to the local climate and do not depend upon irrigation after plant establishment for ultimate survival. Landscaping with native plants, beyond that required by code, could be planted to reduce water demand and integrate with the local ecosystem.
- **District Infrastructure Systems for Energy, Water and Waste** – District Infrastructure Systems aggregate enough service demands to make local neighborhood utility solutions feasible. District infrastructure systems could be used as one approach to provide necessary infrastructure services, if determined to be feasible. District solutions may reduce greenhouse gases by utilizing renewable sources of energy and increasing the use of local resources, materials and supplies. District parking solutions and car sharing are designed to reduce vehicle trips. Water reuse and anaerobic digesters may reduce sewer flows. Rainwater capture may reduce stormwater flows. Water reuse and rainwater capture could also reduce potable water demands. District systems for Yesler Terrace could potentially include energy, potable water, wastewater, and solid waste.
- **Waste Management and Deconstruction** – When existing buildings need to be demolished, there are often opportunities to reduce the amount of waste being sent to the landfill with sustainable waste management strategies. In the Seattle area, standard practice for building construction and demolition results in fairly high recycling rates of over 50 to 60 percent. However, these rates can be increased by implementing aggressive demolition recycling. Such efforts can require considerable additional effort on the part of the contractor. Some of the options under consideration that could mitigate waste generated by the Yesler Terrace project include on-site source separated recycling, potential reuse of demolition materials on-site, deconstruction of existing buildings, and salvage and reuse of building components.

Due to the presence of asbestos and lead-based paint in the majority of the existing onsite buildings, it is unlikely that solid waste resulting from most building demolition would be recyclable. Building materials would be tested as part of demolition activities in order to determine the levels of contamination present. The test results would be used to determine whether building materials could be recycled, would be sent to a landfill or to a specialized facility that handles hazardous waste (see DEIS Section 3.6, Environmental Health, for details).

- **Building Design** – Building design at Yesler Terrace could integrate a wide variety of green building features. Green building encompasses energy and water conservation, waste reduction, and good indoor environmental quality. Tools and standards that are used to measure green building performance could be used at Yesler Terrace. Some

options include: Built Green, LEED, and the Evergreen Sustainable Development Criteria. Custom green building guidelines could also be developed to guide building design and construction. Some of the specific building design strategies that might be considered include solar panels for electricity generation or domestic solar hot water, energy star rated appliances, water conserving fixtures beyond code, low toxic materials, finishes, and flooring, energy and water sub-metering for individual units, high efficiency fixtures such as dual flush toilets, toilet flushing and irrigation supplied by recaptured wastewater or rainwater, dual plumbing systems for all new buildings to accommodate water reuse, and wind generated alternative energy.

- (NEW) **District Heat System.** The Yesler Terrace Sustainable District Study identified a set of on-site renewable energy sources that could provide most of the space heating and cooling and water heating requirements of the Yesler Terrace redevelopment. The most economically viable of such systems was determined to be a geo-exchange/solar hot water strategy, which could reduce the net annual electricity consumption of the project by 25 percent relative to the estimates in **FEIS Table 3.5-6**, while reducing peak electricity demand by over 40 percent. This geo-thermal/solar strategy would lower the production of greenhouse gas emissions associated with electricity generation, and would replace those electrical energy needs with renewable energy from some combination of geo-thermal, passive solar and sewer heat recovery sources.
- (NEW) **Increased Energy Conservation Efforts.** It is always possible to both construct buildings and make choices within buildings that conserve energy beyond the minimum requirements of the Washington State Energy Code. This analysis does not assume such investments or behavior, but they remain a potential source of mitigation, and could be further supported by external factors such as rising energy prices and conservation assistance programs.

Significant Unavoidable Adverse Impacts

Declaring the impacts of climate change and greenhouse gas emissions significant or not significant implies an ability to measure incremental effects of global climate change. The body of research and adopted regulations necessary to connect individual land uses, development projects, operational activities, etc. with the broader issue of global warming do not currently exist. Scientific research and analysis tools sufficient to determine a numerical threshold of significance have not been established at this time and any conclusions regarding impact significance would be speculative. As discussed in the DEIS, SHA is considering opportunities to employ sustainable development strategies, when feasible, to reduce greenhouse gas emissions and to reduce the carbon footprint of the Yesler Terrace Redevelopment. In addition, increasing housing opportunities in close proximity to transit, and co-location of housing and jobs, can be considered beneficial impacts in terms of overall greenhouse gas emissions from the transportation sector.

The direct and indirect impacts of energy use of the Preferred Alternative, including redevelopment of the East of 12th Sector, would not be expected to be significant.

Environmental Health

The following required/proposed and other possible mitigation measures would address potential impacts to humans or the environment from existing hazardous materials/conditions as

a result of the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

- (MODIFIED) Additional characterization, removal, and proper disposal of soil with lead concentrations greater than the MTCA Method A cleanup level for unrestricted land uses would be conducted.
- A site-specific health and safety plan would be prepared that includes the safety requirements of WAC 296-843, Hazardous Waste Operations, and WAC 296-155, Safety Standards for Construction Work, to minimize the potential for workers to be exposed to hazardous materials during construction and to address appropriate handling and disposal of any soil with contaminant concentrations greater than the MTCA cleanup levels.
- Conventional dust control measures would be implemented to minimize the exposure of workers and the immediate surrounding populations to construction-generated dust (see **FEIS Section 3.2, Air Quality**, for details).
- Spill prevention and response planning would be conducted prior to the start of construction to prevent and, if needed, respond to hydraulic oil or fuel spills.
- Proper characterization of contaminated soil and/or asphaltic concrete pavement, as part of site clearing, grading, or general excavating, would be conducted in order to select an appropriate offsite disposal site.
- Dewatering may be needed for construction of underground structures (e.g., parking garages) and utilities, depending on the depth of the facility. Monitoring, and potentially treatment, of dewatering discharges would be performed, as necessary, to limit impacts to receiving waters in the event the dewatering water contains contaminated or turbid groundwater.
- A King County Waste Discharge permit would be required to discharge any dewatering water to the combined sewer. Monitoring of dewatering discharges would be necessary to determine whether physical and chemical parameters are within King County discharge limits. If parameters are outside acceptable limits, treatment would be necessary prior to discharging to combined sewer.
- During construction activities, possible contaminants in soil could become entrained in stormwater. Stormwater treatment and monitoring would be conducted during demolition and/or construction activities (see **FEIS Section 3.3, Water Resources**, for details on water quality treatment).
- Building demolition would be conducted after a hazardous building materials survey has been completed to identify the presence of such materials (e.g., ACBM or lead-based paint) and remove or stabilize them prior to demolition.

- If underground steam pipes (associated with the former Steam Plant) are uncovered during site grading or excavation activities, they would need to be evaluated for the potential presence of hazardous materials (i.e., asbestos-containing pipe wrap).
- ~~The SHA Brownfields site would need to remain in the Department of Ecology's Voluntary Cleanup Program until a "No Further Action" letter is issued.~~
- (MODIFIED) At the Steam Plant, residual material within the smokestack and the stack itself may contain potentially hazardous materials. Testing of the residual material and the smokestack would be performed prior to any activities that would affect the smokestack. Proper characterization of any hazardous materials identified within the smokestack would be conducted in order to select an appropriate offsite disposal site.
- If unanticipated contamination is discovered, the project would need to comply with applicable cleanup provisions, based on MTCA regulations.
- (NEW) Additional characterization, removal, and proper disposal of soil with lead, heavy oil, or other contaminant concentrations greater than the MTCA cleanup levels for unrestricted land uses within the East of 12th Sector would be necessary.
- (NEW) If groundwater contamination is encountered (i.e. contaminant concentrations greater than MTCA Method A cleanup levels or other applicable standards), then characterization, remediation and/or monitoring would be necessary in accordance with MTCA cleanup standards.
- (NEW) Building remodeling on the Baldwin Apartments building and the Urban League building would be conducted after a hazardous building materials survey has been completed to identify the presence of such materials (e.g., ACBM or lead-based paint) and to remove or stabilize them prior to remodeling activities, as applicable. In addition, ACBM or lead-based paint abatement records for the King County Archives site, if available, would need to be reviewed prior to the demolition of the warehouses, or a hazardous building materials survey would need to be completed for the site. If there is any ACBM or lead-based paint remaining at the King County Archives site, removal or stabilization would be needed prior to demolition.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse environmental health-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Noise

The following required/proposed and other possible mitigation measures would address potential noise impacts to sensitive on and offsite receivers as a result of the Yesler Terrace Redevelopment. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

- Construction activities would be subject to applicable City of Seattle noise limits.
- HVAC equipment, particularly equipment proposed to be located outside or on the tops of buildings, would need to be selected, located and designed to ensure compliance with the City of Seattle's daytime and nighttime noise limits at nearby receiving locations.
- (MODIFIED – moved from Other Possible to Required/Proposed) Construction materials and techniques would be used in all buildings that would reduce interior sound levels in residences to 45 dBA L_{dn} or less.
- (NEW) Along the western edge of the site along I-5, most outdoor use areas would not be located on the western sides of the buildings or at any other locations in this area that have an unobstructed view to the freeway.
- (NEW) Buildings adjacent to Boren Avenue should be designed with internal courtyards oriented away from the traffic noise.
- (NEW) Special building materials and techniques would be employed to reduce the transmission of noise from outside to inside spaces for all residential buildings exposed to sound levels greater than 65 dBA L_{dn}. Effectively controlling exterior-to-interior sound level transmission would also require careful attention to detail during installation of noise-reducing building components. Examples of measures that are likely to be necessary for buildings exposed to levels greater than 75 dBA L_{dn}, specifically those buildings nearest the western edge of the site, include the components and restrictions listed below.
 - (NEW) "Acoustic" or "noise-reducing" exterior wall components (i.e., wall, windows, and doors) that provide an outside to inside transmission class (OITC) rating of at least 45. In order to achieve the specified OITC ratings, special measures will be necessary to install doors and windows. These include the use of non-hardening (acoustical) caulk at all hidden surfaces, flexible caulk at all exposed surfaces, and solid continuous blocking to fill all voids over 1/4" around windows and doors.
 - (NEW) Double-studded (i.e., staggered stud) exterior walls to provide a physical break in the structure of the walls to eliminate the noise path through the structural components of the wall, except at the top and bottom plates.
 - (NEW) Masonry façade ranging from 4-8 inches thick.
 - (NEW) Double layers of 5/8" sheetrock on the interior side of exterior walls.
 - (NEW) Double sheeting or extra insulation to provide extra mass on the exterior side of exterior wall, or a brick or masonry façade ranging from 4-8 inches thick.
 - (NEW) Prohibition of in-window or through-wall air-conditioning, ventilating, or heating units.

- (NEW) All vent ducts, including those for bathroom exhaust fans and dryers, connecting the interior space to the outdoors constructed of rigid metal and containing at least two 90° bends, or one 90° bend and a total length of at least 20 feet (or the maximum length allowed by the dryer manufacturer).
- (NEW) Mechanical ventilation systems that would provide the minimum air circulation, fresh air supply, heating, and cooling requirements for various uses in occupied rooms, as specified in the state building code, without the need to open windows, doors, or other openings to the exterior. This measure would also apply to residential units exposed to levels between 65 and 75 dBA L_{dn} (i.e., those units in “normally unacceptable” locations as defined by HUD noise criteria).

Other Possible Mitigation Measures

Construction

Some relatively simple and inexpensive practices can reduce the extent to which people are affected by construction noise and ensure that construction noise levels stay within the applicable daytime sound level limits. Examples include the following:

- Use properly sized and maintained mufflers, engine intake silencers, engine enclosures, and turn off idle equipment.
- Make construction contracts specify that mufflers be in good working order and that engine enclosures be used on equipment when the engine is the dominant source of noise.
- Locate stationary equipment as far away from sensitive receiving locations as possible. Where this is not feasible, or where noise impacts are still significant, place portable noise barriers around the equipment, with the opening directed away from noise-sensitive receiving locations.
- To the extent feasible, substitute hydraulic or electric models for impact tools such as jack hammers, rock drills and pavement breakers to reduce construction and demolition noise. Electric pumps could be specified if pumps are required.
- Explore the feasibility of using broad-band or ambient sensing vehicle back-up alarms, which are typically less noticeable than traditional pure-tone alarms.
- Locate construction staging areas expected to be in use for more than a few weeks as far as possible from sensitive receivers, particularly residences.
- Use quiet equipment and temporary noise barriers to shield sensitive uses, and orient work areas to minimize noise transmission to sensitive off-site locations.

Operation

Sound levels at numerous locations on the project site currently exceed HUD guidelines for residential locations and would continue to do so in the future with any of the proposed alternatives. Therefore, some or all of the following mitigation measures should be considered:

- Place outdoor use areas (where quiet conditions are required for optimal use) both away from the perimeter of the site and in locations that are "shielded" by buildings (i.e. where buildings are located between the exterior use area and major roadways).
- Minimize site grading that increases on-site ground-level elevations that would give lower portions of buildings near I-5 a more direct line-of-sight to the freeway (thereby increasing noise levels).
- (NEW) As an element of the overall decision-making criteria for determining/selecting residential building locations when development occurs, SHA could consider locating family housing away from noisy areas of the site.
- (NEW) Buildings placed along the western boundary of Yesler Terrace could, to the extent feasible, be oriented to be parallel with I-5 in order to shield the site's interior open spaces from noise.

Significant Unavoidable Adverse Impacts

Based upon the consideration of noise impacts at the site, no significant unavoidable adverse noise impacts are anticipated to result from the construction or operation of the Preferred Alternative. Implementation of appropriate noise control mitigation measures, including the required/proposed mitigation measures listed above, would be necessary to provide interior sound levels that are both consistent with HUD noise criteria and appropriate for a livable environment. In addition, for those portions of the site in which residential uses are planned in areas of the site that have sound levels classified as "unacceptable" under HUD noise criteria, City HSD approval of a noise waiver would be required on behalf of HUD prior to application for HUD financing for the project.

Land Use

Ultimately, the design guidelines, Land Use Code development standards and the Planned Action Ordinance for this proposal would guide redevelopment of the Yesler Terrace site over the long-term. These plans, regulations and standards, along with individual project review by the City, would serve as mitigation to preclude any potential significant land use impacts from future redevelopment under the Preferred Alternative and ensure compatibility among site uses and uses in the site vicinity.

The following required/proposed and possible mitigation measures would further address potential land use compatibility issues, particularly related to compatibility with adjacent uses and among uses within the site itself. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

- (MODIFIED) As part of the potential approval of the Proposed Actions, design guidelines would be prepared by SHA and adopted by the City, thereby regulating all future development accordingly.

- (MODIFIED) As part of the potential approval of the Proposed Actions, a new zone designation for the site would be adopted by the City and would establish zoning standards to further lessen potential land use, and height, bulk, and scale impacts on adjacent properties from long-term redevelopment.
- (MODIFIED) As the existing in-home day care businesses operating out of residential units are temporarily displaced as a result of redevelopment activity, a portion of the low income housing units would be configured to meet the in-home daycare licensing requirements.
- ~~SHA's decision on which development plan to implement will likely include SHA imposed design standards to help mitigate land use, and height, bulk and scale impacts.~~

Other Possible Mitigation Measures

- (MODIFIED) Features that could be incorporated into the Development Plan approved by the SHA Board (see **FEIS Section 2.2**, Next Steps, for details), to further facilitate the compatibility of uses could include the following:
 - A mix of uses that creates opportunity for the establishment of a live-work-play environment for existing and new tenants.
 - Public parks and open space area that can serve as a resource to Yesler Terrace residents and employees.
 - Provision of landscaping and street trees around the site perimeter in order to provide a buffer between onsite redevelopment and existing offsite adjacent uses.
- (MODIFIED) Mitigation measures to ensure that new land uses are compatible with onsite existing retained/onsite uses and offsite uses, such as street level setbacks, upper level setbacks and landscape design guidelines, could be implemented. See **FEIS Section 3.10, Aesthetics/Light and Glare/Shadows**, for a complete list of specific mitigation measures, as well as DEIS Appendix Q, Urban Design Approach, for guidance for specific design guidelines. See **FEIS Section 2.5.2, Building Heights**, for criteria for spacing of high-rise buildings.
- (MODIFIED) Additional mitigation measures related to air quality, noise, views, transportation and public services could be provided to lessen the potential for impacts from redevelopment of the site (see **FEIS Section 3.2, Air Quality**; **FEIS Section 3.7, Noise**; **FEIS Section 3.10, Aesthetics/Light and Glare/Shadows**; **FEIS Section 3.13, Transportation FEIS** and, **FEIS Section 3.15, Public Services** for details).

Significant Unavoidable Adverse Impacts

Significant adverse land use impacts would not be anticipated under the Preferred Alternative as the proposed land uses would be compatible with existing offsite uses, including redevelopment of the East of 12th Sector.

No significant unavoidable adverse height, bulk or scale related impacts would be anticipated with implementation of appropriate required/proposed mitigation measures, including those listed above.

Redevelopment is assumed to occur consistent with the above required/proposed mitigation measures, and adopted standards, guidelines, and regulations for Yesler Terrace, including a Planned Action Ordinance.

Aesthetics

The following required/proposed mitigation measures would address potential aesthetic and height, bulk and scale impacts resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS.

Required/Proposed Mitigation Measures

Aesthetics

The following measures would be implemented to lessen potential aesthetic impacts.

- The Land Use Code text amendment, and/or Planned Action Ordinance, is expected to include zoning standards that specify heights throughout the site and setbacks at the perimeter of the site, and also include design guidelines. As permit applications are submitted, the City will review the proposed development for conformance with those standards and guidelines.
- Street landscaping would be provided that meets or exceeds City of Seattle regulations, and would serve as a partial buffer to offsite development.
- (NEW) As part of the potential approval of the Proposed Actions, design guidelines would be prepared by SHA and adopted by the City, thereby regulating all future development accordingly.

Other Possible Mitigation Measures

Height, Bulk and Scale

The following measures could be implemented to lessen potential height, bulk and scale impacts to offsite development surrounding the site.

- Upper level building setbacks could be required for buildings above 65 to 85 feet in order to open the sky view from the street and create a less imposing physical building scale near the lower, offsite height and density zoning.
- Building façade lengths could be limited and minimum building spacing required above building heights of 65 feet to 85 feet to reduce the wall effect from tall buildings.
- Maximum floor plate sizes could be established for high-rise buildings, similar to limits currently in place for residential towers in Downtown zones.

- Ground level building setbacks could be used for high-rise buildings to create a wider separation between lower and higher density zoning.
- (MODIFIED) Minimum ground and upper level building stepbacks could be required for buildings adjacent to the property lines of offsite parcels with considerably lower maximum building heights in order to provide separation between areas with lower density development.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse height, bulk or scale related impacts would be anticipated with implementation of appropriate mitigation measures, including those listed above.

Light and Glare

The following required/proposed and other possible mitigation measures would address potential light and glare impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Required/Proposed Mitigation Measures

Light and Glare

The following measures would help to reduce overall light and glare impacts for the project in the immediate vicinity of the Yesler Terrace site.

- Street trees and the use of building materials with relatively low-reflectivity at street level would minimize reflective glare-related impacts to pedestrians and nearby residents immediately adjacent to the site.
- Pedestrian-scale lighting would be provided consistent with code, function and safety requirements.
- Exterior lighting would include fixtures to direct the light downward and/or upward and away from on and off-site land uses.

Other Possible Mitigation Measures

Light and Glare

- Construction-related lighting could be shielded and directed away from adjacent land uses.

Reflected Solar Glare

(MODIFIED) The Preferred Alternative building orientations would not result in significant glare impacts (i.e. glare within the driver's cone-of-influence) to I-5 at any times of day or year. Glare impacts to Boren Avenue would occur on December 21st, at 4 PM. In order to avoid this glare

impact, the building orientation could be altered or excessively-reflective building facade materials could be avoided for the building causing the glare. Changing the building orientation, alone or in combination with other measures, would be expected to mitigate this impact.

The following measures could help to reduce overall light and glare from the redevelopment proposal.

- While building façade materials have not yet been determined, reflectivity of glazing would likely be dictated by the nature of glass that is employed and the requirements set forth by the City's Energy Code and LEED energy requirements, if LEED certification is sought. Excessively-reflective surfaces (i.e. mirrored glass, or polished metals) that go beyond what is required to meet energy-related code provisions could be avoided for buildings with the potential to result in glare impacts.
- Additional measures to mitigate glare could include recessing glazing to produce areas of glare shadow which would reduce the amount of glare being reflected from the building, angling glazing in the building façade with an orientation that will eliminate glare in a driver's cone-of-influence and will cast glare in directions with less of an impact to traffic, and limiting the percentage of glazing on certain building facades to reduce glare impacts to surrounding buildings and roadways. Additional glare studies could be required for individual permit applications to verify glare impacts and mitigation.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated in this FEIS, no significant unavoidable adverse light and glare-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Shadows

The following other possible mitigation measures could address potential shadow impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative to smaller onsite open space areas. All mitigation measures listed below are identified as (NEW), since no mitigation was identified in the DEIS, as no significant shadow impacts were identified under Alternatives 1-4.

Possible Mitigation Measures

To reduce shadow impacts from the development of high-rise buildings to smaller onsite open space areas such as pocket parks, the following measures could be implemented:

- (NEW) Small open space areas could be located adjacent to streets in order to gain solar access from the street. Locations on the north side of east/west streets would be preferable. Secondary preferred locations would be on north/south streets on either side of the street, however locations on the east side of these streets would benefit the most during daylight saving time periods.
- (NEW) Small open space areas adjacent to buildings could be located to the south, east or west sides of the buildings, with a southern location preferred.

- (NEW) Small open space areas could be located in areas which have the least amount of building shadow falling on them from future high-rise building locations from March through September during the hours of 10:00 AM to 4:00 PM.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Historic Resources

The following possible mitigation measures would address potential impacts to historic resources resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS except those identified below that have been modified (MODIFIED)⁵ or (NEW). Deletions of mitigation measures listed in the DEIS are shown in strikethrough format.

Possible Mitigation Measures

- (MODIFIED) Yesler Terrace Steam Plant (designated City of Seattle Landmark and NRHP-eligible property) – The Preferred Alternative assumes the Steam Plant would be retained and adaptively reused/rehabilitated. Changes to the exterior (designated feature) of the Steam Plant, including demolition of the building, cannot be undertaken without the review and approval of the Landmarks Preservation Board. As a NRHP-eligible property, any adaptive reuse/rehabilitation plan would be required to comply with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*.
- ~~Demolition of original (1941-1942) Yesler Terrace – Documentation of the property should be undertaken to mitigate its loss and should be easily accessible to the public. There are several options for providing a historic record, including development of a historic record in accordance with DAHP standards; development and posting of an expanded entry about Yesler Terrace on HistoryLink.org, the online encyclopedia of Washington State history; development of an oral history program by the Museum of History and Industry involving current and former long-term Yesler Terrace residents and managers, as well as early participants in SHA's history; and development and onsite installation of interpretive exhibits or interpretive artwork about the original Yesler Terrace, its social and cultural history, and buildings. Such exhibits or artwork should be located on the exterior, in easily accessible and visible locations on the new project site. Consideration should be given to an exhibit within or outside the Steam Plant. Any exhibit text should be provided in a variety of languages given the cultural diversity of Yesler Terrace. Retention and rehabilitation of the original Yesler Terrace Steam Plant, which does have architectural integrity, could also mitigate the loss of the overall property.~~
- (NEW) St. George Hotel/Urban League (recommended Seattle Landmark and NRHP-eligible) – The Preferred Alternative assumes the St. George Hotel/Urban League would be adaptively reused to accommodate new residential uses. Local permits are likely to

⁵ Additional mitigation may be imposed if the proposed project is determined to have adverse effects on eligible or listed properties under the NHPA, and adverse effects are resolved through executing an MOA under the NHPA.

trigger the Seattle Landmark Nomination process. Assuming this process results in designation of the property, changes to the designated feature(s) of the building cannot be undertaken without review and approval by the Landmarks Preservation Board. As a NRHP-eligible property, any adaptive reuse and/or rehabilitation plan would be required to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

- Potential Structural Instability/Undermining – Care should be taken in order to avoid structural damage to nearby historic buildings that could occur due to construction-related vibrations and/or earthwork. All excavation, earthwork, pile driving, etc. should be designed and monitored in order to minimize and/or immediately address any such impacts to nearby or adjacent historic properties. Monitoring should include crack monitors placed on nearby structures, periodic observation, and photography to document the structural integrity of the historic buildings and determine whether there was resulting damage of interior or exterior finishes, or exterior masonry and/or framing. If such damage occurs as a result of the project, damage should be mitigated through repairs to the affected buildings.
- Temporary Dirt/Unintended Damage – Care should be taken in order to avoid or limit the introduction of atmospheric elements that could alter and/or potentially damage historic building fabric or architectural features of nearby historic resources. All construction activity should be monitored in order to prevent and address any such impacts to adjacent or nearby historic properties from construction vehicles carrying excavation materials. Dust control measures would be implemented (see **Section 3.2, Air Quality** of the EIS for details).
- (MODIFIED) Development pressure on low-scale properties – Mitigation in the form of preservation planning could be undertaken, by development and submittal of landmark nomination reports for those buildings offsite within the APE (*west of 12th Avenue portion only*) that are potentially eligible for listing as Seattle Landmarks but not currently designated.
- ~~Adjacency Analysis – SEPA calls for design analysis and review of new construction adjacent to or across the street from a designated local landmark, by the City Historic Preservation Officer.~~
- ~~If Section 106 consultation results in a finding that the federal undertaking would have an adverse effect upon an NRHP-listed or eligible property or district, Section 106 requires measures to avoid, minimize, or mitigate such effects. A binding commitment to such measures is memorialized in a Memorandum of Agreement (MOA) between the parties and incorporated into the federal agency's Record of Decision.~~

Significant Unavoidable Adverse Impacts

With implementation of the appropriate mitigation measures, no significant unavoidable adverse impacts to historic resources would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Cultural Resources

Although no archaeological sites or ethnographic places have been identified within the FEIS APE and the Yesler Terrace site is considered to have a low potential to contain such resources, unanticipated resources could be encountered during construction. If at any time during construction archaeological resources were observed, the following mitigation measures would be implemented to address potential impacts to cultural resources resulting from the Yesler Terrace Redevelopment. All mitigation measures listed below are the same as those identified in the DEIS, since no new significant adverse impacts associated with the Preferred Alternative were identified.

Required/Proposed Mitigation Measures

- Project site work would be temporarily suspended at the location of the archaeological resource, the project manager would immediately be notified and a professional archeologist would document and assess the discovery. The DAHP and all concerned tribes would be contacted for any issues involving Native American sites.
- If project activities expose human remains, either in the form of burials or isolated bones or teeth, or other mortuary items, work in that area would be stopped immediately. Local law enforcement, DAHP, and affected tribes would be immediately contacted. No additional excavation would be undertaken until a process has been agreed upon by these parties, and no exposed human remains would be left unattended.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts would be anticipated.

Transportation

The following required/proposed and other possible mitigation measures would address potential impacts to the transportation system as a result of the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Proposed/Required Mitigation Measures

(NEW) The following transportation mitigation measures are proposed for the Preferred Alternative (see detailed mitigation measures below):

- Implement a construction management plan.
- Improve on-site and off-site intersections (see below).
- Develop strategies with King County Metro to improve service frequency on Route 27 and/or to reroute Route 3/4 to Yesler Way near the site.
- Build new pedestrian facilities throughout the site.
- Provide truck access (see measures outlined below)
- Implement a Transportation and Parking Management Plan.

(MODIFIED) Mitigation of Construction Impacts

Construction impacts would occur in stages until all development at Yesler Terrace is complete. Prior to commencing construction of the West of Boren Sectors, the SHA and/or its prime contractor(s) would prepare a Construction Management Plan. This plan would document the following:

- Truck haul routes to and from the site.
- Peak hour restrictions for construction truck traffic and how those restrictions would be communicated and enforced.
- Truck staging areas (e.g., locations where empty or full dump trucks would wait or stage prior to loading or unloading.)
- Construction employee parking areas.
- Measures to reduce construction worker trips such as rideshare, shuttles, carpool, transit passes or related programs.
- Road or lane closures that may be needed during utility construction or relocation, roadway construction, or building construction. If any arterial street is affected by a partial or full closure, the contractor should also prepare a Maintenance of Traffic Plan detailing temporary traffic control, channelization, and signage measures.
- Mechanism for notifying community if road or lane closures would be required.
- Sidewalk, bike lane, and/or bus stop closures and relocations. If any sidewalk or bike facility is affected by a partial or full closure, the contractor should also prepare a plan detailing temporary pedestrian detour and signage measures.
- Mechanism for notifying community if sidewalk, bike lane, or bus stop closures would be required.

Other elements or details may be required in the Construction Management Plan to satisfy street use permit requirements of the City of Seattle. SHA and the contractor would incorporate other City requirements into an overall plan, if applicable.

(MODIFIED) Off Site Intersection Improvements

Detailed analysis was performed related to improvement needs at study area intersections. Potential improvements along with the related improvement in traffic operations are summarized in **FEIS Table 1-2**. Three intersections where no improvements are proposed are noted. All three intersections are located on Broadway where changes in the lane configuration and/or signal phasing are proposed to accommodate the First Hill Streetcar. Further changes in intersection configuration are not possible at these intersections and they have been noted as “significant unavoidable adverse impacts.”

Three mitigation measures provide additional turn lanes at Yesler Way/8th Avenue, on eastbound Yesler Way at Broadway, northbound 9th Avenue at Jefferson Street, and southbound Rainier Avenue S at Dearborn Street. The roadway plan for Yesler Way includes these features. An additional lane on 9th Avenue at Jefferson Street would likely require removal of a curb bulb at the intersection. If that is not desired, the intersection could be signalized to improve operations. The short right turn pocket on Rainier Avenue S at Dearborn Street was

previously proposed to accommodate the past Dearborn Street Project (major redevelopment of the Goodwill site and surrounding properties).

**Table 1-2
POTENTIAL INTERSECTION MITIGATION**

Int. #	Intersection Name	Description of Improvement	PM Peak Hour Operations with Preferred Alternative			
			Without Mitigation		With Mitigation	
			LOS	Delay	LOS	Delay
3	Broadway/E Madison St	None Proposed due to Streetcar	E	75.9	n/a	n/a
6	12th Avenue/ E Cherry Street	Restripe E Cherry Street to provide conventional left turn phasing (instead of separate phases for eastbound and westbound traffic).	F	99.8	F	87.2
7	Broadway/E James Street	None Proposed due to Streetcar	F	93.7	n/a	n/a
11	12 th Avenue/Yesler Way	Change signal timing to provide slightly longer north-south phase to account for lane change due to Streetcar	E	66.1	D	37.4
19	Rainier Avenue S/ S Dearborn Street	Add a southbound right turn pocket on Rainier Avenue S	F	99.5	E	67.3
21	7th Avenue/ Cherry Street	Change cycle length to full cycle to match intersection at 6th Avenue/Cherry Street.	F	142.2	F	99.9
22	9th Avenue/ Cherry Street	Convert to an all-way, stop-controlled intersection.	F	>500	C	17.8
25	Boren Avenue/James Street	None proposed due to right of way constraints	E (AM only)	56.8	n/a	n/a
26	9th Avenue/ Jefferson Street	Provide a second northbound lane at the all-way stop-controlled intersection or signalize.	E	49.2	C (stop) B (signal)	21.1 13.6
28	9th Avenue/ Alder Street	Convert to an all-way, stop-controlled intersection.	F	>300	C	19.3
29	Broadway/Boren Avenue	None proposed due to Streetcar	E	72.7	n/a	n/a
31	8th Avenue/ Yesler Way	Install a traffic signal with left-turn pockets on all approaches.	F	282.3	C	29.1
33	6th Avenue/ James Street	Retime intersection	F	157.4	F	140.0
34	6th Avenue/ Yesler Way	Signalize.	F	120.4	C	25.8

Source: Heffron Transportation, Inc, January 2011.

(NEW) Thresholds for Mitigation Implementation

The potential timing of the off-site intersection improvements was estimated as a percentage of the overall project generated trips, and is summarized in **FEIS Table 1-3** below. The range of total trips generated by all sectors of development that would trigger the mitigation was also estimated. This analysis was performed by determining the increase in intersection delay associated with many levels of project trip generation. For intersections that are currently signalized, the need for mitigation was determined when the increase in delay associated with project trips exceeded a 5.0 second increase in average vehicle delay. This is the threshold that the City often applies to indicate a “significant” impact. For intersections where a signal is proposed, the need for mitigation was based on volume threshold in which side street traffic would likely warrant installation of a signal (range of 75 to 150 trips per hour on side street depending on the main street volume).

The analysis below notes that several measures would be needed very early in the development process (between 5 and 10 percent of the project trips). That is because these intersections would operate at poor levels of service under the No Action condition, and even small increases in project trips would be associated with an increase in delay above 5.0 seconds. The range is denoted since the actual intersection operations would also depend on the level of background growth. For the purpose of this analysis, all of the background growth was assumed to have already occurred before project trips were added. Some of the off-site improvements would not be needed until late in the project development (after 75 percent of the development is complete). It is noted that if the East of 12th or East of Boren sectors were to proceed first, individually or together, the small number of trips that they generate and the distribution of those trips would not trigger the need for any of the mitigation measures.

The need for a signal at the Yesler Way/8th Avenue intersection will be primarily related to the rate of development in the NW Sector of the site. Office uses in the range of 200,000 to 300,000 square feet could trigger this signal, depending on the level of background growth that has occurred when those uses are completed. The need for that signal could occur earlier if it is desired to facilitate pedestrian crossings of Yesler Way.

**Table 1-3
THRESHOLDS FOR MITIGATION IMPLEMENTATION**

Int. #	Intersection Name	Description of Improvement	Approximate PM Peak Trip Threshold for Mitigation ^{a,b}	
			Number of New Trips	Percent of Total New Trips
6	12th Avenue/ E Cherry Street	Restripe E Cherry Street to provide conventional left turn phasing (instead of separate phases for eastbound and westbound traffic).	1,060	80%
11	12 th Avenue/ Yesler Way	Change signal timing to provide slightly longer north-south phase to account for lane change due to Streetcar	730	55%
19	Rainier Avenue S/ S Dearborn Street	Add a southbound right turn pocket on Rainier Avenue S	1,000	75%
21	7th Avenue/ Cherry Street	Change cycle length to full cycle to match intersection at 6th Avenue/Cherry Street.	65-130	5-10%
22	9th Avenue/ Cherry Street	Convert to an all-way, stop-controlled intersection.	65-130	5-10%
26	9th Avenue/ Jefferson Street	Provide a second northbound lane at the all-way stop-controlled intersection or signalize.	1,060	80%
28	9th Avenue/ Alder Street	Convert to an all-way, stop-controlled intersection.	330	25%
31	8th Avenue/ Yesler Way	Install a traffic signal with left-turn pockets on all approaches.	330-660	25-50% ^c
33	6th Avenue/ James Street	Retime intersection	65-130	5-10%
34	6th Avenue/ Yesler Way	Signalize.	65-130	5-10%

Source: Heffron Transportation, Inc, January 2011.

- a. *Approximate net increase of new project-generated PM peak hour trips generated by development at Yesler Terrace, East of 12th or East of Boren sectors expected to trigger the need for mitigation at each intersection where future operational impacts have been identified.*
- b. *For intersections that are currently signalized, the need for mitigation was determined when the increase in delay associated with project trips exceeded a 5.0 second increase in average vehicle delay. This is the threshold that the City often applies to indicate a “significant” impact. For intersections where a signal is proposed, the need for mitigation was based on volume threshold in which side street traffic would likely warrant installation of a signal (range of 75 to 150 trips per hour on side street depending on the main street volume).*
- c. *Need for traffic signal would relate to development in the NW Sector of the site as well as pedestrian crossing needs.*

Transit

Increased ridership from the project could increase loads on Route 27 to unacceptable levels. This route currently operates on 20 to 30-minute headways during the PM peak hour. Yesler Way is designated as part of the City's UVTN, for which the goal is service at least every 15 minutes. Increased service on Route 27 would alleviate the loading. Another idea that has been considered is to divert the Route 3/4 from James Street to Yesler Way to avoid congestion at the I-5 interchange. That route has very frequent service which could accommodate the additional riders from Yesler Terrace.

SHA will work with King County Metro and SDOT to evaluate service needs as development at Yesler Terrace progresses. A key milestone would be 2016 when King County Metro may redeploy various services on First Hill and Capitol Hill in response to the University Link project opening. In addition, SHA could be a partner with other agencies pursuing funding opportunities, particularly new federal grants in which low-income housing and sustainable development increase a project's chance of funding. (Note: King County Metro's comment letter on the DEIS noted their support for this approach).

Non-Motorized Facilities

Extensive pedestrian and bicycle improvements would be made throughout the Yesler Terrace site, including street frontage improvements as well as connecting paths throughout the site. New connections would also be made to areas beyond Yesler Terrace, including south towards S Jackson Street. This connection would improve pedestrian access to the International District and key transit routes along S Jackson Street or at the International District and King Street transit stations. Many of the reconstructed streets would provide new or enhanced facilities for bicycles.

Other pedestrian and bicycle amenities would be provided on the site including pocket parks, resting areas, bike racks, secured long-term bicycle storage (in garages), and showers and locker facilities in office buildings. If any entity creates a bike sharing program in Seattle for which Yesler Terrace would be in the bike share zone, SHA would work with that entity to accommodate a bike sharing station within the Yesler Terrace site.

SHA will coordinate with the First Hill Streetcar project to improve the crosswalks at the Boren Avenue/Yesler Way intersection. The crosswalk across the south leg of the intersection is located along the school walk route between Yesler Terrace and Bailey Gatzert Elementary School. The First Hill Community Plan recommended improving this crossing location. (City of Seattle 1998).

Freight

Truck access would be provided for all buildings. Where possible, service drives would be created to the side or back of buildings to provide access to loading docks. Truck access and loading requirements within the site would be determined for individual building applications; however, most buildings could be designed to accommodate just small to medium-sized trucks since large trucks are not often used for deliveries near the downtown core area of Seattle. The exception would be for a grocery store.

On-street loading zones could also be provided. These should be limited to one per block face and located near service drives and away from pedestrian entrances. If an occasional large

truck is needed for a delivery (e.g., during a business or resident move), then temporary on-street loading could be provided with a street-use permit.

Transportation and Parking Management Plans

Transportation Management Plans (TMPs) would be implemented for various elements of the Yesler Terrace Redevelopment. Parcels where office uses are to be built would likely be sold to developers. These parcels could be required to have individual TMPs that are directed at reducing employee commute trips. SHA and developers of residential parcels would distribute information to tenants (in several languages, as needed) regarding transportation options.

TMP Goal. Seattle's Comprehensive Plan for the First Hill/Capitol Hill Urban Center established a trip goal that all peak period trips using non-SOV modes reach 75% by the year 2010 and 80% by 2020. This means that trips by single-occupant vehicle (SOV) should be no more than 25% of the peak period trips in 2010, or 20% in 2020. These goals are consistent with the analysis performed for the Yesler Terrace EIS. Overall, the trip generation estimates that are the basis for the traffic impact analysis assume that about 25% of the office trips would be made by single-occupant-vehicles (SOVs) and about 10% of the residential and retail trips would be made by SOVs.

The Comprehensive Plan goals could be adopted as the short and long-range goals in TMPs for office development at for Yesler Terrace. For each office building within Yesler Terrace, it is recommended that no more than 20% of the employee commute trips would be by SOV.

(MODIFIED) TMP Elements – Office Building. The office-related TMPs would be required consistent with the City of Seattle's Director's Rule (DPD Director's Rule 19-2008 or the Director's Rule that is in effect at the time of each building permit application). The Yesler Terrace redevelopment would have many site amenities and design treatments that would promote the use of alternative transportation modes. These features would be inherent in the site design, and prescribed through Project Actions. Therefore, the TMP for each building only needs to address on-going management elements and site-specific design treatments.

Table 1-4 lists the elements from the Director's Rule (along with the specific element number) that should be included in each office building's TMP. Some of the elements may not be needed at all locations as noted.

TMP for Residential Uses. SHA and developers of residential parcels would have the opportunity to provide information about alternative modes of transportation. This would include information (in multiple languages) about transit routes, stop locations, and schedules, car-sharing programs, and walking/bicycle routes.

**Table 1-4
TRANSPORTATION MANAGEMENT PLAN (TMP) ELEMENTS FOR OFFICE BUILDINGS**

TMP Elements from Seattle Director's Rule 19-2009		Check all that apply	Notes
Building and Frontage Features			
1	Install commuter information center in appropriate location	As needed	May not be needed at all locations if centrally located.
3	Provide on-site shower and locker facility	√	
5	Install pedestrian wayfinding signs	√	
7	Provide bicycle storage and amenities.	√	
Management & Promotion			
8	Appoint Building Transportation Coordinator	√	
9	Produce and distribute a commuter information packet	√	
10	Require tenant participation in the TMP	√	
11	Submit regular reports about TMP elements as required by the City	√	
12	Conduct biennial survey of TMP effectiveness	√	
Parking Management			
15	Charge for parking at market rate for the site's vicinity	√	
17	Prohibit price reductions for all-day parking (e.g., "Early Bird" specials)	√	
18	Unbundle parking from building leases	√	
19	Provide designated parking spaces for car share programs	As needed	May not be needed at all sites if centrally located.
20	Create flex-use parking passes that provide fewer days of parking than a monthly pass.	√	
Transit, Carpool & Vanpool Programs			
21	Require tenant to offer transit pass subsidy to employees who work at the site.	√	Will be negotiated on a case-by-case basis
22	Provide free parking for vanpools registered with a public agency.	√	
23	Provide information about ride-match opportunities	√	
24	Provide reserved spaces for registered vanpools in convenient area that has adequate clearance and maneuvering space	√	
Bicycle/Walking Programs			
27	Offer incentive for commuters who bicycle or walk to work	√	
--	Support bike sharing program if one is formed for site area	√	

Source: DPD Director's Rule 19-2009, December 31, 2008.

The numbers in the left hand column match the element numbers from the Director's Rule.

Other Possible Mitigation Measures

Off-street Parking Supply

Off-street parking supply within the site area would be determined for individual buildings. The parking supply rate used for each residential building may differ based on the income target, average unit size, and whether the units would be rented or owned. Neighborhood services and retail parking supplies should be determined based on specified use needs and may vary by building.

Several parking management strategies and programs could be implemented to reduce the overall parking supply on the Yesler Terrace site. Potential program opportunities would be reviewed for each building and would vary depending on the type of land use and specific tenant requirements. Parking management programs could include:

- **Share office parking on weeknights and weekends.** Parking at key office garages could be made available for evening and weekend use by residential visitors or for residents who commute during the day. This would reduce the parking supply required.
- **Unbundle parking from office leases.** Office tenants could be required to pay for parking as a separate fee from their office space lease. This promotes use of alternative transportation modes by itemizing the cost of parking.
- **Charge for parking.** All office employees and visitors could be required to pay for parking at the market rate in the area. Discounts for all-day parking (e.g., Early Bird specials) should be discouraged.
- **Offer a flex-pass for parking that limits the number of days an employee can park.** Most parking passes are sold on a monthly basis and allow unlimited parking during that month. A flex-pass would be a lower-cost option that would limit the number of days it can be used each month. This type of pass is a good option for employees who may take transit or ride a bike to work some days a week, but need a car on certain days for work or personal business.
- **Do not reserve individual spaces for office parking.** Leases could be structured so that parking spaces at office buildings are not reserved for individual users. This allows all office parking to be shared by employees, and reduces the overall supply requirement.
- **Provide for car-sharing programs.** Car-sharing programs (e.g., Zipcar) allow residents and/or site employees to share a pool of vehicles, which reduces parking demand.

On-Street Parking Supply

Most of the on-street parking within the existing Yesler Terrace site is part of a residential parking zone (RPZ) 7. With the redevelopment, most of the RPZ should be retained; however, the large increase in residents may substantially increase demand for RPZ permits. This could be particularly true if there is a cost for off-street parking associated with a new unit. The City's RPZ policies related to permit eligibility are applied evenly to all RPZ zones throughout the City. Therefore, changing the eligibility requirements may require that a subzone be created for just Yesler Terrace, and new ordinance language adopted limiting the eligibility of RPZ permits in

this subzone. Potential eligibility limits, which would have to be vetted for feasibility by City staff, could include:

- Issuing RPZ permits based on a hardship or need, which could include an income limit or a vehicle ownership requirement for work or school.
- Issuing RPZ permits on a lottery basis (which is done in some other cities).
- Limiting or prohibiting guest permits, and requiring visitors to park off-street.

Some of the on-street parking should be converted to short-term parking for use by customers of adjacent retail businesses or neighborhood services. Because of its location near the downtown core, it is likely that short-term on-street parking would be enforced as paid parking with payment available at pay stations.

Significant Unavoidable Adverse Impacts

Redevelopment of Yesler Terrace would increase vehicular traffic and transit use in the site vicinity. The Preferred Alternative would have a significant unavoidable traffic impact at three intersections along Broadway—at Boren Avenue, James Street, and Madison Street. The First Hill Streetcar would travel through these three intersections and the City is proposing some geometric and signal changes to accommodate the Streetcar. Further changes to mitigate the impacts of the proposed Yesler Terrace project are not desirable and/or feasible within available right of way at these intersections. In addition, mitigation is not feasible within available right of way at Boren Avenue/James Street, which is projected to operate at LOS E during the AM peak hour under 2030 with project conditions.

Public Utilities

The following required/proposed and other possible mitigation measures would address potential utility impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative on the FEIS Site. All mitigation measures listed below would be the same as those identified in the DEIS, with a slight change in wording to remove reference to specific DEIS Alternatives or for clarification (shown as MODIFIED), since no new significant adverse impacts have been identified in this FEIS.

Required/Proposed Mitigation Measures

Water

- The design and construction of all water distribution facilities would comply with the City of Seattle regulations for extensions and improvements to the City's water system.
- (MODIFIED) New water mains would be located within the new public roadway network or easements, consistent with the City of Seattle public utilities regulations and design standards.

Sanitary Sewer

- A hydraulic analysis of stormwater drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment to determine necessary improvements to the City's and site's drainage and wastewater infrastructure. Improvements could include additional upsizing of the combined sewer pipe downstream of the Yesler Terrace Redevelopment in Main Street and 7th Avenue S, as well as GSI and stormwater flow control at the site (see **FEIS Section 3.3, Water Resources**, for details on the GSI).
- The design and construction of public sanitary sewer systems would comply with the City of Seattle standard plans and specifications for extensions and improvements to the City's sewer system.
- (MODIFIED) New sewer mains would be located within the new public roadway network or easements, consistent with the City of Seattle public utilities regulations and design standards.

Other Possible Mitigation Measures

- (MODIFIED) The Yesler Terrace Redevelopment could include provisions to encourage water conservation during building construction and long-term operation of the redevelopment.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and modified/restated in this FEIS, no significant unavoidable adverse impacts to utilities would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Public Services - Parks

Future increases in employment and population at the site over the assumed 20-year buildout period under the Preferred Alternative would be incremental and would be accompanied by increases in demands on park and recreational resources onsite and in the site vicinity. These impacts would be addressed by the following required/proposed and other possible mitigation measures. All mitigation measures listed below are the same as those identified in the DEIS, unless otherwise noted as (MODIFIED).

Required/Proposed Mitigation Measures

- Onsite parks, open space and recreational facilities would be provided with redevelopment. These resources would include a substantial amount of new usable public and semi-private open space to accommodate the increased population and serve the surrounding community. If these facilities are not owned or maintained by the City, they would not be included in the City's official calculations of parks and open space gaps but would, in practice, serve to offset existing open space deficiencies in the area.
- A portion of the tax revenues generated from development of the site – potentially including construction sales tax, retail sales tax, business and occupation tax, property

tax, utilities tax, leasehold excise tax, and other fees from City licenses and permits during site redevelopment – would accrue to the City of Seattle and could help offset demands for public services, including parks and recreation. The City's Capital Improvement Program has identified a need for another new park in the First Hill Urban Village, where Yesler Terrace is located, but a site has not yet been selected. SHA, as a First Hill community stakeholder, would continue to advocate for additional parks and open space resources in the neighborhood.

- (MODIFIED) It is anticipated that increases in employees and resident population onsite over the buildout period, along with general growth in this area of the City, would be planned for through the City's ongoing capital facilities planning process, including planning for parks and open space.
- (MODIFIED) Under the Preferred Alternative, it is assumed that a portion of the low income housing units within the redeveloped site would be configured to meet the outdoor play area requirements for licensed in-home daycare businesses to accommodate existing relocated daycare uses.

Other Possible Mitigation Measures

- (MODIFIED) SHA could enter into discussions with the Seattle Public School District to determine if improvements to the existing playfield on the Bailey-Gatzert Elementary School grounds could be made to help offset the elimination of the existing onsite playfield due to redevelopment.
- (MODIFIED) New P-Patch community gardens could be provided onsite as part of redevelopment and could offset displacement of the existing P-Patch gardens. The specific amount and location of new P-patch gardens would be determined as part of future design and permitting phases.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in this FEIS, no significant unavoidable adverse impacts to parks, recreation and open space resources would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Public Services - Schools

Future increases in housing units and students associated with these units over the assumed 20-year buildout period under the Preferred Alternative would be incremental and would be accompanied by increases in demands on the Seattle Public Schools District. As noted in DEIS Section 3.15.2, the three existing attendance area schools and the Central District would likely exceed available capacity to accommodate the additional students from the Yesler Terrace Redevelopment (Garfield High School is already over capacity). These impacts would be addressed by the following required/proposed and other possible mitigation measures, which are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Required/Proposed Mitigation Measures

- (MODIFIED) A portion of the tax revenues generated from development of the site – potentially including construction sales tax, retail sales tax, business and occupation tax,

property tax, utilities tax, leasehold excise tax, and other fees licenses and permits – would accrue to the School District and could help offset demand for services from the District.

Other Possible Mitigation Measures

- It is anticipated that increases in student population over the buildout period would be addressed through the Seattle School District capital facilities capacity planning process (policy H13.00) to insure that no significant impacts would occur as a result of redevelopment at Yesler Terrace. As stated in DEIS Section 3.15.2.1, the Seattle School District could take one or more of the following actions to match capacity and enrollment as buildout occurs on the Yesler Terrace site:
 - Adding, relocating or removing programs;
 - Adjusting school boundaries;
 - Adjusting geographic zones for option schools;
 - Adding or removing portables;
 - Adding to or renovating buildings; and/or,
 - Opening, reconstituting or closing buildings.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in this FEIS, no significant unavoidable adverse impacts to schools would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Public Services - Fire

The following required/proposed mitigation measures would address potential impacts to fire/EMS services resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted as (MODIFIED).

Required/Proposed Mitigation Measures

- Increases in population and employment over the 20-year buildout of the Yesler Terrace project would be incremental and would be accompanied by increases in demand for fire/EMS services under all of the EIS redevelopment alternatives. A portion of the tax revenues generated from redevelopment of the site – including construction sales tax, retail sales tax, business and operation tax, property tax, utility tax and other fees, licenses and permits – would accrue to the City of Seattle and could help offset demand for public services.
- (MODIFIED) All new buildings would be constructed in compliance with the version of the Seattle Fire Code adopted at the time of building permit application.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse fire and EMS

service-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Public Services - Police

The following required/proposed mitigation measures would address potential impacts to police services resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted as (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

- Increases in population and employment over the 20-year buildout of the Yesler Terrace project would be incremental and would be accompanied by increases in demand for police services under all of the EIS redevelopment alternatives. A portion of the tax revenues generated from redevelopment of the site – including construction sales tax, retail sales tax, business and operation tax, property tax, utility tax and other fees, licenses and permits – would accrue to the City of Seattle and could help offset demand for police services.
- (MODIFIED) The portions of the site that are under construction during phased redevelopment of the site should to the extent feasible be fenced and lit, and monitored by surveillance cameras to help prevent construction site theft and vandalism.
- Permanent site design features could be included to help reduce criminal activity and calls for service, including: orienting building towards sidewalks, streets and/or public open spaces; providing convenient public connections between buildings onsite and to the surrounding area; and, providing adequate lighting and visibility onsite.
- (MODIFIED) In the near-term (i.e. until market rate housing is introduced to the site), SHA would continue funding for one dedicated police staff at the site, who serves as a Community Police Team officer to work with Yesler Terrace management and residents on crime and crime-related concerns. As redevelopment of the site progresses, SHA's funding of dedicated police staff would be reevaluated annually. As market rate housing is added to the site, SHA could elect to contribute to a shared fund along with new homeowners associations to fund a dedicated police officer, or to fund private security for the site.

Other Possible Mitigation Measures

- (NEW) SHA and SPD could work together to ensure effective collaboration between SPD officers and SHA security staff, and both could explore opportunities to secure outside grant support for additional crime prevention program activities.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse police service-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Public Services - Solid Waste

The following required/proposed and other possible mitigation measures would address potential solid waste management service impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative on the FEIS Site. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Possible Mitigation Measures

In conjunction with the overall stewardship and sustainability principle of the redevelopment, the following mitigation measures could be employed by SHA in order to reduce the amount of solid waste generated by the Yesler Terrace Redevelopment, thereby reducing impacts on collection by SHA Solid Waste Division, Seattle Public Utilities and on disposal at the SRDS and ultimately the Columbia Ridge Landfill and Recycling Center in Gilliam County, Oregon:

- Accommodate onsite composting using various types of equipment, including earth bins and anaerobic digestion;
- Provide or encourage household composting units;
- Provide offsite composting after site collection; and/or,
- Expand urban agriculture on the site to utilize organic waste.

(MODIFIED) SHA could be required to contract out collection services to other agencies (such as SPU), hire additional drivers, add vehicles to their fleet, extend workdays and/or add additional workdays in order to handle the additional solid waste from the Yesler Terrace Redevelopment, even with implementation of the above mitigation measures.

Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to solid waste management services would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Public Services - Community Services

The following required/proposed mitigation measures would address potential impacts to community services resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted as: (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

- The displacement of existing community service providers onsite would require SHA to comply with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA). The URA applies to projects with federal funding, such as Yesler Terrace, that involve the displacement of organizations/businesses. Specifically, requirements of the URA include:
 - Relocation advisory services;
 - A minimum 90 days written notice to vacate prior to requiring possession; and,
 - Reimbursement for moving and reestablishment expenses.

- During the construction process, in accordance with the tenant relocation plan, Yesler Terrace residents would be linked with service providers in areas to which they relocate in order to ensure continuity of services during the redevelopment of the site (see **FEIS Section 3.16, Socioeconomics**, for additional information on the tenant relocation plan).
- (NEW) SHA will use the recommendations contained in the *Yesler Terrace Redevelopment Social Infrastructure Report* (January, 2011) to help guide the negotiation of service partnerships and the allocation of neighborhood services space at the redeveloped site.
- (NEW) The Steam Plant could be retained and adaptively reused for onsite relocation of some existing community service programs/providers based on the Yesler Terrace site.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse community service-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

Socioeconomics

The Preferred Alternative would create capacity for a range of uses at the Yesler Terrace site and would increase population, employment and housing potential in the area. This growth would occur in an area that is close to downtown and is targeted to accommodate residential and employment growth as one of the City's designated urban village areas, per the 2005 *Comprehensive Plan*. For further discussion of the relationship of the EIS alternatives to the City's *Comprehensive Plan*, refer to **FEIS Section 3.9, Relationship to Plans, Policies and Regulations**. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Required/Proposed Mitigation

Increases in employment, population and housing would occur gradually within the site over the 20-year buildout period. No significant adverse impacts to community cohesion, public well being, population, employment and housing would be expected to result from the Preferred Alternative and as a result, no other mitigation measures are identified for these elements.

Regulatory Compliance – Residential Displacement

SHA would comply with the Uniform Relocation Act (URA), which provides benefits for persons or organizations involuntarily displaced as a result of federally funded projects.⁶

Tenant Relocation Plan – Temporary Relocation

The following measures are intended to address temporary relocation of residents during the construction process. All residents who remain in good standing with SHA and who maintain

⁶ 49 CFR Part 24.

their eligibility for low income housing would have the option of returning to the redeveloped Yesler Terrace site as new units become available.

Relocation Involvement

- SHA would provide for extensive involvement of residents in relocation planning and would disseminate and communicate information about the timing of and resident choices related to relocation. These involvement and communication efforts would likely include the following:
 - Community-wide relocation planning meetings to inform the community about relocation and solicit feedback on an effective approach;
 - Relocation surveys to assist with the development of relocation options and procedures that conform to the priorities and preferences of residents;
 - (MODIFIED) Language-based telephone information service to provide information and allow for resident feedback (anonymous, if desired) on meetings and upcoming surveys or other activities;
 - Website that includes regular updates on the progress of the project and answers to frequently asked questions;
 - Articles in the newspaper that is distributed to SHA residents by Neighborhood House (The Voice) to share information on relocation benefits, options, Section 8 rules, and development progress; and regular relocation orientation meetings to explain relocation benefits and housing options (Meetings would be interpreted into the primary languages spoken in the Yesler Terrace community).

Relocation Options

- As required by the URA, residents would be offered a range of relocation assistance options. The URA applies to projects with federal funding, such as Yesler Terrace, that involve the displacement of people from their homes. Specifically, requirements of the URA include:
 - Provide a minimum 90 days written notice prior to relocation;
 - Provide reimbursement for moving expenses; and,
 - Provide payments for the added cost of renting comparable replacement housing.
- Some SHA tenants would be able to temporarily relocate to on-site units that would not be removed until later phases of demolition, and since construction would be phased, some residents would be able to move directly from their existing unit to a redeveloped unit, without having to leave the site.

SHA would provide the following relocation options to residents depending upon the availability of various resources, such a rental assistance vouchers, etc.:

- Relocation to another SHA-owned public housing development or to other SHA-owned property, where space is available. Residents who plan to return to the newly redeveloped Yesler Terrace community would have priority to be relocated to existing SHA housing.

- Tenant-based (Section 8) Housing Vouchers could be provided. These vouchers are for renting housing within privately-owned apartments or homes. At this time it is not known if or how many Vouchers may be available for Yesler Terrace residents.
- SHA would pay the difference (if any) between what tenants paid at Yesler Terrace for their unit and utilities versus any increase in a comparable unit, for up to 42 months or in a lump sum amount if the resident so chooses.

Relocation Assistance

- In conjunction with placing residents in comparable assisted housing situations, SHA would also provide a package of relocations benefits for Yesler Terrace residents to prepare and assist residents with the actual task of moving. Regardless of the type of relocation which residents receive, an SHA relocation team would assist residents with their moves, reimburse the resident for the cost of the move, and/or provide a fixed moving expense and relocation allowance. Eligible tenants (i.e. elderly or disabled) could request assistance with packing and unpacking. SHA would provide the following specific assistance:
 - Link residents with service providers in areas to which they relocate in order to ensure continuity of services;
 - Provide transportation or transportation assistance (bus tokens, taxi scripts etc.) and accompany residents to visit potential units;
 - Assist residents with applications for relocation benefits and/or rental applications;
 - Coordinate with moving companies;
 - Assist with the transfer of utility accounts;
 - Pay for the cost of utility disconnections and reconnections; and,
 - Pay for storage of personal property, if necessary.

The proposed moving assistance provisions described above would meet the cost allowance and payment requirements of the URA.

- SHA would notify residents 18 months in advance of planned demolition and relocation activity. This early notification exceeds federal requirements by six months. SHA staff would also provide one-on-one counseling to residents who would be relocated in order to help them identify and understand options for relocation assistance, including the overall package of benefits that they would receive. Residents would have at minimum of 6 to 8 weeks from the initial counseling session to determine which benefit package they prefer. However, this timeframe will not prevent residents from choosing a different benefit option if they so choose prior to receiving benefits.

Permanent Tenant Relocation

Residents may choose to permanently move from Yesler Terrace. Residents who do not wish to return to the redeveloped community may elect to receive a lump sum payment in compensation for their displacement, in order to make their own housing arrangements.

Other Possible Mitigation Measures

In addition to compliance with the URA and the implementation of the above identified temporary relocation measures, some of the inconveniences associated with tenant relocation could be further reduced by the following mitigation measure:

- (NEW) The East of Boren Sector and possibly the East of 12th Sector could be redeveloped first in order to provide some early replacement housing for current residents of Yesler Terrace.

The following possible mitigation measures could be included in the land use code provisions for Yesler Terrace, to be adopted by the City of Seattle, to lessen any potential adverse impacts of the proposed redevelopment on existing business uses in the Little Saigon neighborhood:

- (NEW) Land Use Code regulations could limit inclusion of “big box” retail uses (i.e. single uses over 25,000 SF) onsite.
- (NEW) Bulletin boards with advertisements for Little Saigon retailers could be placed in community gathering areas.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated in this FEIS, no significant unavoidable adverse socioeconomic-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Environmental Justice

The following required/proposed mitigation measures would address potential environmental justice impacts of the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted as: (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

Construction

- All construction activities would be required to comply with City of Seattle Municipal Code regulations as related to air quality and noise.
- The areas of the site undergoing construction would be secured and non-accessible after hours to prevent the creation of an attractive nuisance which could result in safety/public health impacts to the residential population on-site.
- Abatement, remediation, and disposal of any hazardous materials on site would occur in accord with local, state, and federal regulations prior to start of construction or demolition activities on site.
- (NEW) Special building materials and techniques would be employed to reduce the transmission of noise from outside to inside spaces would be employed for all residential buildings exposed to sound levels greater than 65 dBA Ldn. Effectively controlling

exterior-to-interior sound level transmission would also require careful attention to detail during installation of noise-reducing building components. Refer to **FEIS Section 3.7.3** for further details.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified above, no significant unavoidable adverse environmental justice-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

Wind Analysis

The following required/proposed and other possible mitigation measures would address potential wind impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW).

Required/Proposed Mitigation Measures

- The building layout and associated height of structures at the site would be below the wider southern glide path.

Other Possible Mitigation Measures

The following measures could be evaluated at the building design and permit stage of high-rise buildings on the Yesler Terrace site and implemented, if applicable, to reduce potential ground-level pedestrian wind impacts resulting from high-rise buildings:

- (NEW) Architectural devices such as screens, terraces, overhangs and horizontal fixed awnings at the lower levels of high-rise buildings over sidewalks and other pedestrian areas could be used to deflect and minimize downdrafts created by tall building facades, and to reduce wind speeds around the base building.
- (NEW) High-rise building designs could be selected that incorporate an appropriate scale of the base building and the step back of middle (shaft) portion of the building to minimize downdrafts.
- (NEW) Upper level building setbacks for high-rise buildings could be used to break up direct downdrafts coming from upper levels of building facades.
- (NEW) High-rise buildings that are adjacent to open spaces could be located on the prevalent windward side of the open spaces, so down drafts created by building facades are not directed into open spaces.
- (NEW) Close proximity of high-rise buildings adjacent to open spaces could be minimized, to avoid funneling and intensifying wind impacts to open spaces.
- (NEW) Appropriate height, spacing and orientation of high-rise buildings could be employed to minimize wind funneled between two adjacent buildings, which can accelerate wind speeds and cause a wind canyon effect.

Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and included in this FEIS, no significant unavoidable adverse wind-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.



Chapter 2 - DESCRIPTION of the PREFERRED ALTERNATIVE

CHAPTER 2

DESCRIPTION OF PROPOSAL AND PREFERRED ALTERNATIVE

This chapter of the Yesler Terrace Final Environmental Impact Statement (FEIS) provides: 1) an overview of the environmental review process, 2) a description of the Preferred Alternative; and, 3) a comparison of the Preferred Alternative with the Draft Environmental Impact Statement (DEIS) Alternatives.

2.1 Introduction

The Seattle Housing Authority (SHA) is proposing redevelopment of Yesler Terrace, a public housing community located on the southern slope of First Hill in Seattle (see **FEIS Figure 2-1**, Vicinity Map). The Yesler Terrace Redevelopment site currently contains 561 public housing units, a community center and various other buildings (see **FEIS Figure 2-2**, Site Map and **FEIS Figure 2-3**, Existing Site Conditions). Redevelopment is proposed in order to create a mixed-income, mixed use community to better serve existing and future residents. SHA and HSD have developed a Preferred Alternative for analysis in the FEIS. The Preferred Alternative includes a mix of affordable and market-rate housing, commercial and community services uses, as well as parks and open space, and vehicular, pedestrian and bike improvements (see a full description of the Preferred Alternative in **Section 2.5** of this Chapter). It is anticipated that redevelopment of Yesler Terrace would take approximately 15-20 years to complete.

2.2 Overview of Environmental Review Process

Scoping

On April 1, 2010, a joint National Environmental Policy Act (NEPA) Notice of Intent to Prepare an EIS/State Environmental Policy Act (SEPA) Determination of Significance and Request for Comments on the Scope of the Yesler Terrace Redevelopment EIS was issued. A 45-day, expanded public scoping comment period was initiated, and copies of the notice were mailed to federal, state, regional and local agencies, tribes and local organizations. The notice was published in the Federal Register and the SEPA Register, the City of Seattle Land Use Bulletin, and also published in local, regional, community and ethnic newspapers. A public scoping meeting was held on April 29, 2010, to give the public an opportunity to provide verbal comments on the scope of the EIS (see Appendix B of the DEIS for details of the scoping process).

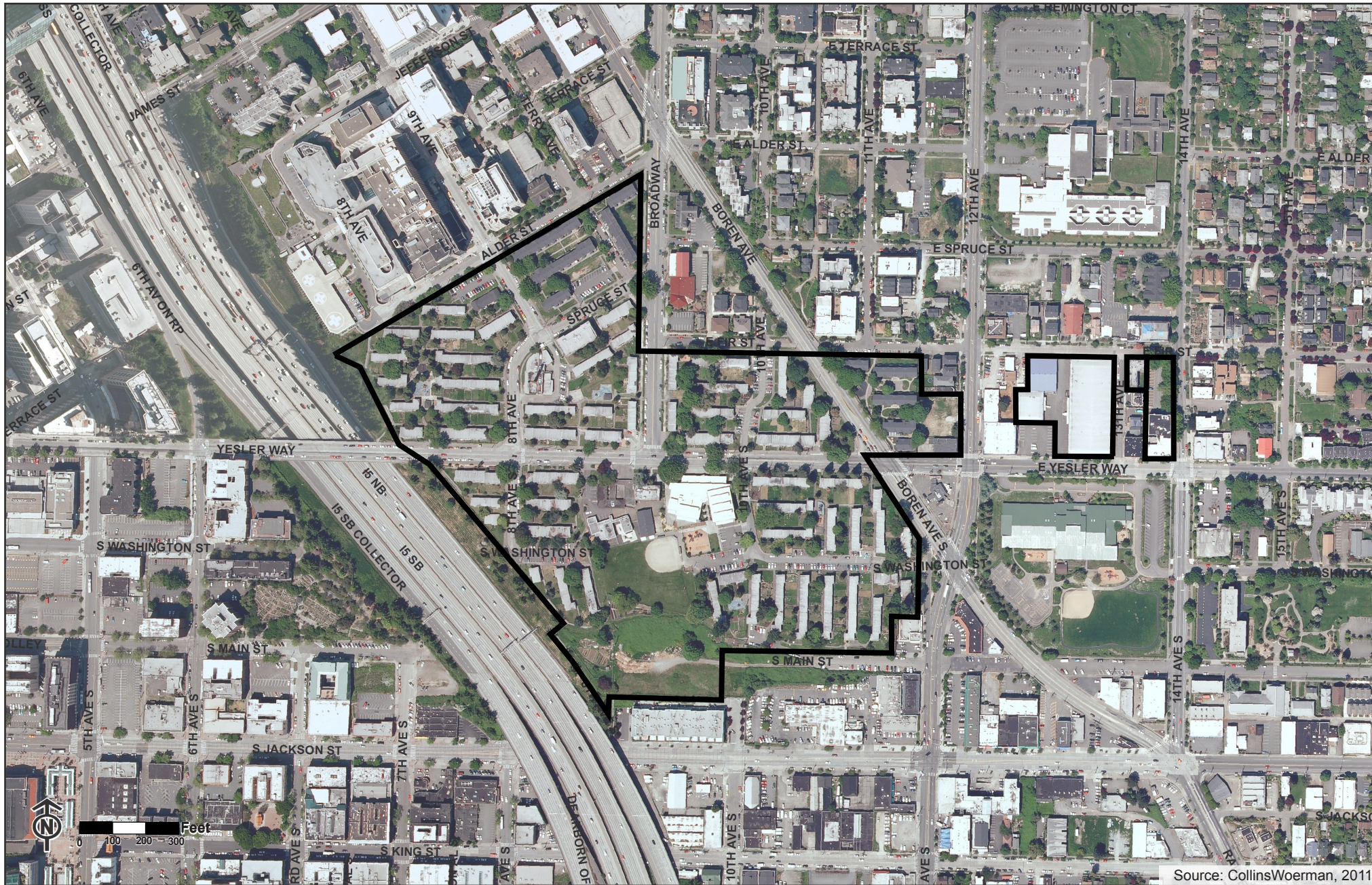
DEIS and FEIS

The DEIS was issued on October 19, 2010, with public comments due December 13, 2010. On November 30th, 2010, a public hearing was held to give the public an opportunity to provide verbal comments on the DEIS. During the DEIS public comment period, 43 written comment letters and e-mail correspondence were received from 10 public agencies, 5 organizations and 28 individuals. Two additional comment letters were received after the comment period closed.



Figure 2-1
Vicinity Map

Yesler Terrace
Redevelopment EIS



Source: CollinsWoerman, 2011



Figure 2-2
Site Map

Yesler Terrace
Redevelopment EIS

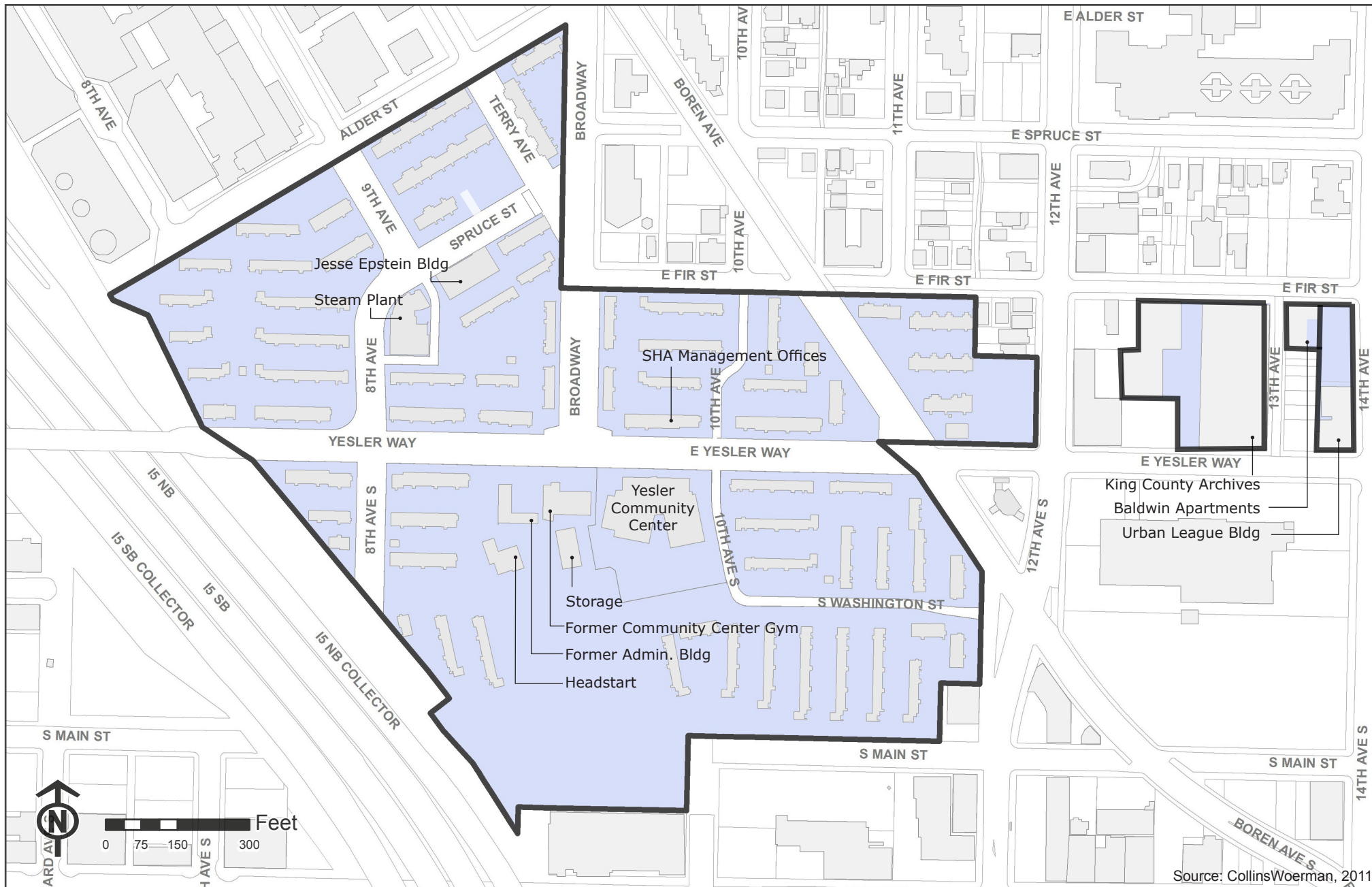


Figure 2-3
Existing Site Conditions

Yesler Terrace
Redevelopment EIS



No one testified at the DEIS public meeting. Each DEIS comment letter/e-mail is numbered and included in **FEIS Chapter 6**.

FEIS Chapter 5 includes a summary of key topic areas that were the subject of multiple comment letters. **FEIS Chapter 6** provides responses to all comments received on the DEIS that are pertinent to the NEPA/SEPA process, responding directly to certain comments and referring to previous and collected responses for others.

Next Steps

The Yesler Terrace EIS (the DEIS and this FEIS) will be used by SHA (along with other considerations, analyses and public input) to formulate a proposed Development Plan for the Yesler Terrace Redevelopment. That Plan will include a description of the proposed development (which may incorporate elements from one or more alternatives analyzed in the EIS), the measures to mitigate environmental impacts, and a description of the strategies for phasing of the development. SHA's adoption of a Development Plan is necessary to support the City's development of zoning changes and other legislation, and to support an application to HSD for a future Release of Funds for the project. Following SHA action on the Development Plan, the Seattle City Council will consider a package of legislation to regulate aspects of the development. Important steps in this process are summarized below.

Subsequent to the issuance of this FEIS, a proposed Development Plan will be considered by the SHA Board of Commissioners at a public meeting in May 2011, and may be adopted by Resolution at that time. A SEPA Notice of Action will be published following the SHA Board decision.

Later in 2011 (likely during June to September), the Seattle City Council will consider proposed Development Regulations for a new zone to be applied to the Yesler Terrace site west of Boren Avenue, a legislative rezone of that portion of the site to the new zone designation, a Planned Action Ordinance to address environmental impacts and City-imposed mitigation measures, and possibly a Development Agreement. All of the proposed legislation will be submitted for public review and comment, including one or more public meetings or hearings, with ultimate decisions to be made by the Seattle City Council. The Development Plan, Development Regulations, Planned Action Ordinance, and possible Development Agreement, if approved, as well as planned Street Vacations/Dedications, will provide the framework for long term redevelopment of the site.

Later in 2011 (likely during June to September), the City HSD will use the Yesler Terrace EIS and public and agency input on the EIS to prepare a Record of Decision (ROD) for the proposed development on behalf of HUD, in accord with HUD regulations implementing NEPA. The ROD will state the decision; identify all alternatives considered by City HSD in reaching its decision, including the environmentally preferable alternative or alternatives and all factors balanced by City HSD in making its decision; state whether all practicable means to avoid or minimize environmental harm from the alternative selected were adopted, and if not, why not; and adopt a monitoring and enforcement program where applicable for any mitigation. It is anticipated that the mitigating measures in the Planned Action Ordinance and ROD would be coordinated. Following preparation of the ROD, the City HSD may submit a Request for Release of Funds and environmental certification to HUD, and HUD may approve the Request, releasing any federal HUD funds to the proposed development.

Permits for certain activities to prepare the East of Boren and East of 12th Sectors for redevelopment, consistent with the assumptions analyzed in the EIS, could be submitted for City approval prior to City Council legislative decisions, as those portions of the site would be developed under existing zoning and would not be utilizing or subject to the regulations for the new zone to be created for the property west of Boren Avenue. Permits applications for redevelopment of the West of Boren Sectors would not occur until after City Council legislative decisions.

Prior to submittal of permit applications to the City or other agencies, SHA will review the proposed development for consistency with the Development Plan adopted by the SHA Board. Once approved by SHA, permit applications for infrastructure improvements, construction projects and building redevelopment activities within the site will be submitted to the City and/or other agencies over the long-term buildout period. The City will determine whether each project is consistent with applicable regulations as well as the Planned Action Ordinance, and whether the environmental impacts for these projects are within the range of impacts analyzed in the EIS. If so, further environmental analysis will not be required under SEPA and the City will make decisions on permits according to the appropriate process. For projects that require other state and federal permits, the appropriate agencies will review such projects and make decisions on the permits according to their applicable processes. These agencies will also utilize this EIS related to those specific projects. When applicable approvals have been obtained from the City and agencies, redevelopment projects would commence on the site.

2.3 Site Area

The Yesler Terrace site is located in the City of Seattle's First Hill and Central Area Neighborhoods. The site is generally bound by Interstate 5 (I-5) on the west; Alder Street and E Fir Street on the north, 14th Avenue on the east and S Main Street on the south (see **FEIS Figure 2-2, Site Map**). A 36.6-acre site area was analyzed in the DEIS (see **Section 2.3.1** below for details). The site area was expanded in this FEIS to include an approximately 2.3-acre area east of 12th Avenue (see **Section 2.3.2** below for details).

For descriptive purposes in this FEIS, the site has been divided into the five sectors that were analyzed in the DEIS (referred to as the DEIS Site), and the East of 12th Sector, the new sector which has been added to the redevelopment site since issuance of the DEIS.

2.3.1 DEIS Site

The 36.6-acre DEIS Site is comprised of the four sectors that make up the Planned Action area (referred to as the West of Boren Sectors), and the East of Boren Sector, which is outside of the Planned Action area.¹ The West of Boren Sectors include the: NW Sector, NE Sector, SE Sector and SW Sector (see **FEIS Figure 2-4, Sector Boundaries**). Refer to Section 2.4.2 of the DEIS for further description of the five sectors comprising the DEIS Site.

¹ As noted, the EIS anticipates that the area west of Boren Avenue would be covered by the Planned Action Ordinance, and the areas east of Boren Avenue would not be, as the latter would be redeveloped under existing zoning and, for phasing purposes, redevelopment of the East of Boren Sector and the East of 12th Sector may need to occur prior to City Council action on the legislative package. If the City Council determines that one or both of the sectors east of Boren Avenue will be covered by the Planned Action Ordinance, this would not change the analysis of environmental impacts from redevelopment of areas east of Boren Avenue.

2.3.2 East of 12th Sector

Since issuance of the DEIS, further analysis has determined that the provision of replacement housing for the existing 561 onsite housing units would be facilitated by expanding the site area to include the East of 12th Sector. Two properties in the East of 12th Sector, the King County Archive site and the Urban League property, are not currently owned by SHA. A partnership or other transaction would need to occur to accommodate the Proposed Actions in the East of 12th Sector; preliminary discussions with the property owners/agencies have been initiated.

If SHA is unsuccessful in negotiating a partnership/purchase with King County and/or the Urban League of Metropolitan Seattle for the redevelopment of the East of 12th Sector, the units proposed for these properties could be accommodated within the DEIS Site. DEIS Alternative 3 analyzed the impacts for providing all 5,000 units within the DEIS Site; therefore, if these properties are not available, then the impact of providing those units (that were originally allocated to the East of 12th Sector under the Preferred Alternative) within the DEIS Site has already been analyzed under DEIS Alternative 3.

If SHA identifies other potential sites for replacement units in the immediate neighborhood² in response to being unable to complete an acquisition/agreement with King County or the Urban League for the respective sites, it would undertake supplemental environmental review in order to determine potential impacts, if any. However, in accordance with the Guiding Principles, no sites outside of the immediate neighborhood would be considered.

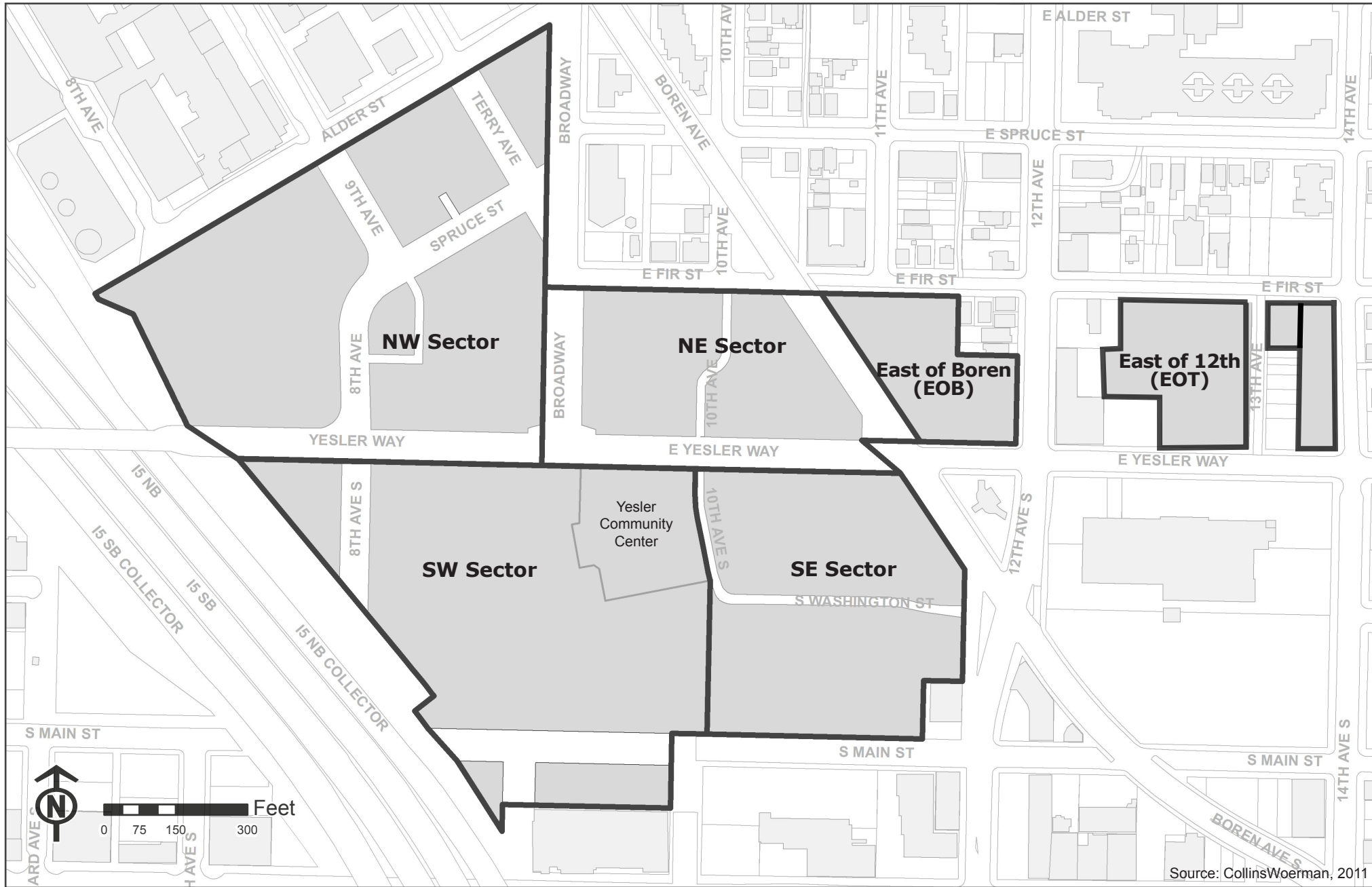
The 2.3-acre East of 12th Sector is bound by E Fir Street on the north, 14th Avenue on the east, E Yesler Way on the south, and a strip of retail development on 12th Avenue, to the east. This sector is located approximately ½ block to the east of the East of Boren Sector (refer to **FEIS Figure 2-4**). This sector does not encompass the entire two blocks between 12th and 14th Avenues; the commercial properties along 12th Avenue are not included, as well as the Ritz building and the single family home immediately north of the Ritz building, both recently renovated and owned by SHA. The privately-owned lots abutting 13th Avenue between the Baldwin Apartments building and the Ritz building, including a single family home, a vacant lot, and a 3-unit multi-family (townhouse) building, are also not components of the proposed redevelopment area. The East of 12th Sector consists of 4 lots containing four buildings, including two warehouses associated with the King County Archives facility, the Baldwin Apartments building, and the Urban League building. These buildings and associated parking lots and open spaces are described further below.

Existing Uses

Baldwin Apartments Building

The Baldwin Apartments building is located in the central-east portion of the East of 12th Sector, along 13th Avenue and E Fir Street. This is a 3-story, 11,120–square foot (SF) brick building constructed in 1918. A 1,350 SF grass courtyard is located to the southeast of this building. SHA owns the apartment building, which is currently in uninhabitable condition (see **FEIS Section 3.6, Environmental Health**).

² Immediate neighborhood would be bounded by Alder Street and Remington Court to the north, 14th Avenue to the east, Jackson Street to the south, and Interstate 5 to the west.



Source: CollinsWoerman, 2011

Figure 2-4
Sector Boundaries

Urban League Building

The Urban League Building, constructed in 1910, is located in the southeast corner of the East of 12th Sector, along 14th Avenue and E Yesler Way. The 3-story, 32,700 SF office building is currently owned by the Urban League of Metropolitan Seattle, a non-profit organization (see **FEIS Section 3.15.6, Community Services**, for additional information about the Urban League). The first floor is currently occupied by the Urban League and the upper floors are currently vacant. A surface parking lot with 34 parking spaces is located to the north of the building, and is owned and utilized by the Urban League.

King County Archives

The King County Archives facility is located on the west half of the East of 12th Sector, to the west of 13th Avenue. This facility contains two, 1-story warehouses that were built in 1954; a chain-link fence surrounds the property. The larger, 42,000 SF warehouse is located along 13th Avenue, and the smaller, 16,500 SF warehouse is located to the west of the larger building. A surface parking lot with 27 parking spaces is located between the two warehouse buildings. The King County Archives is the repository for historical county government records.

2.4 Proposed Actions

The Yesler Terrace Redevelopment EIS addresses the probable significant adverse impacts that could occur as a result of the following Proposed Actions:

- Decision by SHA on which alternative to pursue and implement;
- Possible City of Seattle Comprehensive Plan changes;
- Zoning changes that would be necessary in order to accommodate the mixed use redevelopment, including a Land Use Code text amendment and a change to the Official Land Use Map (legislative rezone);
- Planned Action Ordinance adoption by City of Seattle;
- Possible Development Agreement between the City of Seattle and SHA;
- Preliminary and Final Plat approvals by City of Seattle;
- Street Vacation and dedication approvals by City of Seattle;
- Future local, state and federal permits and approvals that would be required for construction and development of the Yesler Terrace community;
- Release of Funds by HUD; and,
- Construction and operation of buildings and facilities within the Yesler Terrace community.

A list of federal, state and local permits/actions necessary for the Yesler Terrace Redevelopment is provided within the Fact Sheet at the front of this document. See also **FEIS Section 2.2, Next Steps**, for an overview of the next steps in the environmental review process. Additional detail on key local Proposed Actions is provided below.

2.4.1 Planned Action Ordinance

The EIS fulfills SEPA requirements for a Planned Action environmental review for future redevelopment of the West of Boren Sectors, per RCW 43.21C.031, SMC 25.05.164 [et seq],

and SHA Resolution 4945. Please refer to the DEIS, Chapter 2, Section 2.3, for further information on the purpose and intent of Planned Action designations. It is proposed that redevelopment of the West of Boren Sectors be designated by the City of Seattle as a Planned Action by adoption of a Planned Action Ordinance. The East of Boren and East of 12th Sectors would be redeveloped under the existing zoning. Therefore, the EIS assumes that these areas are not included as part of the Planned Action area.

2.4.2 Comprehensive Plan and Land Use Code Text Amendments, and Legislative Rezone

At present, the Yesler Terrace site is primarily designated Multi-Family Residential on the City of Seattle Comprehensive Plan Future Land Use Map. Portions of the site within the East of Boren and East of 12th Sectors are designated Commercial/Mixed Use.

As part of the City's annual Comprehensive Plan Amendment cycle, in May 2010 the City's Department of Planning and Development proposed a Comprehensive Plan Amendment to establish Master Planned Community sites and policies. The intent was to establish a mechanism in the City's Comprehensive Plan to consider planning for large sites, such as Yesler Terrace, and also to designate Yesler Terrace as a Master Planned Community on the Future Land Use Map in the Plan. In July 2010, the City Council made a threshold decision to include the Master Planned Community amendment on the docket for further consideration. The City then conducted its own environmental review on the package of annual Comprehensive Plan Amendments, including the Master Planned Community amendment, separate from this FEIS. A City Council decision on whether to adopt this package of Amendments is anticipated to occur in April 2011.

In addition to the City-initiated Comprehensive Plan changes described above, additional Comprehensive Plan amendments may be considered as part of City review of the Yesler Terrace Redevelopment Proposal.

According to the zoning map in the Seattle Land Use Code, the East of Boren Sector is zoned Multi-Family Residential, Mid-Rise (MR) and Neighborhood Commercial (NC3P-65). The East of 12th Sector contains three zoning designations: The King County Archive property is zoned Commercial (C2-65) and Neighborhood Commercial (NC3-65); the Baldwin Apartments building property is zoned Low-rise Residential-3 (LR-3); and, the Urban League building property is zoned NC3-65, while the building's parking area is zoned LR-3. SHA proposes to develop the East of Boren and East of 12th Sectors under the existing zoning.

As noted in the DEIS, the West of Boren Sectors are zoned Lowrise Residential, LR-3. Under this designation, only residential and certain institutional uses are allowed. In order to allow higher residential densities and non-residential uses, such as single-use office buildings, lodging or retail uses in the West of Boren Sectors, a Land Use Code text amendment and legislative rezone of the West of Boren Sectors are necessary. The City may decide, for uniformity purposes, to rezone the entire site to a new zone designation, even though the East of Boren Sector and East of 12th Sector are proposed to be developed under existing zoning (see DEIS/FEIS Section 3.8, Land Use, and DEIS/FEIS Section 3.9, Relationship to Plans and Policies for details).

2.4.3 Street Vacations and New Street Dedications

Under the Preferred Alternative, certain street vacations and new street dedications are assumed in order to provide a more connected street grid network internally and to/from the surrounding community. The configuration assumed under this alternative is intended to provide better connections to the surrounding neighborhoods and provide an internal circulation loop which connects the West of Boren Sectors. The street grid in the Preferred Alternative is essentially the same as the street grid in DEIS Alternatives 2 and 3 (see DEIS Figures 2-6 and 2-7); however, it has been revised to retain the Steam Plant building (which was recently designated as a City Landmark), to minimize utility relocation, and to work better with existing topography. The following road segments within the West of Boren sectors would be vacated under the Preferred Alternative (see **FEIS Figure 2-5** and **FEIS Figure 2-6**):

- Terry Avenue;
- Spruce Street;
- A portion of 8th Avenue S between Yesler Way and Washington Street;
- Service road around the Steam Plant (portion not within new 9th Avenue alignment);
- S Washington Street from 10th to 12th Avenue S;
- S Main Street west of 10th Avenue S; and,
- Stub of 9th Avenue S south of S Main Street.

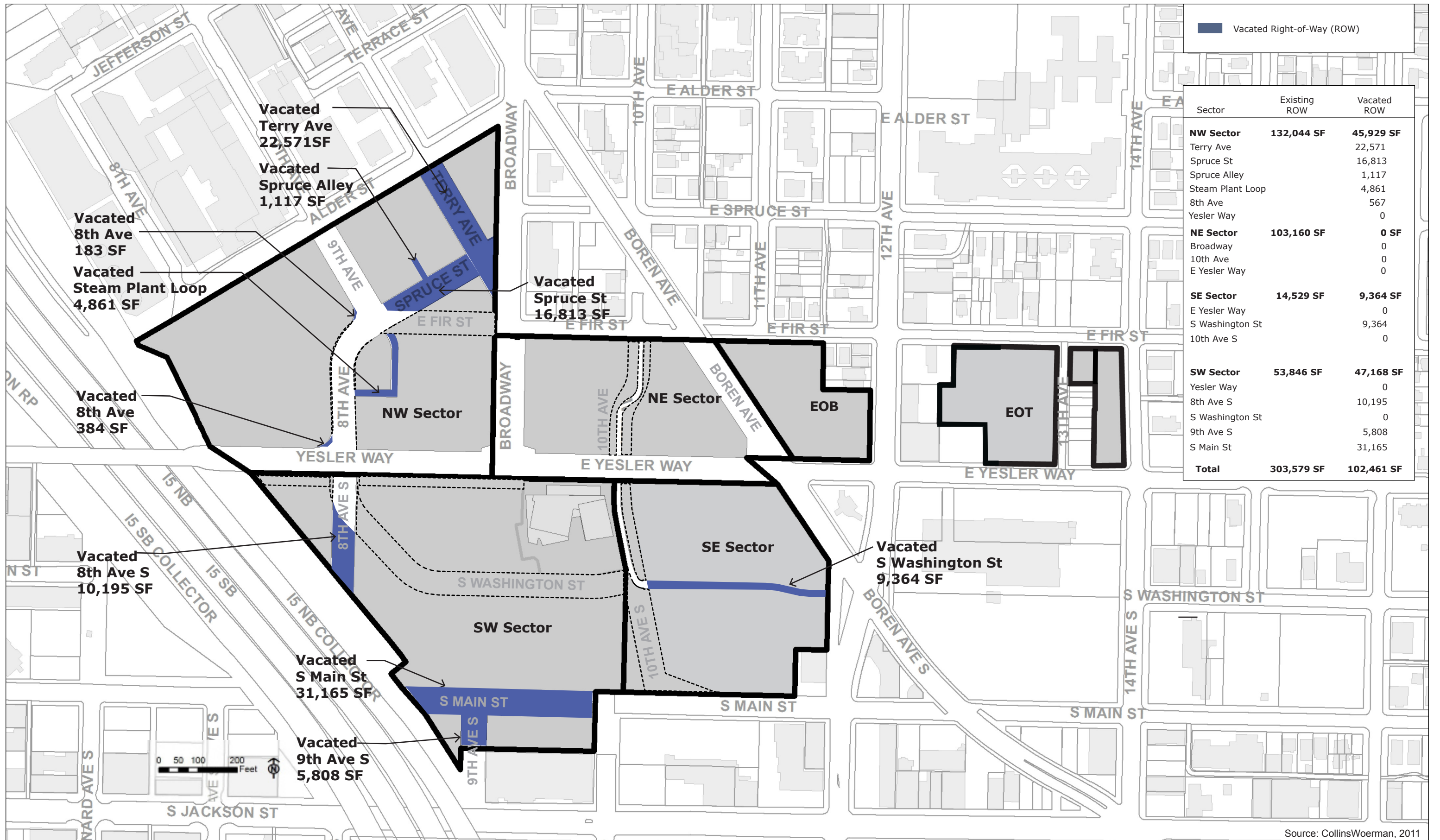
The following alley would be vacated under the Preferred Alternative:

- The southern portion of the alley north of Spruce Street between 9th Avenue and Terry Avenue (the northern portion of the alley was previously vacated).

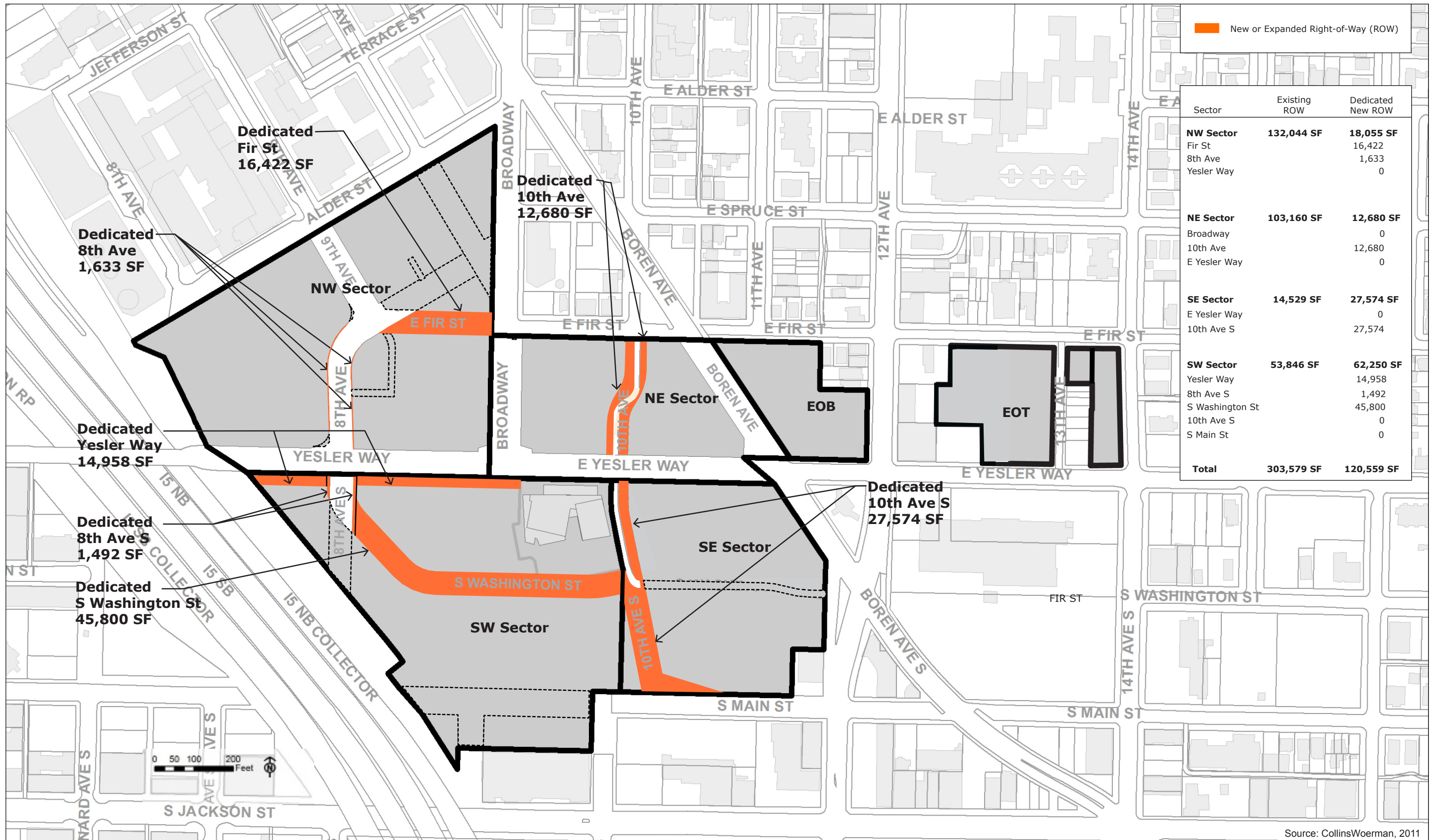
The following streets would be dedicated as new right-of-ways under the Preferred Alternative:

- Fir Street would be dedicated from Broadway to 8th Avenue;
- S Washington Street would be dedicated from 8th Avenue S to 10th Avenue S;
- 10th Avenue S would be dedicated from S Washington Street to S Main Street;
- Additional right-of-way adjacent to 10th Avenue and 10th Avenue S would be dedicated to widen the existing right-of-way; and,
- Additional right-of-way adjacent to Yesler Way and E Yesler Way would be dedicated to widen the right-of-way.

The square footage of new right-of-way (116,112 SF) would exceed the square footage of vacated right-of-way (95,661 SF).



Source: CollinsWoerman, 2011



Source: CollinsWoerman, 2011

2.5 Preferred Alternative

As indicated above, SHA and HSD have developed a Preferred Alternative for analysis in this FEIS. This alternative was developed based on the information provided in the DEIS, public and agency input, and additional analysis. The Preferred Alternative represents a further refinement of Alternatives 1-4 presented in the October 2010 DEIS. The Preferred Alternative is intended to be a high density, sustainable development that features a mix of uses that are complimentary to the existing First Hill and Central Area neighborhoods and the adjacent downtown district; a street network that integrates with and connects the site to the surrounding neighborhoods; and, a system of parks, trails and open. The level of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for Alternatives 1-4 in the DEIS. Redevelopment under the Preferred Alternative would incorporate elements of DEIS Alternatives 2 and 3 (see **FEIS Figure 2-7**, Preferred Alternative, for plans illustrating redevelopment under the Preferred Alternative at full buildout).

The Preferred Alternative is intended to meet the proposal's objectives, purpose and need (see Section 2.4 of the DEIS) through creation of a higher density, mixed use, mixed-income sustainable neighborhood with an enhanced street network that links Yesler Terrace into the surrounding neighborhoods.

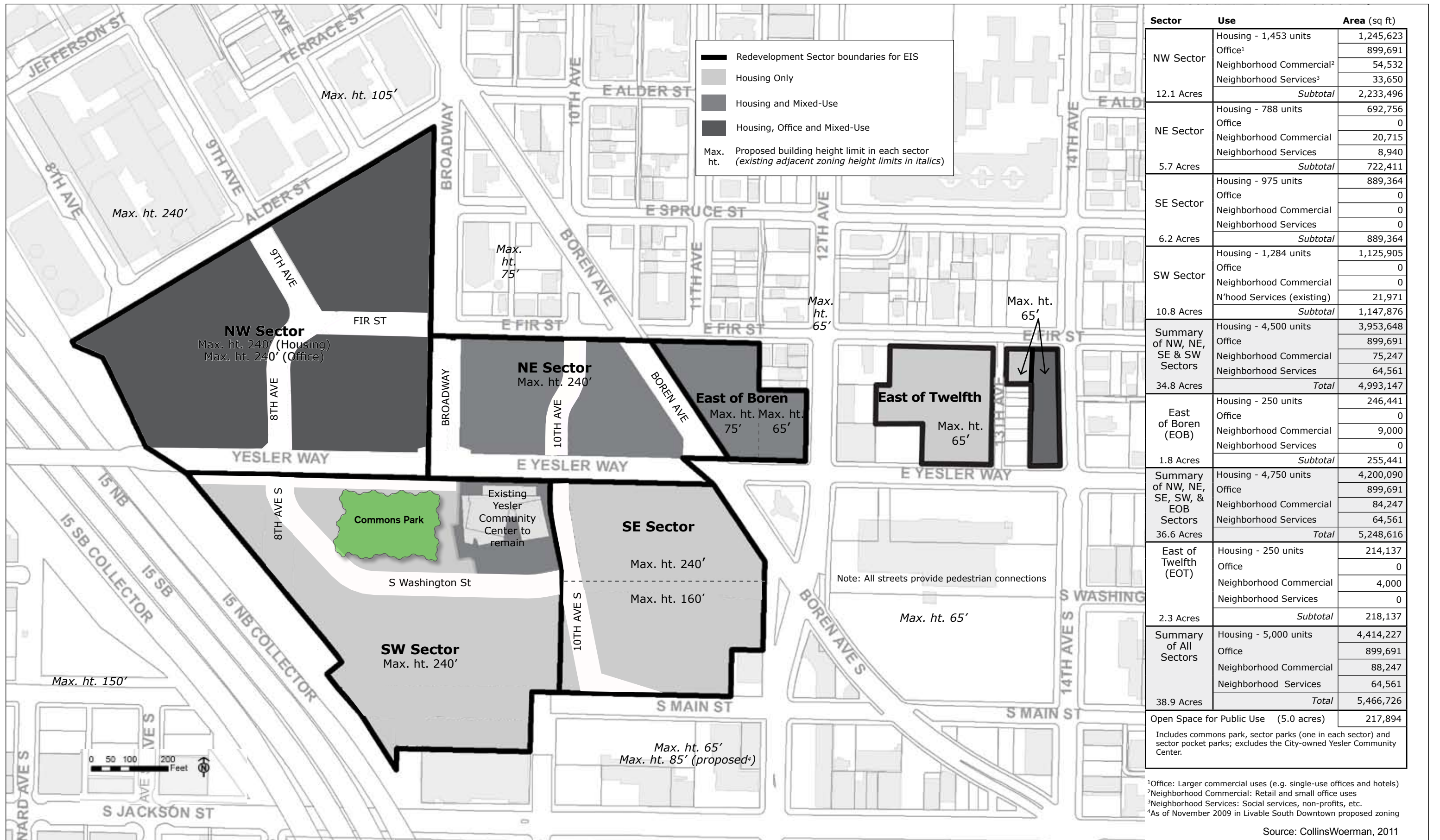
2.5.1 Summary of DEIS Alternatives

For purposes of environmental review, five redevelopment alternatives (Alternatives 1, 1A, 2, 3 and 4) and a No Action Alternative were analyzed in the DEIS. A summary description of each DEIS Alternative is provided below and a detailed description of each alternative is provided in Chapter 2 of the DEIS.

Alternatives 1, 1A, 2 and 3 represented a range of densities and intensities of uses that the site could accommodate under a new zoning designation, including Lower Density (Alternative 1), Lower Density with Less Office (Alternative 1A), Medium Density (Alternative 2), and Higher Density (Alternative 3).

Under Alternative 4, the existing City of Seattle Comprehensive Plan and Lowrise-3 zoning designations would govern future development of the site. The No Action Alternative represented a continuation of the site in its present configuration and condition. The existing low income public housing units would be replaced and renovated as necessary or on a programmed schedule.

The alternatives analyzed in the DEIS incorporated differing assumptions regarding the number of dwelling units, parking, building heights, street vacations, building demolition and the amount of development space devoted to office, lodging, neighborhood commercial uses, neighborhood services, and public open space (presented in **FEIS Section 2.6** for comparison purposes). The range of DEIS alternatives created an envelope of potential redevelopment for analysis of probable significant environmental impacts under SEPA and NEPA.



¹Office: Larger commercial uses (e.g. single-use offices and hotels)
²Neighborhood Commercial: Retail and small office uses
³Neighborhood Services: Social services, non-profits, etc.
⁴As of November 2009 in Livable South Downtown proposed zoning

Source: CollinsWoerman, 2011

Figure 2-7
Preferred Alternative - ROW Vacations

Yesler Terrace
Redevelopment EIS



2.5.2 Preferred Alternative Overview

The Preferred Alternative is based on the same EIS Alternatives Concept as described in Section 2.8.1 of the DEIS. The Preferred Alternative represents a further refinement of the DEIS Alternatives in the DEIS in the following key areas:

- Redevelopment density and mix of uses;
- Road system;
- Historic buildings;
- Expansion of the site boundary (East of 12th Sector);
- Extremely low income replacement units and Potential Phasing

Redevelopment Density and Mix of Uses

The level of redevelopment proposed under the Preferred Alternative would be within the range of development assumed for Alternatives 1-4 of the DEIS; the proposed redevelopment would generally incorporate elements of Alternatives 2 and 3. The following refinements to the DEIS alternatives are proposed under the Preferred Alternative:

- A greater amount of neighborhood services space would be provided in the Preferred Alternative, providing opportunities for community service providers to expand or for additional community services to be provided. Approximately 65,000 SF of neighborhood services would be provided under the Preferred Alternative, as compared to the 50,000 SF under DEIS Alternatives 1-4.
- A lower average parking ratio is assumed for residential uses under the Preferred Alternative, recognizing the proximity to the new streetcar line and existing transit, as well as the proximity to downtown. The overall average parking ratio would be reduced to 0.7 stalls per residential unit under the Preferred Alternative, from the 0.85 stalls assumed per residential unit for DEIS Alternatives 1-4.
- A larger amount of parks and open space would be provided under the Preferred Alternative, including the East of 12th Sector. Approximately 17.2 acres of public and semi-private parks/open space would be provided under the Preferred Alternative (15.9 acres on the DEIS site and 1.3 acres in the East of 12th Sector), as compared to the 16.1 acres under Alternatives 1-4.
- A lower maximum building height is assumed in the southern portion of the SE Sector to transition to the lower density area to the south (a maximum of 160 feet versus the 180 feet under Alternatives 1-4).

See **Section 2.5.3**, Preferred Alternative Description, below for additional details.

Road System

The configuration assumed under the Preferred Alternative has been revised from the DEIS alternatives to preserve the Steam Plant building (a recently designated City Landmark) and to minimize utility relocation and to work better with existing topography. Similar to DEIS

Alternatives 2 and 3, this configuration provides better connections to the surrounding neighborhoods (than under existing conditions) and an internal circulation loop which connects all of the West of Boren sectors (see **Section 2.4.3, Street Dedications/Vacations** above).

Historic Buildings

The Steam Plant building at 8th Avenue and Spruce Street was designated as a City Landmark on October 6, 2010 and the Preferred Alternative proposes preservation of this building.

The Urban League building in the East of 12th Sector is likely eligible for nomination as a Seattle landmark and listing in the National Register of Historic Places. The Preferred Alternative proposes rehabilitation of this building.

FEIS Site Boundary

The DEIS Alternatives assumed that development would occur within the 36.6 acre DEIS site (DEIS Site) comprised of the NW, NE, SE, SW and East of Boren Sectors. The Preferred Alternative assumes development would occur within the 38.9-acre FEIS site which is comprised of the 36.6-acre DEIS Site plus the 2.3-acre East of 12th Sector (see **FEIS Figure 2-4** for an illustration of these six sector boundaries).

An analysis of the East of 12th Sector was not included in the DEIS, as the East of 12th Sector was not part of the site at that time. In addition to an analysis of the Preferred Alternative within the DEIS site, this FEIS presents an analysis of the existing land uses in the East of 12th Sector (in **Section 2.3**); assumptions for the Preferred Alternative in the East of 12th Sector (**Section 2.5.3**); affected environment, impacts, mitigation measures and significant unavoidable adverse impacts to the environment in this Sector (**FEIS Chapter 3**); and, cumulative environmental impacts of the FEIS Site (DEIS Site and the East of 12th Sector) (**FEIS Chapter 3**).

Extremely Low Income Replacement Units and Potential Phasing

As with the DEIS Alternatives, the Preferred Alternative will provide one-to-one replacement of the existing 561 low income public housing units currently on the site. As noted above, a new sector has been added to the site. This new sector (East of 12th) would provide replacement housing for extremely low income tenants displaced by the first phases of redevelopment under the Preferred Alternative, as well as new housing for a spectrum of other income levels. See **FEIS Section 3.16** for details regarding the anticipated low income housing unit distribution across the site.

Although no specific sequence of development has been detailed at this time, under the Preferred Alternative it is likely that the East of Boren Sector, and possibly the East of 12th Sector, would be redeveloped first. According to the assumed unit distribution, up to 140 extremely low income units could be located within these sectors (70 within each sector). When the replacement housing in the East of Boren sector is complete, then demolition and redevelopment could begin in phases within the West of Boren Sectors. Implementation of this phasing schedule could reduce the potential scope of temporary offsite relocations of existing residents. Replacement of the remaining 421 extremely low income units within the West of Boren Sectors could then occur onsite as phased redevelopment occurs over the build-out period. Overall, temporary and/or permanent relocation within the site boundary would be

expected to alleviate disruptions to existing residents of the community. However, even with implementation of this phasing sequence, it is still possible that some residents would need to temporarily relocate offsite. Any such temporary tenant relocation would be conducted in compliance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970, as described in DEIS Section 2.8.4, DEIS Section 3.16.3 and **FEIS Section 3.16.3**.

2.5.3 Preferred Alternative Description

Redevelopment Density

The Preferred Alternative represents an assumed 5.47 million SF of housing-based/mixed use redevelopment built over the assumed 20-year buildout horizon (see **FEIS Figure 2-7**). Land uses under the Preferred Alternative would include:

- Approximately 4.4 million SF of residential space, which approximates to 5,000 residential units (4,750 residential units in the West of Boren Sectors and East of Boren Sector, 250 residential units in the East of 12th Sector);³
- Approximately 900,000 SF of office space (a portion of this could be lodging use);
- Approximately 88,000 SF of neighborhood commercial⁴ space (including 9,000 SF of neighborhood commercial in the East of Boren Sector and 4,000 SF of neighborhood commercial in the East of 12th Sector);
- Approximately 65,000 SF of neighborhood service space (including the Yesler Community Center and Steam Plant);
- 6.4 acres of public open space (including the existing 1.4-acre Yesler Community Center parcel, and a 1.7-acre Commons Park west of the Community Center) and 10.8 acres of semi-private open space; and,
- 5,100 parking spaces within/under buildings, plazas and landscaped courtyards.

The intensity of development under the Preferred Alternative would be highest in the NW Sector and lowest in the East of 12th Sector. It is assumed that four existing on-site buildings (the approximately 8,500 SF Steam Plant, the approximately 22,000 SF City-owned Yesler Community Center, the 11,120 SF Baldwin Apartments building and the 32,700 SF Urban League building) would be retained.

³ The number of residential units is based on taking the total residential square footage and applying estimated unit sizes. If unit sizes change over time (for example if studio or one bedroom units become smaller), the total number of residential units could increase. However, the total residential square footage would not increase.

⁴ Neighborhood commercial uses are those uses allowed in the NC zones (SMC 23.47A.004).

Building Heights

For purposes of the FEIS analysis (including the evaluation of potential visual impacts from development to the maximum proposed heights), certain assumptions have been made related to the number of possible mid- and high-rise buildings and the distribution of such buildings across the site under the Preferred Alternative (see DEIS Section 2.8.3 for high-rise location criteria). These assumptions were based on the capacity of the Preferred Alternative within the proposed square footage parameters and modeled with a mix of mid-rise and high-rise buildings. Due to the square footage parameters, not all high-rise buildings modeled under the Preferred Alternative reach the maximum heights allowed within each sector.

These assumptions, detailed in **FEIS Table 2-1**, below, are not intended to indicate a definitive development plan for the site, but are used instead as a basis for assessing the potential impacts of redevelopment under the Preferred Alternative in this EIS. The specific number, height, location and general design parameters of onsite buildings would be determined as part of full build-out of the site, and would be in accordance with zoning regulations and the Planned Action Ordinance.

Under the Preferred Alternative, residential high-rise buildings are proportionally placed in each of the NW, NE, SE, and SW Sectors to accommodate the areas of lower density land use and maximize spacing between the high-rise buildings (See **FEIS Figure 2-8**, Preferred Alternative high-rises noted in bold). In the NW Sector, two high-rise office buildings, built to the maximum allowed height, are located adjacent to Alder Street to minimize view and shadow impacts on the site and approximately match the adjacent height and density of the adjacent zoning at Harborview Hospital. Ten residential high-rise buildings are distributed in the remaining sectors west of Boren Avenue and are configured to minimize shadows on parks and maximize public and private views.

Specific high-rise locations would be determined as individual developments are proposed. Any of the high-rise locations noted in **FEIS Figure 2-8** (high-rises noted in both bold and dashed lines) could be proposed in the future if the high-rise building impacts are within the range of high-rise locations analyzed in the FEIS and DEIS (see DEIS Figures 2-15 thru 2-18).

Building Demolition

Similar to the DEIS Alternatives 1-4, the 561 existing residential units on the DEIS site would be demolished and the existing tenants relocated (see **FEIS Chapter 5** for further discussion about tenant relocation, and DEIS Sections 2.8.4 and 3.16.3 for details of the Tenant Relocation Plan). Under the Preferred Alternative, it is assumed that all existing buildings would be demolished except the Yesler Community Center, Steam Plant (which was recently listed as a City Landmark), Baldwin Apartments building and Urban League building. It is assumed that the Baldwin Apartments building would be rehabilitated for residential use and the Urban League building would be converted to primarily residential use.

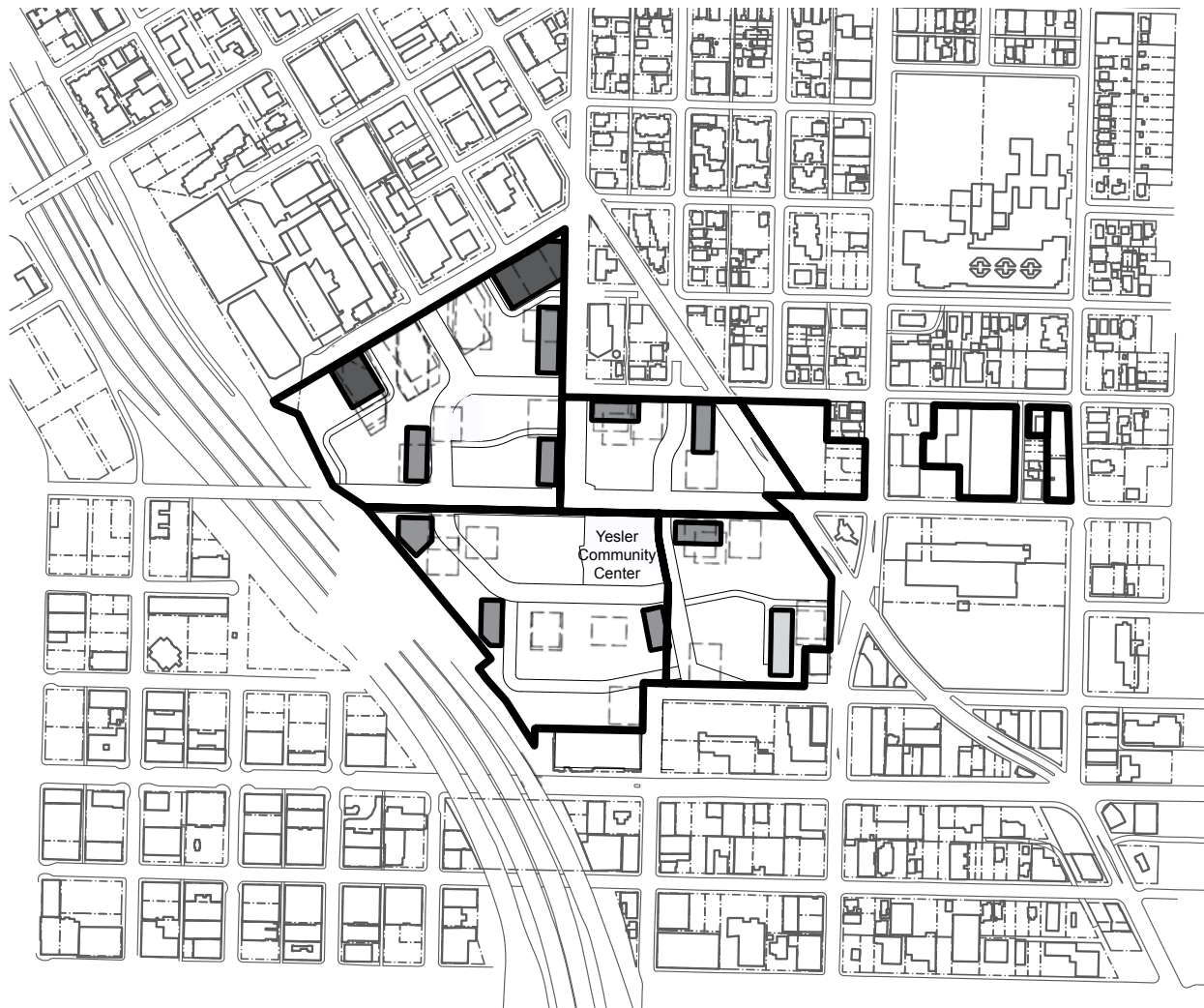
**Table 2-1
PREFERRED ALTERNATIVE
POTENTIAL MID-RISE AND HIGH-RISE BUILDINGS^{1,2}**





Sector	Number of Buildings			
	Mid-Rise Residential Buildings ¹	High-Rise Buildings		Total Number of High-Rise Buildings
		High-Rise Residential	High-Rise Office/Lodging	
NW Sector	6	3 Maximum: 240 feet Capacity Model: Two buildings at 225 feet; one at 155 feet)	2 Maximum: 240 feet Capacity Model: Two buildings at 240 feet	5
NE Sector	3	2 Maximum: 240 feet Capacity Model: 225 feet	0	2
SE Sector	4	2 Maximum: 240 feet north of Washington St; 160 feet south of Washington St Capacity Model: One at 225 feet, one at 160 feet	0	2
SW Sector	7	3 Maximum: 240 feet Capacity Model: 225 feet	0	3
East of Boren	3	0	0	0
East of 12th	3	0	0	0
FEIS SITE TOTAL	26	10	2	12

Source: CollinsWoerman, 2011.

¹ Mid-rise buildings are defined in this FEIS as more than four stories, but less than 100 feet and high-rise buildings as 100 feet or more.

² Both the maximum height and the height modeled in the capacity analysis of this alternative were analyzed in this FEIS.



-  High-rise locations studied in Alternatives 1, 1A, 2 & 3
-  High-rise Office/Lodging, 240' max
-  High-rise Residential, 240' max
-  High-rise Residential, 160' max

Source: CollinsWoerman, 2011



Figure 2-8
Potential High-Rise Locations - Preferred Alternative

Yesler Terrace
Redevelopment EIS

Housing

The average housing density on the site under the Preferred Alternative would be approximately 231 dwelling units/acre, similar to DEIS Alternative 2. The capacity model for this alternative assumes the housing would be comprised of a combination of 5 to 7-story mid-rise buildings (up to 100 feet in height) and ten 15 to 22-story high-rise buildings (up to a maximum of 225 feet throughout the West of Boren Sectors). Approximately fifty percent of the housing units would be located within mid-rise buildings and the other half in high-rise buildings. No new low-rise buildings (4 stories or less) would be assumed in this alternative, but could be developed if market conditions warrant. Two existing low-rise buildings in the East of 12th Sector would be retained (the Baldwin Apartments and Urban League buildings) for residential uses. High-rise residential buildings would be oriented and distributed throughout the West of Boren Sectors to facilitate the protection of views from public spaces and to control the near and distant viewshed from the buildings. Minimum spacing between high-rise buildings would be established to protect these views. Typical housing would be contained in single-use or mixed use buildings. Two-story ground-level housing units (with private open space for unit occupant use) could be provided in the base of some mid-rise and high-rise residential buildings in some locations. Some mixed use buildings could also include neighborhood commercial and neighborhood service uses located up to 3 stories above ground level.

Housing would be provided for extremely low (at or below 30 percent average median income - AMI) and very low income (at or below 60 percent AMI) households, as well as low income (at or below 80 percent AMI) and market rate households. Approximately 64 percent of the overall housing units would be market rate.

Office/Lodging

Similar to DEIS Alternatives 1-4, in the Preferred Alternative, it is assumed that office uses (other than small offices in neighborhood commercial areas) would be located only in the NW Sector of the site, which is adjacent to other intense non-housing uses, such as Harborview Hospital and other medical office uses to the north. Office buildings would be allowed in the NW Sector. Lodging uses could also be located in the NW Sector. The maximum height for office/lodging uses would be 240 feet in the NW Sector. The capacity model for the Preferred Alternative assumes office and lodging development in two high-rise buildings of 22 stories (225 feet in height). The office/lodging development floor-area ratio (FAR) is estimated at approximately 11.5.⁵

Neighborhood Commercial

Similar to DEIS Alternatives 1-4, the Preferred Alternative assumes neighborhood commercial uses would be provided onsite and could include: small offices, and small to medium retail uses – such as grocery, dry cleaners, restaurants, and book stores. In this alternative such uses would be located in mixed use buildings that provide either office or housing as their predominant use. Neighborhood commercial uses could occur in the NW, NE, East of Boren, and East of 12th Sectors. Typical locations would be along or adjacent to primary streets, particularly near the intersection of Broadway and E Yesler Way, and at the intersection of Alder

⁵ FAR in this EIS is based on assumed lot areas in order to give a measure of density to allow a comparison of the alternatives, but the method of calculation differs from how FAR is determined under the City's Land Use Code.

and Broadway. A small amount of neighborhood commercial would be located at the intersections of 12th Avenue and Yesler Way, and 14th Avenue and Yesler Way, at the ground floor of the Urban League building.

Neighborhood Services

Neighborhood service uses are assumed under the Preferred Alternative, similar to DEIS Alternatives 1-4, and could include: police, library, classrooms, social services, supportive services, non-profit organizations, government-funded health agencies, and SHA offices open to the public. In the Preferred Alternative, these uses would be located in mixed use buildings that provide either office or housing as their predominant use. Neighborhood service uses would primarily be located in the NW and NE Sectors, in addition to the existing Yesler Community Center and the Steam Plant. Typical locations would be along Broadway.

Parks and Open Space

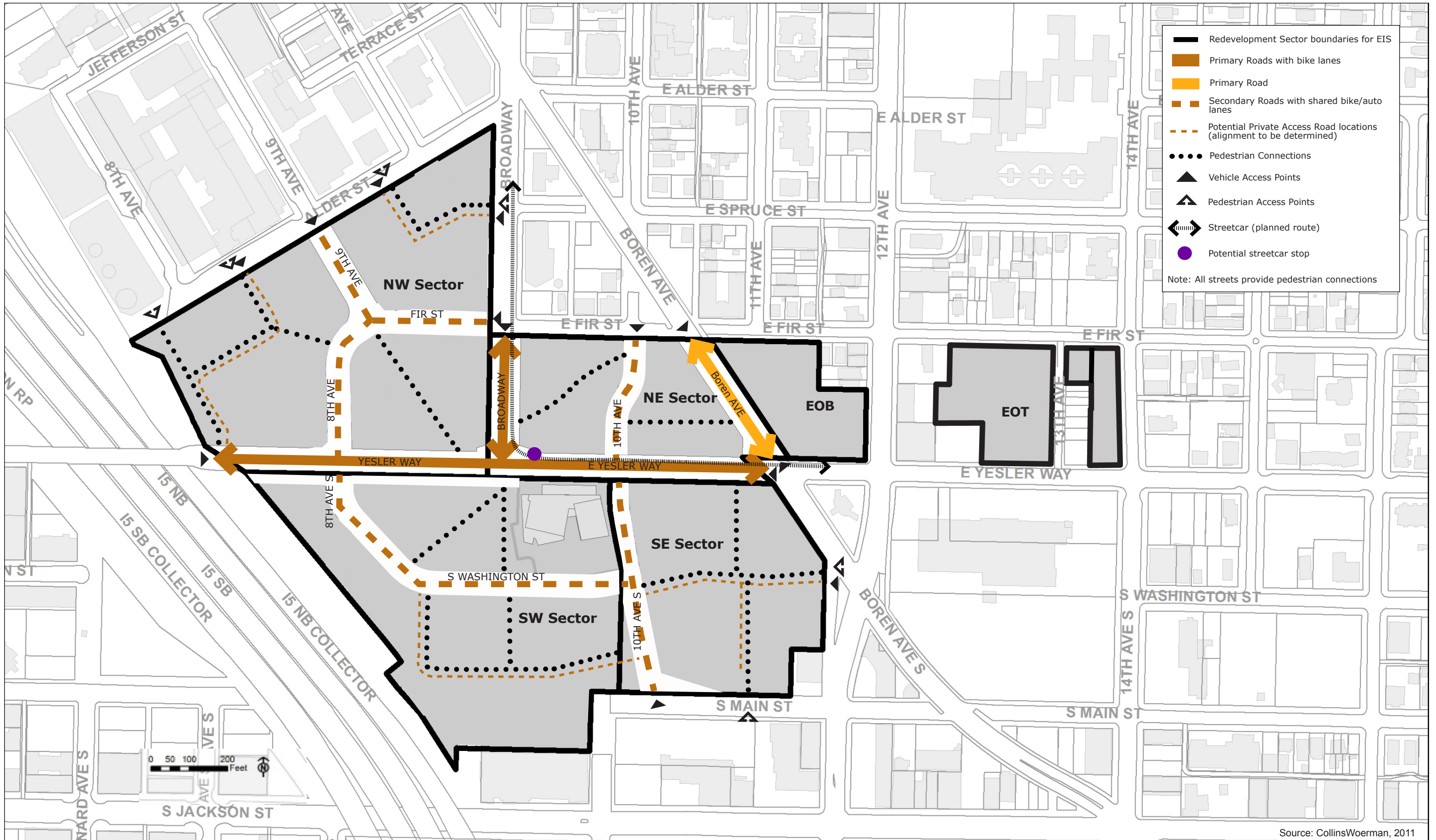
Similar to DEIS Alternatives 2 and 3, the Preferred Alternative assumes a 1.7-acre Commons Park would be provided in the core of Yesler Terrace, adjacent to the existing 1.4-acre City of Seattle parcel containing the Yesler Community Center. The Commons Park would serve as the community's central gathering place, containing both active and passive recreational opportunities to attract and serve different facets of the community. The sector and pocket parks distributed across all sectors would be intended to serve the daily needs of surrounding neighbors and on-site building residents and employees and to highlight the unique qualities of the neighborhood for visitors from outside the district. The sector and pocket parks would focus on passive recreation activities, such as open lawn and picnic areas, as well as children's play areas and community gardens.

Residential buildings would typically include semi-private open space in courtyards or on roofs for use by the building occupants. Additional private open space in the form of balconies, building roofs, and courtyards not accessible from grade, would be provided at each building for building residents' exclusive use. Open space for public use would be provided equitably across all sectors of the DEIS site within reasonable proximity to all residential buildings. Open space for residential tenants would also be provided in the East of 12th Sector.

The Preferred Alternative includes 17.2 acres of parks and open space comprised of 6.4 acres of public open space (including the existing 1.4-acre Yesler Community Center parcel, as well as the 1.7-acre Commons Park) and 10.8 acres of semi-private open space (including 1.3 acres in the East of 12th Sector).

Access

The onsite circulation concept under the Preferred Alternative has been revised from DEIS Alternatives 2 and 3 to preserve the Steam Plant building, minimize utility relocation, and to work better with existing topography. The circulation concept for the Preferred Alternative is based on a comprehensive reconfiguration of the circulation infrastructure across the site. This new configuration would enhance connections to surrounding neighborhoods and provide an internal circulation loop of secondary rights-of-way which would connect the West of Boren Sectors without the need to travel on primary rights-of-way (see **FEIS Figure 2-9**).



Source: CollinsWoerman, 2011

Figure 2-9
Preferred Alternative - Circulation

Yesler Terrace
Redevelopment EIS

Transit and non-motorized circulation would be similar to DEIS Alternatives 2 and 3 (see page 2-39 of the DEIS for additional details). Under the Preferred Alternative, one additional pedestrian connection would be provided in the NW Sector from Alder Street to Yesler Way, adjacent to the location of the new access drive.

Parking

As was the case under DEIS Alternatives 1-4, it is assumed that parking under the Preferred Alternative would be primarily provided in below-grade structures under buildings, plazas and open space. Typically, parking would be provided below individual buildings, but in some cases parking could be combined and located below multiple buildings. Within the East of 12th Sector, parking would be provided in below-grade structures on the King County Archives property, and within existing surface parking areas associated with the Baldwin Apartments and Urban League buildings.

Parking for delivery vehicles would generally be accommodated off street within building structures. A few short-term surface parking stalls could be provided on the site under this alternative. Designated delivery and drop off zones would be provided in the parking zone of the street rights-of-way. On-street parking in rights-of-way is controlled by the City and could be metered for primary use by visitors to the site.

A lower average parking rate is assumed under the Preferred Alternative than under DEIS Alternatives 1-4, recognizing the proximity to the new streetcar line and existing transit, as well as the proximity to downtown. The overall average parking rate would be reduced to 0.7 stalls/unit from the 0.85 stalls/unit assumed for DEIS Alternatives 1-4.

Utilities

Water

Similar to DEIS Alternatives 1-4, improvements to the existing water system on and in the vicinity of the site would be required for the Preferred Alternative. North of Yesler Way, in the NW and NE Sectors, it is assumed that street improvements would include water main improvements in Fir Street (between Broadway and 9th Avenue). The existing water main bisecting the East of Boren Sector is assumed to be removed and a new 8-inch water main installed in Fir Street (between 11th Avenue and 12th Avenue). South of Yesler Way, in the SW and SE Sectors, the existing 6-inch water main is assumed to be removed or abandoned and a new 8-inch water main installed. In addition, 10th Avenue and Main Street are assumed to have new 8-inch mains. See **FEIS Section 3.14, Utilities**, for additional detail.

Sewer

Similar to DEIS Alternatives 1-4, improvements to the existing sewer system on and in the vicinity of the site would be required for the Preferred Alternative. New sewer mains would be installed in 8th Avenue S, 10th Avenue, Washington Street, and Main Street. The existing combined sewer main in the northwest section of the SW Sector would be removed or abandoned and a new combined sewer main would be installed along Yesler Way connecting to the new combined sewer along 8th Avenue S. No public sewer improvements are assumed in the East of Boren and East of 12th Sectors.

The existing 8-inch combined sewer main located between 9th Avenue and Yesler Way does not have capacity for the estimated flows under the Preferred Alternative. With the construction of the First Hill Streetcar and no improvements to the combined sewer in Broadway, a new sewer main is assumed from the intersection of 9th Avenue and Fir Street south along its current location east of the Steam Plant building, then south to Yesler Way, then west along Yesler Way to 8th Avenue S, then south to the downstream point of connection at I-5. It is assumed that a new sewer main would be located in Fir Street to provide sewer service to the northeast section of the NW Sector. The existing sewer main along the west edge of the NW Sector is assumed to remain and connect to the proposed combined sewer pipe on Yesler Way at the intersection of 8th Avenue. See **FEIS Section 3.14, Utilities**, for additional detail.

Stormwater

As was assumed under DEIS Alternatives 1-4, a permanent stormwater control system would be installed to serve redevelopment under the Preferred Alternative. This system would consist of both public and private infrastructure and would be designed and constructed in accordance with the City of Seattle Drainage Code. Stormwater runoff from the entire site would be conveyed using man-made systems, including GSI, to the public combined sewer system. The stormwater control system for the privately-owned portions of the site would include conventional collection (i.e. catch basins and pipes), as well as Green Stormwater Infrastructure (GSI) conveyance and flow control elements (i.e. swales, bioretention cells and cascading planters) that would collect and convey runoff to the existing combined sewer system. GSI facilities could include permeable pavement access roads, courtyards and private sidewalks, green roofs on a portion of the buildings, bioretention planters and swales. If the assumed extent of GSI facilities is not feasible, then stormwater vaults/tanks with flow control serving individual parcels could be used. The potential to use GSI will be determined in coordination with Seattle Public Utilities. By using GSI facilities, the peak stormwater discharge to the combined sewer system would decrease from existing conditions. See **FEIS Section 3.3, Water Resources** for additional detail.

Other Utilities

As was assumed for DEIS Alternatives 1-4, all electrical and communication lines would be placed underground. New natural gas mains could be provided in new streets and service lines would be provided onsite. See **FEIS Section 3.5, Energy**, and **FEIS Section 3.14, Utilities**, for additional detail.

2.6 Comparison of DEIS Alternatives and FEIS Preferred Alternative

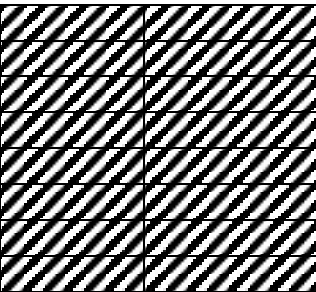
The level of redevelopment proposed under the Preferred Alternative would be within the range of development assumed for Alternatives 1-4 of the DEIS; the proposed development would incorporate elements of Alternatives 2 and 3. A summary of the features assumed under the Preferred Alternative is provided in **Section 2.5.2** above; a detailed description of the Preferred Alternative is provided in **Section 2.5.3** of this FEIS. A comparison of the land use areas, maximum building heights, levels of density, and housing types between the Preferred Alternative and the DEIS Alternatives is provided below.

2.6.1 Mix of Uses

Under the Preferred Alternative, redevelopment would include a total of approximately 5.4 million SF of new uses, an amount between DEIS Alternatives 2 (4.7 million SF) and 3 (5.8 million SF); see **FEIS Table 2-2**. It should be noted that this square footage is spread over a larger area with the addition of the East of 12th Sector. The general differences in land use quantities between the Preferred Alternative and the DEIS Alternatives are as follows:

- The Preferred Alternative assumes 4.4 million SF of residential uses, or approximately 5,000 units, which is similar to DEIS Alternative 3;
- Approximately 900,000 SF of office space are assumed, midway between DEIS Alternatives 1 (800,000 SF) and Alternative 2 (1.0 million SF);
- Approximately 88,000 SF of neighborhood commercial space are assumed, similar to DEIS Alternative 3;
- Approximately 65,000 SF of neighborhood service uses are assumed, which exceeds the amount assumed under the DEIS Alternatives (50,000 SF);
- A total of 17.2 acres of public and semi-private open space are assumed, exceeding the amount assumed under DEIS Alternatives 1-4 (16.1 acres); and,
- Approximately 5,100 parking spaces are assumed under the Preferred Alternative, similar to DEIS Alternative 2 and less than DEIS Alternative 3.

**Table 2-2
COMPARISON OF ASSUMPTIONS⁴ -
DEIS ALTERNATIVES AND FEIS PREFERRED ALTERNATIVE**

	West of Boren Sectors	East of Boren Sector	Subtotal	East of 12 th Sector	TOTAL
Acreage	34.8	1.8	36.6	2.3	38.9
FEIS Preferred Alternative					
Residential (SF)	3,953,648	246,441	4,200,090	214,137	4,414,227
Office/Lodging (SF)	899,691	0	899,691	0	899,691
Neighborhood Commercial (SF)	75,247	9,000	84,247	4,000	88,247
Neighborhood Services (SF) ¹	64,561	0	64,561	0	64,561
Total	4,993,147	255,441	5,248,588	218,137	5,466,725
Residential (units)	4,500	250	4,750	250	5,000
Parking Spaces	4,772	156	4,928	184	5,112
Parks and Open Space (acres) ^{2,3}	15.1	0.8	15.9	1.3	17.2
Existing Conditions/No Action Alternative					
Residential (SF)	427,395	40,847	468,242	11,120	479,362
Office (SF)	20,259	0	20,259	0	20,259
Neighborhood Commercial (SF)	0	0	0	0	0
Neighborhood Services (SF) ¹	49,342	0	49,342	32,700	82,042
Light Industrial (SF)	0	0	0	58,500	58,500
Total	496,996	40,847	537,843	102,320	640,163
Residential (units)	521	40	561	18	579
Parking Spaces	289	3	292	61	353
Parks and Open Space (acres) ^{2,3}	12.2	1.4	13.6	0	13.6
DEIS Alternative 1 – Lower Density Alternative					
Residential (SF)	2,525,152	232,751	2,757,903		
Office/Hotel(SF)	800,103	0	800,103		
Neighborhood Commercial (SF)	30,000	10,000	40,000		
Neighborhood Services (SF) ¹	49,971	0	49,971		
Total	3,405,226	242,751	3,647,977		
Residential (units)	2,747	253	3,000		
Parking Spaces	3,677	237	3,914		
Parks and Open Space (acres) ^{2,3}	14.0	0.7	14.7		

	West of Boren Sectors	East of Boren Sector	Subtotal	East of 12 th Sector	TOTAL
DEIS Alternative 1A – Lower Density Alternative with Less Office					
Residential (SF)	2,525,103	232,751	2,757,854		
Office (SF)	401,000	0	401,000		
Neighborhood Commercial (SF)	30,000	10,000	40,000		
Neighborhood Services (SF) ¹	49,971	0	49,971		
Total	3,006,074	242,751	3,248,825		
Residential (units)	2,747	253	3,000		
Parking Spaces	3,088	237	3,325		
Parks and Open Space (acres) ^{2,3}	14.5	0.7	15.2		
DEIS Alternative 2 – Medium Density Alternative					
Residential (SF)	3,401,462	232,751	3,634,213		
Office/Hotel (SF)	1,001,126	0	1,001,126		
Neighborhood Commercial (SF)	50,000	10,000	60,000		
Neighborhood Services (SF) ¹	49,971	0	49,971		
Total	4,502,559	242,751	4,745,310		
Residential (units)	3,747	253	4,000		
Parking Spaces	4,887	236	5,123		
Parks and Open Space (acres) ^{2,3}	15.2	0.7	15.9		
DEIS Alternative 3 – Higher Density Alternative					
Residential (SF)	4,216,980	279,720	4,496,700		
Office/Hotel (SF)	1,201,660	0	1,201,660		
Neighborhood Commercial (SF)	70,000	18,000	88,000		
Neighborhood Services (SF) ¹	49,971	0	49,971		
Total	5,538,611	297,720	5,836,331		
Residential (units)	4,697	303	5,000		
Parking Spaces	6,037	295	6,332		
Parks and Open Space (acres) ^{2,3}	15.4	0.7	16.1		
DEIS Alternative 4 – Existing Zoning					
Residential (SF)	1,143,535	272,145	1,415,680		
Office (SF)	20,259	0	20,259		
Neighborhood Commercial (SF)	0	10,000	10,000		
Neighborhood Services (SF) ¹	49,938	0	49,938		
Total	1,213,732	282,145	1,495,877		
Residential (units)	1,219	304	1,523		
Parking Spaces	1,562	278	1,840		
Parks and Open Space (acres) ^{2,3}	13.8	0.7	14.5		

Source: CollinsWoerman, 2011.

- 1 Neighborhood services include the existing 21,971 SF Yesler Community Center.
- 2 Parks and open space acreage includes public and semi-private open space areas, as well as unusable open space (steep slopes and inaccessible areas). It does not include private yards.
- 3 Parks and open space acreage includes the 1.4-acre Community Center parcel (0.7-acre Yesler Community Center building and the 0.7-acre Community Center outdoor play area).
- 4 The numbers presented in this table were utilized for EIS analysis purposes, based on the capacity model developed for each alternative (See FEIS Section 2.5.3 and DEIS Section 2.8.3). These numbers were rounded in the alternative descriptions to indicate comparative differences.

2.6.2 Building Height

The building heights proposed under the Preferred Alternative would be within the range of heights assumed for Alternatives 1-4 of the DEIS. The proposed maximum building height for both residential and office uses in the Preferred Alternative in the West of Boren Sectors is 240 feet, with the exception of the portion of the SE Sector south of Washington Street, which would be limited to 160 feet. The maximum building heights would be limited to 65 to 75 feet by existing zoning in the East of Boren and East of 12th Sectors.

The maximum building heights in the Preferred Alternative are similar to DEIS Alternative 2, with the exception of that portion of the SE Sector mentioned above (see **FEIS Table 2-3** below).

**Table 2-3
MAXIMUM BUILDING HEIGHT SUMMARY OF ALTERNATIVES (FEET)**

Sector	FEIS Preferred Alternative	DEIS Alternatives					No Action
		1	1A	2	3	4 ⁶	
NW Sector	240 (housing)	240 (housing)	240 (housing)	240 (housing)	300 (housing)	37*	30 (existing)
	240 (office/lodging)	240 (office/hotel)	240 (office)	240 (office/hotel)	240 (office/hotel)		
NE Sector	240	240	240	240	300	37*	20 (existing)
SE Sector	240 (north of Washington St)	180	180	240	240	37*	20 (existing)
	160 (south of Washington St)						
SW Sector	240	180	180	240	240 (housing) 240 (office/hotel)	37*	35 (existing)
East of Boren Sector	75 (west half)	75 (west half)	75 (west half)	75 (west half)	75 (west half)	75 (west half)	30 (existing)
	65 (east half)	65 (east half)	65 (east half)	65 (east half)	65 (east half)	65 (east half)	
East of 12 th Sector	65 (KC Archives)	/	/	/	/	/	24 (KC Archives);
	65 (Urban League)						42 (Urban League)
	40 (Baldwin Apts)						34 (Baldwin Apts)

Source: CollinsWoerman, 2011.

* Additional 5 feet of height allowed for sloped roofs.

⁶ For DEIS Alternative 4, Existing Zoning, draft code revisions for the L3 zone dated May 18, 2009, were used to project proposed development for the West of Boren Sectors. Subsequent to the DEIS issuance, final revisions to L3 zone standards were passed by the City Council in December 2010.

2.6.3 Levels of Density

The level of density proposed under the Preferred Alternative would be within the range of densities assumed for DEIS Alternatives 1-4. As discussed in DEIS Section 2.8.3, the net housing density has been defined, for environmental review purposes, as the number of units per acre, based on the gross site area minus the rights-of-way, the potential office parcels, public open space, critical and non-usable areas, private access drives and road, and the Yesler Community Center. The average floor-area ratio (FAR) for the office/lodging parcels is defined as the total gross floor area of the assumed office/lodging buildings divided by the square footage of the total land area on which the office/lodging buildings are based.⁷ Therefore, the FAR figures in **FEIS Table 2-4** refer to the average of individual office buildings, and not FAR for the entire sector. Actual FAR for individual buildings may be more or less than this average FAR.

As shown in **FEIS Table 2-4**, the Preferred Alternative assumes an overall residential density similar to DEIS Alternative 2. On the DEIS site only, the residential density of the Preferred Alternative is between that of DEIS Alternatives 2 and 3.

In the Preferred Alternative, the NE Sector assumes the highest housing density (307 housing units per acre), whereas the NW Sector had the highest housing density under DEIS Alternatives 2 and 3. This shift is primarily due to the retention of the Steam Plant in the Preferred Alternative. The SW Sector under the Preferred Alternative has a higher housing density (262 units per acre) compared to DEIS Alternatives 1-4 (192 to 234 units per acre).

In the Preferred Alternative, the lowest housing density, at 110 units per acre, is assumed in the East of 12th Sector.

⁷ FAR is based on assumed lot areas in order to give a measure of density to allow a comparison of the alternatives, but the method of calculation differs from how FAR is determined under the City's Land Use Code.

**Table 2-4
DENSITY OF REDEVELOPMENT ALTERNATIVES**

Sector	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
NW Sector							
• Housing units/acre	243	161	147	271	365	64	27
• Avg. Office FAR	11.5	7.5	4.3	7.6	7.6	2.0	2.0
NE Sector							
• Housing units/acre	307	221	221	235	340	67	26
SE Sector							
• Housing units/acre	230	176	176	242	304	68	20
SW Sector							
• Housing units/acre	262	192	192	199	234	61	24
• Avg. Office FAR					4.4		
West of Boren							
• Housing units/acre	255	183	183	235	303	65	25
• Avg. Office FAR	11.5	7.5	4.3	7.6	6.7	2.0	2.0
East of Boren							
• Housing units/acre	147	152	152	154	188	183	23
DEIS Site							
• Housing units/acre	245	180	180	227	292	74	24
• Avg. Office FAR	11.5	7.5	4.3	7.6	6.7	2.0	2.0
East of 12 th Sector							
• Housing units/acre	110						
FEIS Site							
• Housing units/acre	231						
• Avg Office FAR	11.5						

Source: CollinsWoerman, 2010-11.

2.6.4 Housing Types


The same number of residential units are assumed under the Preferred Alternative as DEIS Alternative 3; however, these units are spread across greater land area under the Preferred Alternative with the addition of the East of 12th Sector (See **FEIS Table 2-5**). Under all alternatives, it is assumed that the 561 existing low income housing units would be replaced on site.

In addition to the replacement of the 561 existing extremely low income units, the Preferred Alternative also includes an additional 290 very low-income units and 950 low-income units. Therefore, approximately 36 percent of the overall housing units at Yesler Terrace would be affordable (income-restricted) housing units under the Preferred Alternative (1,801 units out of 5,000 overall units). This is a lower percentage of units than DEIS Alternatives 1-3 (43 to 49 percent), and a similar percentage to Alternative 4.

**Table 2-5
HOUSING TYPES BY ALTERNATIVE**

Housing Type	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
Extremely Low Income	561	561	561	561	561	561	561
Very Low Income	290	239	239	335	335	0	0
Low Income	950	660	660	950	1,231	0	0
Subtotal	1,801	1,460	1,460	1,846	2,127	561	561
Market Rate	3,199	1,540	1,540	2,154	2,873	962	0
Total	5,000	3,000	3,000	4,000	5,000	1,523	561

Source: CollinsWoerman, 2010-11.



Chapter 3 - AFFECTED ENVIRONMENT,
IMPACTS, ALTERNATIVES, MITIGATION
MEASURES, and SIGNIFICANT UNAVOIDABLE
ADVERSE IMPACTS of the
PREFERRED ALTERNATIVE

CHAPTER 3

AFFECTED ENVIRONMENT, IMPACTS, ALTERNATIVES, MITIGATION MEASURES AND SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS OF THE PREFERRED ALTERNATIVE

Chapter 3 provides a discussion of the probable significant impacts, mitigation measures and significant unavoidable adverse impacts of the Preferred Alternative (as described in **Chapter 2** of this Final Environmental Impact Statement -- FEIS). This section provides the following analyses for each element of the environment:

- An analysis of the impacts of the Preferred Alternative on the Draft Environmental Impact Statement (DEIS) Site (NW, NE, SW, SE and East of Boren Sectors) and comparison of those impacts to those assumed for DEIS Alternatives 1-4;
- A description of the existing conditions in the East of 12th Sector and analysis of redevelopment impacts assumed within that sector under the Preferred Alternative;
- A conclusion about the impacts of redevelopment on the FEIS Site (the DEIS Site plus the East of 12th Sector) and comparison to those impacts assumed for DEIS Alternatives 1-4; and,
- A description of mitigation measures and significant unavoidable adverse impacts associated with the Preferred Alternative.

3.1 EARTH

This section compares the probable significant impacts from the Preferred Alternative on soil and geologic conditions on and in the vicinity of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) to those analyzed under the DEIS Alternatives 1-4 (as summarized in DEIS Chapter 3.1). The impacts of the Preferred Alternative on the East of 12th Sector are also analyzed. Any changes in impacts and mitigation measures are identified. This section is based on the April 2011 *Earth Technical Report Addendum, Yesler Terrace Redevelopment Project* prepared by Landau Associates and provided in **FEIS Appendix B**.

3.1.1 Affected Environment

Information on earth-related conditions at the Yesler Terrace DEIS Site was based on a review of existing reports, published geologic mapping, historic information, as well as site-specific subsurface explorations and reconnaissance activities. Additional review of existing data and site-specific subsurface exploration and reconnaissance activities were conducted for the East of 12th Sector in support of this FEIS (see **FEIS Appendix B** for details).

DEIS Site

In DEIS Section 3.1.1, the affected environment at the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) is described, including the existing topography, soils and geology, geologic hazards and groundwater conditions. The existing geologic conditions on the DEIS Site and in

the site vicinity have remained the same as presented in the DEIS; therefore, no additional descriptions of existing conditions is warranted.

East of 12th Sector

Topography

The topography of the East of 12th Sector slopes downward, generally to the south and southeast, with a maximum of about 10 feet of elevation change between E Fir Street and E Yesler Way.

Soils and Geology

The general geology, surficial geology and geologic units at the East of 12th Sector are the same as those described for the DEIS Site in DEIS Section 3.1.1.

Geologic Hazards

Geologic hazard conditions on the East of 12th Sector, including erosion hazards, seismic hazards, ground rupture, soil liquefaction and risk of tsunamis, are generally the same as those described on the DEIS Site in DEIS Section 3.1.1. Steep slope and landslide hazard conditions on the East of 12th Sector are described below.

Steep Slope Hazards and Landslide Hazards

No steep slope or landslide hazards are known to be present in the East of 12th Sector. A small steep slope area is shown offsite to the west/northwest of the King County Archives site on the Seattle DPD GIS system (see Figure 3.1-1 in DEIS Appendix D), but site reconnaissance confirmed this is a soil retaining structure and would not meet the definition of a steep slope.

Groundwater

Groundwater conditions in the East of 12th Sector are generally the same as those described on the DEIS Site in DEIS Section 3.1.1; however, groundwater perched in surficial fill and/or recessional outwash materials could be encountered from about 5 to 15 feet below ground surface due to the presence of relatively shallow glacial till in certain portions of the area.

3.1.2 Impacts

This section evaluates the potential earth-related impacts of redevelopment under the Preferred Alternative at the site during construction and long-term operation of the Yesler Terrace redevelopment.

DEIS Site

With respect to soils and geologic hazards and impacts of proposed redevelopment, there would generally be little difference between the types and levels of potential impacts associated with the Preferred Alternative and DEIS Alternatives 1-4 on the DEIS Site; differences in impacts among these alternatives would primarily relate to the relative intensity of development.

The general discussion of earth-related impacts in DEIS Section 3.1.2 would also apply to the Preferred Alternative; therefore, the discussion below refers only to impacts specific to the Preferred Alternative on the DEIS Site.

Construction Impacts

Earth-related construction impacts are short-term impacts that could occur during the construction phase of site redevelopment, as described below. In general, before construction is allowed in or immediately adjacent to mapped geotechnical hazard areas, detailed geotechnical studies would be conducted as part of the permit process to address specific standards relating to site geology and soils, erosion, seismic hazards and facility design. Temporary erosion and sedimentation control measures would be implemented in accordance with City of Seattle regulations, as described in DEIS Section 3.1.3; as a result, no significant impacts would be expected.

Grading

The Preferred Alternative would require grading for construction of building foundations, roads, utilities and parking structures on the DEIS Site. For purposes of this FEIS analysis, a preliminary grading concept was formulated. Specific grading plans for redevelopment would be developed as part of the future design and permit process. **FEIS Table 3.1-1** shows the amount of cut and fill estimated under the Preferred Alternative for each of the DEIS Site sectors. Excavated soil would either be reused onsite as structural fill (if determined to be suitable for that purpose), or transported offsite to an appropriate disposal location.

**Table 3.1-1
GRADING ACTIVITIES FOR THE PREFERRED ALTERNATIVE
ON THE DEIS SITE
(CUBIC YARDS)**

Grading Activity	Sector					
	NW Sector	NE Sector	SE Sector	SW Sector	East of Boren	DEIS Site Area
Cut	303,000	91,600	65,200	136,200	18,200	614,200
Fill	7,800	6,400	4,300	22,600	0	41,100

Source: SvR Design Company, 2011.

Similar to DEIS Alternatives 2 and 3, under the Preferred Alternative, new building construction and substantial site grading and infrastructure improvements would occur in the existing steep slope/slide-prone areas along the southern portion of the SW and SE Sectors and in the area containing tiebacks for the northern wall of the Pacific Rim Center Building. While there is the potential for impacts on these steep slope/slide-prone areas and the existing drainage tunnels, the mitigation measures described in the DEIS and restated in **FEIS Section 3.1.3**, including substantial slope stabilization and drainage improvements, would address those impacts, and no significant impacts would be anticipated.

As shown in **FEIS Table 3.1-2**, the amount of grading activities (cut and fill) assumed for the Preferred Alternative at the DEIS Site would fall within the range estimated for the DEIS Alternatives 1-4.

**Table 3.1-2
COMPARISON OF GRADING ACTIVITIES FOR THE
PREFERRED ALTERNATIVE AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(CUBIC YARDS)**

Grading Activity	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
Cut	614,200	465,000	465,000	745,000	730,000	158,000	0
Fill	41,100	57,000	57,000	108,000	88,000	84,000	0

Source: SvR Design Company, 2011.

Placement of Structural Fill

Similar to DEIS Alternatives 1-4, the Preferred Alternative would require site grading and placement of structural fill for construction/modification required for access roads, installation of utilities, construction of earth retention structures, local raising of site grades, etc. Structural fill and backfill material placed as part of future site improvements would be densely compacted, which could cause ground vibrations in the immediate vicinity of the construction work. However, placement of structural fill would not typically be expected to cause significant settlement/ground subsidence that could impact existing or future structures (onsite or offsite) in the immediate area of the fill. Adjacent structures/surfaces could be monitored during construction to verify that no adverse ground movement occurs.

As stated previously, similar to DEIS Alternatives 2 and 3, the Preferred Alternative would require placement of structural fill to modify site grades within or adjacent to the steep slope/slide-prone area of the site. Site-specific geotechnical investigations and slope stability analyses would be undertaken and appropriate design and construction of earth retention structures, fill slopes, and drainage and erosion control would be implemented to properly stabilize the area.

As part of the environmental review process for the Yesler Terrace project, Seattle Housing Authority (SHA) submitted documentation to the Seattle DPD to support a request for relief from the prohibition of development on the steep slopes in the West of Boren Sectors. This request was based on the fact that the identified Environmental Critical Area (ECA) steep slopes were created through previous legal grading activities. Seattle DPD subsequently granted SHA's request on October 19, 2010, and a copy of the DPD decision is included in **FEIS Appendix B**.

Other Construction Impacts

Other potential earth-related impacts of the Preferred Alternative at the DEIS Site during construction (i.e. related to construction dewatering, construction of foundations and potential for erosion impacts) would be similar to the impacts discussed for Alternatives 1-4 in the DEIS and are not expected to be significant.

Operational Impacts

Similar to DEIS Alternatives 1-4, under the Preferred Alternative, the majority of the DEIS Site would be covered with impervious surfaces (i.e. buildings, roadways, and sidewalks); pervious areas (i.e. landscaping) would also be retained/provided following redevelopment. A permanent stormwater control system would be installed and maintained, in accordance with City of Seattle regulations (see **FEIS Section 3.3** for further information). As a result, no significant earth-related impacts (i.e. landslide and erosion impacts) would be anticipated on the DEIS Site during operation of the Yesler Terrace Redevelopment.

East of 12th Sector

Construction Impacts

Under the Preferred Alternative, earth-related construction impacts in the East of 12th Sector would generally be similar to the impacts at the DEIS Site under Alternatives 1-4, as described in DEIS Section 3.1.2. Temporary erosion and sedimentation control measures would be implemented in accordance with City of Seattle regulations, as described in DEIS Section 3.1.3, and no significant impacts would be expected.

Grading

The Preferred Alternative would require grading for construction of building foundations, roads, utilities and parking structures in the East of 12th Sector. For purposes of this FEIS, a preliminary grading concept was formulated for this sector. It is estimated that approximately 24,000 cubic yards of cut and no fill would be required to redevelop this sector. The grading activities would occur on the King County Archives site in order to develop underground parking. Specific grading plans for redevelopment would be developed as part of the future design and permit process.

Other Construction Impacts

Earth-related impacts of the Preferred Alternative in the East of 12th Sector related to construction dewatering, geologic hazard areas would be similar to the impacts discussed for DEIS Alternatives 1-4 in DEIS Section 3.1.2.

Operational Impacts

Potential earth-related impacts of the Preferred Alternative in the East of 12th Sector during operation of the project would be similar to the impacts discussed for the DEIS Alternatives 1-4 (see DEIS Section 3.1.2), because the majority of the site would be covered in impervious surfaces, and a permanent stormwater control system would be installed, in accordance with City of Seattle regulations. As a result, no significant impacts are expected.

FEIS Site/Conclusion

Redevelopment under the Preferred Alternative on the FEIS Site (DEIS Site and East of 12th Sector) would require grading for construction of infrastructure components and to achieve suitable finish grades for building construction. It is estimated that a total of up to approximately

638,200 cubic yards of cut and up to 41,100 cubic yards of fill could be required for grading activities under the Preferred Alternative. As indicated by **FEIS Table 3.1-3**, the total amount of grading on the FEIS Site under the Preferred Alternative falls within the range of grading activities analyzed in the DEIS for Alternatives 1-4.

**Table 3.1-3
COMPARISON OF GRADING ACTIVITIES
UNDER THE PREFERRED ALTERNATIVE AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(CUBIC YARDS)**

Grading Activity	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
Cut	638,200	465,000	465,000	745,000	730,000	158,000	0
Fill	41,100	57,000	57,000	108,000	88,000	84,000	0

Source: SvR Design Company, 2011.

There would be the potential for earth-related impacts both during construction and operation of the Preferred Alternative on the FEIS Site, similar to those impacts described in the DEIS for Alternatives 1-4. Temporary erosion/sedimentation control measures and permanent stormwater control systems would be installed and geotechnical engineering design and construction measures would be implemented to preclude significant adverse impacts (see DEIS Section 3.3, **FEIS Section 3.3** DEIS Appendix F for further information). Additional site-specific geotechnical engineering analyses and design studies would be conducted as part of the future design and permitting process for future buildings and infrastructure elements.

Cumulative Impacts

Cumulative impacts to geologic conditions resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.1.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential impacts to geologic conditions resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are assumed to be the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Required/Proposed Mitigation Measures

- Appropriate foundation support systems would be determined during the design and permitting of specific infrastructure and building projects.
- Site-specific seismic analyses would be conducted during design and permitting, in accordance with City of Seattle Municipal Code requirements.

- (MODIFIED) The design of infrastructure and buildings would incorporate seismic provisions of the current version of the Seattle Building Code (International Building Code with Seattle amendments).
- Site-specific analyses of development planned adjacent to or within the steep slope/slide-prone areas in the southern portion of the site would be conducted during the design and permitting phase. These analyses would identify appropriate methods of slope stabilization and other measures to prevent potential landslide impacts (see DEIS Appendix D for details).
- The existing drainage tunnels below the slide area in the southern portion of the site would be protected during construction or improved with appropriately designed new infrastructure. Drainage provisions would include measures to collect and route both groundwater and surface water runoff away from slide-prone areas for discharge to appropriate downslope locations.
- During construction, a temporary erosion and sedimentation control plan (TESCP) and Best Management Practices would be implemented to control erosion. These measures would be consistent with City of Seattle regulations, and could include the following:
 - Limit areas of exposure;
 - Schedule earthwork during drier times of the year;
 - Retain existing vegetation where possible;
 - Seed or plant appropriate vegetation on exposed areas as soon as earthwork is completed;
 - Route surface water through temporary drainage channels around and away from disturbed soils or exposed slopes;
 - Intercept and drain water from any surface seeps, if encountered;
 - Use silt fences, temporary sedimentation ponds, or other suitable sedimentation control devices to collect and retain possible eroded material;
 - Cover exposed soil stockpiles and exposed slopes with plastic sheeting, as appropriate;
 - Use straw mulch and erosion control matting to stabilize graded areas and reduce erosion and runoff impacts to slopes, where appropriate;
 - Temporarily cease work under certain, limited circumstances, if weather conditions warrant, and
 - Rock pads or truck washing stations to limit excess soil materials from entering the right-of-way.
- Temporary shoring systems would be installed to address the potential for impacts associated with construction excavations. The design and construction of excavation shoring systems would include an evaluation of nearby adjacent structures and utilities (e.g. the I-5 retaining wall located along the west side of the site, adjacent building foundations, and/or existing drainage tunnels), and incorporate measures to limit impacts to these structures/utilities.
- Site-specific investigations and analyses would be conducted during the design and permitting process in order to identify appropriate measures to address the potential need for and impacts of excavation dewatering. These measures could include site-

specific design and control of dewatering systems, minimizing the extent and duration of dewatering, and monitoring for settlement.

- As necessary, groundwater discharged during construction could be monitored to assess the water quality and need for treatment, to comply with applicable state and local requirements (see DEIS Section 3.6, Environmental Health for details).
- Fill from grading activities would be designed to prevent settlement impacts to adjacent structures. As appropriate, monitoring could be conducted during construction to verify that no significant settlement occurs.
- Excavated soil not reused onsite as structural fill (if determined to be suitable for that purpose), would be transported offsite and disposed of at an appropriate disposal location in accordance with all applicable local, state and federal regulations.
- Foundation construction impacts could be mitigated by proper design and construction of temporary excavation shoring and dewatering systems. Ground elevation surveys could be conducted in conjunction with pre- and post-construction inspections and photographic surveys of structures or facilities located near foundation construction activities.
- A permanent stormwater control system would be installed and maintained, in accordance with City of Seattle regulations (see **FEIS Section 3.3** and DEIS Section 3.3 and DEIS Appendix F for further information).

Other Possible Mitigation Measures

- The following measures could be employed to address potential impacts during drilled shaft installation of deep foundation support of structures:
 - Casings could be installed to control caving of soils during drilled shaft installation for deep foundation support of structures;
 - Vibration monitoring and ground elevation surveys could be conducted near construction activities;
 - Spoils generated during drilled shaft installation could be disposed of in accordance with applicable local, state, and federal requirements.

3.1.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in this FEIS, no significant unavoidable adverse earth-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.2 AIR QUALITY

The following section compares the probable significant impacts from the Preferred Alternative on air quality conditions on and in the vicinity of the Yesler Terrace site to those analyzed under the DEIS Alternatives 1-4 in DEIS Section 3.2, and identifies any new increased impacts and mitigation. This analysis also considers existing and future pollutant concentrations and potential project impacts in the East of 12th Sector. This section is based on the *Air Quality Technical Report Addendum* prepared by ENVIRON and provided in **FEIS Appendix C**.

3.2.1 Affected Environment

DEIS Site

In DEIS Section 3.2.1, the affected environment of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) is described including existing carbon monoxide (CO), ozone, inhalable particulate matter, sulfur dioxide, and nitrogen oxides levels on and in the site vicinity. The existing regulatory environment, toxic air pollutants and air quality conformity review are also described. The existing air conditions on the site and in the site vicinity have remained the same as presented in the DEIS; therefore, no additional descriptions of the existing conditions are warranted.

East of 12th Sector

Existing air quality conditions in the East of 12th Sector are essentially the same as those described in DEIS Section 3.2.1 for the DEIS Site. That is, air quality generally complies with applicable health standards most of the time, but the surrounding area is subject to somewhat elevated levels of some air contaminants due to the numerous transportation sources in the vicinity. Existing and future annual average concentrations of diesel particulate matter are about the same in the East of 12th Sector as across the DEIS Site, in spite of the increased distance from I-5 (refer to DEIS Appendix E, Figures 9 and 10). On the other hand, short-term (e.g., 1-hour) concentrations of pollutants from transportation sources such as NO₂ are lower in the East of 12th Sector compared with the portions of the main site near I-5, due to the increased distance (refer to DEIS Appendix E, Figures 5 and 6).

3.2.2 Impacts

This section evaluates the potential air quality-related impacts of redevelopment under the Preferred Alternative at the Yesler Terrace site during construction and long-term operation of the Yesler Terrace Redevelopment.

DEIS Site

Construction

Construction impacts on the DEIS Site under the Preferred Alternative would be generally as described in DEIS Section 3.2.3 for Alternatives 1-4. That is, redevelopment under the Preferred Alternative would include the demolition of most existing buildings and construction of new buildings and infrastructure improvements. Construction would include extensive grading

and excavation for building foundations as well as removal of existing roadways and grading and paving of new on-site roadways. Such activities could result in temporary, localized increases in particulate concentrations due to emissions from construction-related sources.

Demolition of existing structures would require the removal and disposal of building materials that could possibly contain asbestos and lead based paint. Demolition contractors would therefore be required to comply with Environmental Protection Agency (EPA) and Puget Sound Clean Air Authority (PSCAA) regulations related to the safe removal and disposal of any asbestos- and lead-containing materials.

Similar to under DEIS Alternatives 1-4, construction would require the use of heavy trucks, excavators, graders, and pavers along with a range of smaller equipment such as generators, pumps, and compressors. Emissions from existing traffic sources near the project area would likely outweigh any degradation of local air quality resulting from construction equipment emissions. Nonetheless, emissions from such sources and especially from diesel-fueled engines are coming under increasing scrutiny because of their suspected risk to human health. Specific dose/response effects are unknown, but long-term exposure to excessive amounts of diesel emissions is now understood to represent a human health risk, especially to sensitive individuals like the chronically ill, the elderly and the very young. Hence, although there is little or no danger of such emissions resulting in pollutant concentrations that would exceed an applicable ambient air quality standard, pollution control agencies are now urging that emissions from diesel equipment be minimized to the extent practicable in order to reduce potential health risks. By taking steps such as minimizing on-site diesel engine idling, construction-related diesel emissions would not likely substantially affect air quality on the DEIS site or in the site vicinity.

Although some construction phases would cause odors, particularly during paving operations using tar and asphalt, any odors related to construction would be short-term. Construction contractors would have to comply with PSCAA regulations that prohibit the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

Construction equipment and material hauling can affect traffic flow in a project area if construction vehicles travel during peak periods or other heavy-traffic hours of the day and pass through congested areas. SHA and/or its prime contractor(s) would prepare a *Construction Management Plan* to help reduce construction-related transportation impacts. This plan would detail peak hour restrictions for construction truck traffic and how those restrictions would be communicated and enforced. See **FEIS Section 3.13.3** for further information.

With implementation of the controls required for the various aspects of construction activities and consistent use of best management practices to minimize on-site emissions, as identified below in **FEIS Section 3.2.3** Mitigation Measures, construction of the Preferred Alternative would not be expected to significantly affect air quality.

Operational Impacts

As noted in DEIS Section 3.2.2, for the DEIS Alternatives, the primary emissions-generating activity associated with the Yesler Terrace Redevelopment under the Preferred Alternative would be traffic traveling to and from the site. The analysis of potential air quality impacts

related to the DEIS Alternatives focused on off-site traffic and was based on consideration of ambient concentrations of CO that could occur under worst-case conditions near congested intersections.

The DEIS analyzed the three most congested signalized intersections that would be affected by project traffic during the peak commute period under DEIS Alternative 3, the highest density alternative. See **FEIS Figure 3.2-1** for a map of the roadways and intersections considered in the air quality analysis. The results of the air quality modeling analysis indicated that the model-predicted CO concentrations under existing and future scenarios both with and without the project would be much less than the 35 parts per million (ppm) 1-hour ambient air quality standard and the 9 ppm 8 hour standard. The DEIS concluded that project traffic related to DEIS Alternative 3 would not result in any significant air quality impacts. An expanded traffic analysis completed for the Preferred Alternative indicated no changes in operations of the most affected signalized intersections in the study area (see **FEIS Section 3.13** for details), similar to DEIS Alternative 3; therefore, operations of the Yesler Terrace Redevelopment on the DEIS Site under the Preferred Alternative would not be expected to result in any significant air quality impacts.

East of 12th Sector

Construction

Construction of facilities within the East of 12th Sector would have a similar potential for air quality impacts as discussed for DEIS Alternatives 1-4. Demolition of existing buildings, renovation of existing buildings, site preparation and grading, and new construction could result in localized increases in some air pollutants including dust and emissions associated with diesel powered equipment. By taking steps such as minimizing on-site diesel engine idling, construction-related diesel emissions would not likely substantially affect air quality on the project site or in the site vicinity. As discussed for DEIS Alternatives 1-4, adherence to requirements and advisories from the PSCAA would likely be sufficient to prevent any significant air quality impacts related to construction sources and activities.

Operation

The potential for air quality impacts associated with off-site traffic related to operation of the proposed project under the Preferred Alternative including within the East of 12th Sector would be the same as discussed for DEIS Alternatives 1-4. An expanded traffic analysis completed for the Preferred Alternative indicated no changes in operations of the most affected signalized intersections in the study area (see **FEIS Section 3.13** for details), similar to Alternative 3; therefore, operations of the Yesler Terrace Redevelopment on the East of 12th Sector under the Preferred Alternative would not be expected to result in any significant air quality impacts.

Site Suitability Assessment

Site suitability issues under the Preferred Alternative site configuration would remain as described in DEIS Section 3.2.2 for Alternatives 1-4. The addition of the East of 12th Sector to the FEIS Site boundary would not change the conclusions of the DEIS analysis regarding long-term average exposure of people on and in the vicinity of the site to pollutants from vehicle sources. As was concluded in the DEIS for Alternatives 1-4, the analysis of toxic air pollutant



Source: ENVIRON International Corporation, 2011



Figure 3.2-1
Roadways and Intersections Considered in Air Quality Analysis

Yesler Terrace
Redevelopment EIS

(TAPs) concentrations associated with roadways in the vicinity of the project site suggests that emissions from traffic sources affect large areas nearby to the degree that there is a potentially elevated health risk in long-term residency near busy roads. The focus of the review was the Yesler Terrace site, but the sorts of emissions and resulting concentrations of air toxics occurs everywhere there are large numbers of vehicles or other sources burning fossil fuels.

FEIS Site/Conclusion

The probable significant impacts from redevelopment under the Preferred Alternative on the FEIS Site (the DEIS Site and the East of 12th Sector) related to air quality would generally be the same as analyzed under DEIS Alternatives 1-4 on the DEIS Site. With implementation of the mitigation measures noted in **FEIS Section 3.2.3** below, no significant impacts on the FEIS Site would be anticipated. Site suitability issues on the FEIS Site as related to air quality would also be within the range identified for the DEIS Alternatives.

3.2.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential air quality impacts associated with the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are assumed to be the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

Construction contractors would be required to comply with all relevant federal, state and local air quality rules.

(MODIFIED) In addition, best management practices (BMPs) would be implemented to reduce emissions related to the construction phase of the project. Possible management practices for reducing the potential for air quality impacts during construction include measures for reducing both exhaust emissions and fugitive dust. The Washington Associated General Contractors brochure Guide to Handling Fugitive Dust from Construction Projects and the PSCAA suggest a number of methods for controlling dust and reducing the potential exposure of people to emissions from diesel equipment. A list of some of the possible control measures that could be implemented to reduce potential air quality impacts from construction activities follows:

- Use only equipment and trucks that are maintained in optimal operational condition.
- Require all off-road equipment to have emission reduction equipment (e.g., require participation in Puget Sound Region Diesel Solutions, a programs designed to reduce air pollution from diesel, by project sponsors and contractors).
- Use car-pooling or other trip-reduction strategies for construction workers.
- Implement restrictions on construction truck and other vehicle idling (e.g., limit idling to a maximum of 5 minutes).
- Spray exposed soil with water or other suppressant to reduce emissions of PM and deposition of particulate matter.

- Pave or use gravel on staging areas and roads that would be exposed for long periods.
- Cover all trucks transporting materials, wetting materials in trucks, or providing adequate freeboard (space from the top of the material to the top of the truck bed), to reduce PM emissions and deposition during transport.
- Provide wheel washers to remove particulate matter that would otherwise be carried off site by vehicles to decrease deposition of particulate matter on area roadways.
- Cover dirt, gravel, and debris piles as needed to reduce dust and wind blown debris.
- Stage construction to minimize overall transportation system congestion and delays to reduce regional emissions of pollutants during construction.

Other Possible Mitigation Measures

- (NEW) SHA could incorporate the use of additional filters on building air intake units to partially reduce exterior-to-interior infiltration of particulate matter.
- (NEW) SHA could incorporate inoperable windows and eliminate balconies on buildings near I-5 in order to reduce occupant exposure to particulate matter.

3.2.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated and supplemented in this FEIS, no significant unavoidable adverse air quality-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.3 WATER RESOURCES

The following section compares the probable significant water resource-related impacts from the Preferred Alternative to those from DEIS Alternatives 1-4 (as summarized in Chapter 3.3 of the DEIS). The impacts of the Preferred Alternative on the East of 12th Sector are also analyzed. Any changes in impacts and mitigation measures are identified. This section is based on new analysis prepared by SvR Design Company subsequent to issuance of the DEIS. Background information and figures for the new analysis is contained in **FEIS Appendix K**.

Impacts of implementation of a district water system on water resources are not described in this section, but are discussed in the report titled, "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics, dated December 12, 2010 (see **FEIS Chapter 4** for details).

3.3.1 Affected Environment

DEIS Site

In Section 3.3.1 of the DEIS, existing water resources and stormwater control facilities at the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) and in the site vicinity are described, including private and public stormwater facilities, offsite stormwater flows and downstream water resources. The existing water resources and stormwater facilities on the DEIS site and in the site vicinity have generally remained the same as presented in the DEIS; additional monitoring of flows in existing combined sewer maintenance holes and additional field studies of two potential wetland areas have been conducted since issuance of the DEIS, as described below.

As stated in DEIS Section 3.3.1, both the East and West Conveyance Basins in which the site is located connect to the King County Metro system for final treatment and disposal at the West Point treatment plant, prior to discharge to Puget Sound. Per the July 2010 *Combined Sewer Overflow Control Program 2009 Annual Report*, by King County Wastewater Treatment Division, when large storm events occur and flows exceed the capacity of the conveyance system pipes, flows are discharged into the adjacent water body instead of being conveyed to the treatment plant. These combined sewer overflows (CSOs) may occur at some of the 38 county CSO locations or the 88 City of Seattle CSO locations. The Yesler Terrace site contributes flow to two county CSOs: the Rainier Avenue CSO adjacent to Lake Washington and the Connecticut Street CSO adjacent to Elliot Bay. It was also noted in the DEIS that a hydraulic analysis of the drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment Project.

In October 2010, SHA started monitoring flows in six existing combined sewer maintenance holes to obtain actual flow data for on and offsite flows in order to begin the process of the hydraulic analysis. Initial analysis of preliminary results indicates that actual peak flow rates at these manholes are less than the peak flow rates used for the conveyance analysis in the DEIS. Therefore, the DEIS analysis is considered conservative (likely because that analysis accounted for future build out of the upstream basin per the zoning code). A summary of preliminary results (October 2010-January 2011) was prepared by SvR Design Company and is provided in **FEIS Chapter 4**.

As stated in DEIS Section 3.4.1, an onsite wetland delineation was performed in June 2010. During that site investigation, two areas at the base of the steep slope area in the SW Sector were identified as potential wetland areas. Additional site investigation of the potential wetland areas was completed in March 2011 to review site hydrology (see **FEIS Section 3.4.1** for additional information).

East of 12th Sector

Surface Water

No streams, wetlands or other water resources were identified on or adjacent to the East of 12th Sector.

The East of 12th Sector presently contains a combination of both private and public stormwater conveyance facilities. The primary public system for the conveyance of stormwater onsite is the combined sewer system (a pipe that conveys both sanitary sewer and stormwater). The stormwater runoff within this sector is collected and conveyed to the public combined sewer system within the sector by catch basins, inlets, downspout lines, and private stormwater conveyance lines (see Figure 3 in **FEIS Appendix K**).

Conveyance Basins

The East of 12th Sector is split between two blocks separated by 13th Avenue (as shown in Figure 1 in **FEIS Appendix K**). The west block's catch basins and building downspouts connect to the public combined sewer main that runs through the sector and discharges to the public combined sewer main in E Yesler Way. The east block's catch basins and building downspouts connect the public combined sewer mains in 14th Avenue and E Yesler Way. The E Yesler Way and 14th Avenue combined sewer mains both discharge to the 30-inch wide by 45-inch tall elliptical Rainier Avenue combined sewer system that flows south (similar to the East Conveyance Basin described in Section 3.3.1 of the DEIS). For a full discussion of offsite combined sewer capacity, see **FEIS Section 3.14, Utilities**.

Offsite Flows

Offsite combined sewer flows are conveyed through the East of 12th Sector block via an 18-inch public combined sewer main. The public combined sewer main passes through private property in the sector, below an existing access drive.

Private Stormwater Facilities

The existing private stormwater control system for the East of 12th Sector includes catch basins, inlets, building roof downspouts and conveyance pipes ranging from 6 to 12 inches in diameter. Private stormwater conveyance lines connect to the public combined sewer system. There are no private flow control structures or water quality treatment facilities located within the East of 12th Sector.

Public Stormwater Facilities

The existing public stormwater conveyance system in the East of 12th Sector consists of catch basins and inlets located along the public streets to collect stormwater runoff and convey stormwater through pipes to the public combined sewer system.

A portion of the 12-inch public combined sewer main runs through the west block of the East of 12th Sector. This pipe was installed in the vacated street that was formerly Garden Place, then Mosler Avenue. It discharges to the combined sewer main in E Yesler Way. There is a publicly-owned flow control detention pipe located in E Yesler Way. Sidewalk and roadway runoff from E Yesler Way, 13th Avenue, and 14th Avenue are collected by a series of inlets and catch basins and conveyed to this detention pipe. There are no public stormwater quality treatment facilities located on or adjacent to the East of 12th Sector.

Existing private and public stormwater conveyance systems are shown in Figure 3 **FEIS Appendix K**.

Groundwater

There are no known active uses of groundwater, industrial or domestic, in the East of 12th Sector. Nor are there any signs or reports of groundwater problems. Isolated areas of perched groundwater are likely to be encountered on top of the glacial till, as well as in pockets within the glacial till underlying this sector (see **FEIS Section 3.1, Earth**, for details). Where groundwater was encountered during the geotechnical investigations in the vicinity (not including the East of 12th Sector), it was generally greater than 15 feet below ground surface.

An investigation of the permeability of onsite soils has not been completed at this time. For purposes of stormwater modeling for this FEIS, a conservative assumption has been made that there is no infiltration into native soils.

3.3.2 Impacts

This section evaluates potential impacts to water resources during construction and operation of the Yesler Terrace Redevelopment under the Preferred Alternative. Operational impacts are presented at full buildout when maximum impacts to stormwater runoff would occur due to the increased amounts of new and replaced impervious surface areas (i.e. building roofs, sidewalks and parking areas), relative to existing conditions.

DEIS Site

Construction

Onsite Water Resources

Under the Preferred Alternative, the construction impacts to surface water resources on the DEIS site would be similar to the impacts described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. If it is determined that wetlands are located onsite, and fill of these wetlands is required, the project would comply with applicable requirements (i.e. the Seattle Municipal Code Title 25).

Water Quality

Under the Preferred Alternative, the construction-related impacts to water quality (i.e. erosion/sedimentation and release of pollutants) on the DEIS site and in the site vicinity would be similar to the impacts described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. With the proper use of construction Best Management Practices (BMPs) and effective accidental spill response planning, significant impacts to water quality and downstream water resources would not be expected.

Flow Control

Temporary stormwater retention/detention facilities for construction of the Preferred Alternative on the DEIS site would be provided in accordance with City of Seattle regulations, similar to those described for DEIS Alternatives 1-4 in Section 3.3.2 of the DEIS. If the combined sewer facilities, where construction de-watering would be discharged, are determined to be at capacity, additional storage of construction de-watering with flow control could be provided. With the proper application of these temporary stormwater retention/detention and de-watering facilities, no significant adverse impacts to downstream water resources and combined sewer facilities would be expected.

Operation

Grading/Development

Impacts from site grading and redevelopment for the Preferred Alternative on the DEIS site would be similar to those described in Section 3.3.2 of the DEIS. Following development, impervious surfaces on the DEIS site would increase relative to existing conditions (from approximately 58 percent impervious surfaces under existing conditions to approximately 74 percent impervious surfaces under the Preferred Alternative). The coverage percentages used in stormwater modeling are shown in **FEIS Table 3.3-1** and a summary of the site coverage areas is provided in Table 2 in **FEIS Appendix K**.

Permanent Stormwater Control System

Design of the permanent stormwater control system for the Preferred Alternative on the DEIS site would be in accordance with City of Seattle regulations, similar to DEIS Alternatives 1-4 (see Section 3.3.2 of the DEIS). The permanent stormwater control system systems would include conventional collection (i.e. catch basins and pipes), as well as Green Stormwater Infrastructure (GSI) conveyance and flow control elements (i.e. swales, bioretention cells and cascading planters). By using GSI, the peak stormwater discharge to the combined sewer system under the Preferred Alternative would decrease from existing conditions on the DEIS site. The preliminary stormwater modeling presented in DEIS Appendix F indicated that it is feasible to control the DEIS site's stormwater runoff using comprehensive GSI facilities. For example, by using amended soils and other means, it would be possible to use GSI facilities with as little as 0 in/hr of infiltration to provide flow control for the entire site. The use of GSI, even with no native soil infiltration, could still provide many other benefits, such as: habitat, the opportunity for evapotranspiration processes, water quality in some cases, and aesthetics, in addition to storage/flow control and removal of some volume of stormwater from the City's piped infrastructure. If the extent of assumed GSI facilities is not feasible (i.e. due to changes in the redevelopment assumptions), then stormwater vaults/tanks with flow control could be used

onsite. The potential to use GSI facilities will be determined in coordination with Seattle Public Utilities. **FEIS Table 3.3-1** presents estimated stormwater release rates for existing conditions at the DEIS site. Estimated stormwater release rates are provided for each sector in the summary tables later in this section.

**Table 3.3-1
DEIS SITE COVERAGE AND ESTIMATED STORMWATER RELEASE RATES –
EXISTING CONDITIONS***

Basin	Total Area (ac) ¹	Impervious (ac)	Pervious (ac)	Estimated Current Release 2-Year (cfs)	Estimated Current Release 25-Year (cfs)
West Basin	12.0	7.6	4.4	3.49	8.01
East Basin	28.2	17.2	11.0	8.00	18.47

Source: SvR Design Company, 2010.

1. Only includes section of roadway being improved. Includes offsite improvements.

* DEIS Table 3.3-1

Based on the site coverage assumptions (i.e. pervious, impervious and green roof), stormwater runoff rates for the Preferred Alternative on the DEIS site were estimated using the MGSFlood continuous hydrologic model (see Tables 1 and 2 in **FEIS Appendix K** for the site coverage assumptions).

Water quality treatment of stormwater runoff would not be required for the Yesler Terrace Redevelopment by the City of Seattle Drainage Code, since the site discharges to the existing combined sewer system, which already provides treatment at the West Point treatment plant. However, proposed GSI features would provide some water quality treatment nonetheless.

Right-of-Way Improvements

Assumptions for right-of-way improvements on the DEIS site under the Preferred Alternative would be similar to those described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. In general, a new public stormwater control system would be installed where full street improvements take place (see Figure 2 in **FEIS Appendix K**). Where feasible, these systems would include GSI conveyance elements.

Groundwater

Under the Preferred Alternative, the construction impacts to groundwater on the DEIS site would be similar to the impacts described in Section 3.3.2 the DEIS. No significant impacts to groundwater would be anticipated.

Preferred Alternative - DEIS Site

The following subsection is a discussion of the specific impacts on water resources and assumed stormwater control systems under the Preferred Alternative on the DEIS site. Under the Preferred Alternative, the permanent stormwater control system for privately-owned portions of the site would include catch basins, inlets, GSI conveyance and flow control facilities, green

roofs, downspouts, footing drains and private stormwater conveyance pipes that would collect and convey stormwater runoff to the proposed public stormwater drainage system. Fifty percent of the roofs are assumed to be green for the West of Boren and East of Boren Sectors. GSI flow control would be provided by bioretention cells, bioretention planters and permeable pavements. Similar to DEIS Alternatives 2 and 3, by using GSI, the peak stormwater discharge to the combined sewer system in the Preferred Alternative would decrease from current conditions (see **FEIS Table 3.3-2**). If the extent of assumed GSI facilities is not feasible (i.e. due to changes in the redevelopment assumptions), then stormwater vaults/tanks with flow control could be used onsite. The potential to use GSI facilities will be determined in coordination with Seattle Public Utilities. The majority of the private utilities would be removed or abandoned in place, depending on their capacity/condition. A summary of sector peak release rates and GSI required to meet the City's Drainage Code under the Preferred Alternative on the DEIS Site is presented in **FEIS Table 3.3-2**.

The permanent stormwater control system for public rights-of-way improvements under the Preferred Alternative on the DEIS Site would include: full right-of-way improvements, catch basins, inlets, and GSI combination flow control/conveyance facilities that would collect, detain and convey stormwater runoff to the new public stormwater drainage mains. GSI flow control would be provided by bioretention cells and bioretention planters. For stormwater conveyance, it is assumed that the stormwater runoff from each full/half right-of-way improvement segment would be equal to the 25-year Peak Flow Standard release rate, in accordance with City of Seattle regulations. For the sidewalk only improvement segments, it is assumed that runoff would be equal to the unmitigated runoff from that segment.

The new public stormwater drainage mains would connect to the combined sewer system at two locations. The public stormwater drainage main connections to the existing combined sewer mains would be similar to those described for Alternatives 2 and 3 in Section 3.3-2 of the DEIS (Figure 2 in **FEIS Appendix K** illustrates the location of proposed GSI and conventional conveyance systems under the Preferred Alternative).

NW Sector

The entire East Basin portion of this sector would be redirected to the West Basin. Both East and West Basin portions of the sector would drain to the new public stormwater drainage mains in Yesler Way via new GSI conveyance systems. The portion of Alder Street west of 9th Avenue, as well as the offsite flows from the Harborview campus, would continue to drain to the existing public combined sewer main that runs along the west side of the sector parallel to I-5. The portion of Alder Street between 9th Avenue and Broadway Avenue would be redirected to the new GSI conveyance system in 9th Avenue. Adjacent offsite street improvements in Broadway would continue to drain to the existing combined sewer main in Broadway which drains to the East Basin.

**Table 3.3-2
DEIS SITE - PEAK STORMWATER RELEASE RATES AND GSI FACILITIES PER SECTOR**

	Bioretention Bottom Area (sf)	Permeable Pavement Area (sf)	Estimated Current Release – 2 Year (cfs)	Code Required Release Rate - 2 Year (cfs) ¹	GSI Controlled Release - 2 Year (cfs)	Estimated Current Release – 25 Year (cfs)	Code Required Release Rate - 25 Year (cfs) ¹	GSI Controlled Release - 25 Year (cfs)
NW Sector (W)	11,800	6,600		1.90	1.18		5.08	4.94
NW Sector (E)	225	0		0.02	0.02		0.05	0.05
NE Sector (E)	4,800	0		0.67	0.41		1.79	1.70
SE Sector (E)	6,350	3,100		1.08	0.61		2.88	2.82
SW Sector (W)	4,425	0		0.69	0.38		1.84	1.71
SW Sector (E)	2,500	8,400		0.66	0.52		1.76	1.74
EOB Sector (E)	2,190	0		0.32	0.20		0.86	0.82
Total Site - Total (W)	16,225	6,600	3.49	2.59	1.56	8.01	6.92	6.70
Total Site - Total (E)	16,065	11,500	8.00	2.75	1.76	18.47	7.34	7.16

Source: SvR Design Company, 2011.

(W) West Basin, drains to combined sewer under I-5.

(E) East Basin, drains to combined sewer.

1. Code-required release rate is 0.15 cfs/ac for the 2-year storm event and 0.4 cfs/ac for the 25-year storm event.

2. All sectors in this table include both private site and right-of-way improvement areas, including offsite improvements.

NE Sector

This entire sector is part of the East Basin. The portion of Broadway within the site and E Yesler Way from 10th Avenue to Boren Avenue would continue to drain to the existing combined sewer main in E Yesler Way. All other portions of this sector would flow to the new public stormwater drainage main in 10th Avenue via new GSI conveyance systems. The adjacent offsite street improvements on E Fir Street would continue to drain to the existing combined sewer main in E Fir Street.

SE Sector

This entire sector is part of the East Basin. Portions of the site would flow to the new public stormwater drainage main in S Main Street via new GSI conveyance systems. Adjacent offsite street improvements on Boren Avenue S and 12th Avenue S would continue to drain to the existing combined sewer main in 12th Avenue S via new GSI conveyance systems.

SW Sector

The West Basin portion of the sector would drain to the new public stormwater drainage mains in 8th Avenue S and S Washington Street via new GSI conveyance systems. A portion of the East Basin corresponding with S Washington Street would be redirected to the West Basin. The East Basin portion of the sector would drain to new public stormwater drainage mains in S Main Street via new GSI conveyance systems.

East of Boren Sector

This entire sector is part of the East Basin and would flow to the existing combined sewer main in Boren Avenue. Adjacent offsite street improvements on E Fir Street would continue to drain to the existing combined sewer main there. Adjacent offsite street improvements on 12th Avenue and E Yesler Way would continue to drain to the existing combined sewer main in E Yesler Way.

East of 12th Sector

Construction

Onsite Water Resources

There are no onsite water resources located in the East of 12th Sector. Therefore, there would be no construction-related impacts to such resources under the Preferred Alternative.

Water Quality

In the East of 12th Sector under the Preferred Alternative, the construction impacts to water quality would be similar to the impacts described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. With the proper use of BMPs and effective accidental spill response planning, significant impacts to water quality and downstream water resources would not be expected.

Flow Control

Temporary stormwater retention/detention facilities for construction of the Preferred Alternative in the East of 12th Sector would be provided, similar to those described for DEIS Alternatives 2 and 3 in Section 3.3.2 of the DEIS. If the combined sewer facilities, where construction de-watering would be discharged, are determined to be at capacity, additional storage of construction de-watering with flow control could be provided. With the proper application of these temporary de-watering and stormwater retention/detention facilities, no significant impacts to downstream combined sewer facilities or water resources would be expected.

Operation

Grading/Development

Impacts from site grading and redevelopment for the Preferred Alternative in the East of 12th Sector would be similar to those described in Section 3.3.2 of the DEIS. Following redevelopment, impervious surfaces in this sector would decrease relative to existing conditions (from approximately 81 percent impervious surfaces under existing conditions to approximately 72 percent impervious surfaces under the Preferred Alternative). See **FEIS Table 3.3-1** for the impervious/pervious surface area coverage percentages used in stormwater modeling, and **FEIS Appendix A** for impervious area by sector.

Permanent Stormwater Control System

Design of the permanent stormwater control system for the Preferred Alternative in the East of 12th Sector would be similar to DEIS Alternatives 2 and 3 described in Section 3.3.2 of the DEIS, except that no green roofs are assumed for the East of 12th Sector. The permanent stormwater control system would include conventional collection and conveyance elements (i.e. catch basins and pipes), as well as GSI conveyance and flow control elements (i.e. swales, bioretention cells and cascading planters). By using GSI, the peak stormwater discharge to the combined sewer system under the Preferred Alternative would decrease from existing conditions. Preliminary stormwater modeling indicates that it is feasible to control this sector's stormwater runoff using comprehensive GSI facilities. If the extent of assumed GSI facilities is not feasible (i.e. due to changes in the redevelopment assumptions), then stormwater vaults/tanks with flow control could be used onsite. The potential to use GSI facilities will be determined in coordination with Seattle Public Utilities. **FEIS Table 3.3-3** presents estimated stormwater release rates for existing conditions.

Table 3.3-3
EAST OF 12TH SECTOR - SITE COVERAGE AND ESTIMATED STORMWATER RELEASE RATES – EXISTING CONDITIONS

Basin	Total Area (ac) ^{1,2}	Impervious (ac)	Pervious (ac)	Estimated Current Release 2 Year (cfs)	Estimated Current Release 25 Year (cfs)
East of 12 th Sector	3.1	2.5	0.6	1.02	2.66

Source: SvR Design Company, 2011.

1. Only includes section of roadway being improved. Includes offsite improvements.
2. Does not include east block of the East of 12th Sector, since proposed improvements do not require any new or replaced impervious surface.

Based on the site coverage assumptions (i.e. pervious, impervious and green roof), stormwater runoff rates for the Preferred Alternative were estimated using the MGSFlood continuous hydrologic model (see Tables 1 and 2 in **FEIS Appendix K** for the site coverage assumptions). As mentioned previously, water quality treatment of stormwater runoff is not required for the Yesler Terrace redevelopment by the City of Seattle Drainage Code, since stormwater from the East of 12th Sector would discharge to the existing combined sewer system, which already provides treatment at the West Point treatment plant. However, proposed GSI features would provide some water quality treatment nonetheless.

Right-of-Way Improvements

Assumptions for right-of-way improvements would be similar to those described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. It is assumed that half-street improvements would be constructed on 13th Avenue and sidewalk improvements would be constructed on E Fir Street. GSI flow control elements in this sector would connect to the existing combined sewer.

Groundwater

Under the Preferred Alternative, the construction impacts to groundwater would be similar to the impacts described in Section 3.3.2 of the DEIS. No significant impacts to groundwater are anticipated.

Following is a discussion of the specific impacts on water resources and assumed stormwater control systems under the Preferred Alternative.

East of 12th Sector

Stormwater from this entire sector would flow to the existing combined sewer mains in E Yesler Way and 14th Avenue via existing side sewers. Adjacent offsite street improvements on E Fir Street would continue to drain to the existing combined sewer system.

Flow control is currently provided for 13th Avenue by the detention facility in E Yesler Way. Based on a 1994 version of the City of Seattle Detention Tank sizing spreadsheet, it is assumed that the standards used to design this facility exceed the current Stormwater Code requirements. Therefore, it is assumed that no additional flow control would be required for proposed 13th Avenue street improvements. As soil and groundwater conditions permit, permeable pavement sidewalks could be used to further reduce peak runoff to the combined sewer system and meet the requirement for GSI to the maximum feasible extent (MEF)

A summary of peak release rates and GSI required to meet the City's Drainage Code under the Preferred Alternative in the East of 12th Sector is presented in **FEIS Table 3.3-4** (see Figure 2 in **FEIS Appendix K** for an illustration of the permanent stormwater control system under the Preferred Alternative).

**Table 3.3-4
EAST OF 12TH SECTOR - PEAK STORMWATER RELEASE RATES AND GSI FACILITIES**

	Bioretention Bottom Area (sf)	Permeable Pavement Area (sf)	Estimated Current Release – 2 Year (cfs)	Code Required Release Rate - 2 Year (cfs) ¹	GSI Controlled Release - 2 Year (cfs)	Estimated Current Release – 25 Year (cfs)	Code Required Release Rate - 25 Year (cfs) ¹	GSI Controlled Release - 25 Year (cfs)
Preferred Alternative								
East of 12 th Sector (E)	1,860	0	1.02	0.49	0.38	2.66	1.68	1.67

Source: SvR Design Company, 2010.

(E) East Basin, drains to combined sewer.

1. Code-required release rate is 0.15 cfs/ac for the 2-year storm event and 0.4 cfs/ac for the 25-year storm event.

2. All sectors in this table include both private site and right-of-way improvement areas, including offsite improvements.

FEIS Site/Conclusion

Construction

Onsite Water Resources

Under the Preferred Alternative, the construction impacts at the FEIS Site (DEIS Site and East of 12th Sector) on surface water resources would be similar to the impacts described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. If it is determined that wetlands are located in the southwestern portion of the DEIS site, and fill of these wetlands is required, the project would comply with applicable requirements (i.e. the Seattle Municipal Code Title 25). If the combined sewer, where construction de-watering would be discharged, is determined to be at capacity, additional storage of construction de-watering with flow control could be provided.

Water Quality

Under the Preferred Alternative, the construction impacts to water quality would be similar to the impacts described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. With the proper use of BMPs and effective accidental spill response planning, significant impacts to water quality and downstream water resources would not be expected.

Flow Control

Temporary stormwater retention/detention facilities for construction of the Preferred Alternative on the FEIS Site would be provided similar to those described for DEIS Alternatives 2 and 3 in Section 3.3.2 of the DEIS. With the proper implementation of these temporary stormwater retention/detention facilities, no significant adverse impacts to downstream water resources would be expected.

Operation

Grading/Development

Impacts from site grading and redevelopment for the Preferred Alternative would be similar to those described in Section 3.3.2 of the DEIS. Following redevelopment, onsite impervious surfaces on the FEIS Site would increase relative to existing conditions (from approximately 58 percent impervious surfaces under existing conditions to approximately 74 percent impervious surfaces under the Preferred Alternative). See **FEIS Table 3.3-5** for breakdowns of the impervious surface area.

Permanent Stormwater Control System

Design of the permanent stormwater control system for the Preferred Alternative on the FEIS Site would be similar to DEIS Alternatives 1-4 described in Section 3.3.2 of the DEIS. The permanent stormwater control system would include conventional collection and conveyance elements (i.e. catch basins and pipes), as well as GSI conveyance and flow control elements (i.e. swales, bioretention cells and cascading planters). By using GSI, the peak stormwater discharge to the combined sewer system under the Preferred Alternative would decrease from

existing conditions. **FEIS Table 3.3-5** presents estimated stormwater release rates for existing conditions.

**Table 3.3-5
FEIS SITE - SITE COVERAGE AND ESTIMATED STORMWATER RELEASE RATES –
EXISTING CONDITIONS**

Basin	Total Area (ac)	Impervious (ac)	Pervious (ac)	Estimated Current Release 2 Year (cfs)	Estimated Current Release 25 Year (cfs)
West Basin*	12.0	7.6	4.4	3.49	8.01
East Basin (with East of 12 th Sector)	31.3	19.7	11.6	9.02	21.13

Source: SvR Design Company, 2011.

*From DEIS Table 3.3-1

Based on the site coverage assumptions (i.e. pervious, impervious and green roof), stormwater runoff rates for the Preferred Alternative were estimated using the MGSFlood continuous hydrologic model (see Tables 1 and 2 in **FEIS Appendix K** for the site coverage assumptions). The preliminary stormwater modeling indicates that it is feasible to control the FEIS Site's stormwater runoff using comprehensive GSI facilities. If the extent of assumed GSI facilities is not feasible (i.e. due to changes in the redevelopment assumptions), then stormwater vaults/tanks with flow control could be used onsite. The potential to use GSI facilities will be determined in coordination with Seattle Public Utilities.

As mentioned previously, water quality treatment of stormwater runoff is not required for the Yesler Terrace redevelopment by the City of Seattle Drainage Code, since the site discharges to the existing combined sewer system, which already provides treatment at the West Point treatment plant. However, GSI features for the FEIS Site would provide some water quality treatment nonetheless.

Right-of-Way Improvements

Assumptions for right-of-way improvements would be similar to those described for Alternatives 2 and 3 in Section 3.3.2 of the DEIS. In general, a new public stormwater control system would be installed where full street improvements take place. Where feasible, these systems would include GSI conveyance elements.

Groundwater

Under the Preferred Alternative, the construction impacts to groundwater would be similar to the impacts described in Section 3.3.2 the DEIS. No significant impacts to groundwater are anticipated.

FEIS Site

The specific impacts on water resources and assumed stormwater control systems under the Preferred Alternative for the FEIS Site are presented in the DEIS Site subsection and the East of 12th Sector subsection above. A summary of peak release rates and GSI required to meet

the City's Drainage Code under the Preferred Alternative is presented in **FEIS Table 3.3-6**, along with a comparison to the peak release rates and required GSI for the DEIS Alternatives.

Cumulative Impacts

Cumulative impacts (i.e. of the proposed redevelopment under the Preferred Alternative together with the King County Youth Detention Facility and Seattle University MIMP Expansion projects) on water resources would be similar to DEIS Alternatives 2 and 3, as described in Section 3.3.2 of the DEIS.

3.3.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential impacts to water resources and stormwater control facilities resulting from the Yesler Terrace Redevelopment Preferred Alternative on the FEIS Site. All mitigation measures listed below are the same as those identified in the DEIS, with slight changes in wording for clarification (shown as MODIFIED) and a new possible mitigation measure related to de-watering (shown as NEW), since no new significant adverse impacts have been identified in this FEIS.

Required/Proposed Mitigation Measures

Construction

- Temporary erosion and sedimentation control measures and BMPs would be utilized during construction in accordance with the City of Seattle Drainage Code (see DEIS Appendix F for a list of specific BMPs that could be used).
- A Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented as required by the City's Drainage Code.
- Construction entrances, wheel washes, street cleaning, and other BMPs would be used to prevent tracking of soils beyond the project limits.
- BMPs for concrete work would include the following:
 - Cement trucks wash water would not be disposed of onsite, but would be returned to the offsite batch plant for recycling as process water; and,
 - New concrete work would be covered and protected from rainfall until cured.
- (MODIFIED) The generation of dissolved zinc and copper would be minimized through prohibitions on the use of unsealed external copper and galvanized metal, except where required by Code and/or necessary for public safety and/or where no feasible alternative exists. Zinc and copper source controls would extend to rooftops, which would be constructed of inert materials so that water quality treatment facilities for metals removal would not be required.

**Table 3.3-6
DEIS/FEIS SITE - PEAK STORMWATER RELEASE RATES AND GSI FACILITIES PER BASIN**

	Bioretention Bottom Area (sf)	Permeable Pavement Area (sf)	Estimated Current Release – 2 Year (cfs)	Code Required Release Rate - 2 Year (cfs) ¹	GSI Controlled Release - 2 Year (cfs)	Estimated Current Release – 25 Year (cfs)	Code Required Release Rate - 25 Year (cfs) ¹	GSI Controlled Release - 25 Year (cfs)
DEIS Alternative 1								
DEIS Site - Total (W)	11,550	5,800	3.49	1.83	1.09	8.01	4.89	4.46
DEIS Site - Total (E)	21,560	0	8.00	3.15	1.97	18.47	8.40	8.09
DEIS Alternative 2								
DEIS Site - Total (W)	14,110	5,700	3.49	2.69	2.13	8.01	7.18	6.44
DEIS Site - Total (E)	16,405	2,000	8.00	2.85	1.65	18.47	7.59	6.73
DEIS Alternative 3								
DEIS Site - Total (W)	15,560	6,450	3.49	2.69	1.66	8.01	7.18	6.53
DEIS Site - Total (E)	16,695	2,000	8.00	2.85	1.58	18.47	7.59	6.60
DEIS Alternative 4								
DEIS Site - Total (W)	6,100	45,500	3.49	1.79	1.25	8.01	4.78	3.70
DEIS Site - Total (E)	13,405	69,900	8.00	3.21	2.24	18.47	8.56	7.11
Preferred Alternative								
FEIS Site - Total (W)	16,225	6,600	3.49	2.59	1.56	8.01	6.92	6.70
FEIS Site - Total (E)	17,925	11,500	9.02	3.24	2.14	21.13	9.02	8.83

Source: SvR Design Company, 2011.

- Measures to control any impacts of excavation dewatering on groundwater could include: site-specific design and careful control of dewatering systems, minimizing the extent and duration of dewatering, and re-infiltration of extracted groundwater (see DEIS Appendix D for details).
- (MODIFIED) If it is determined that wetlands are located onsite, and impacts to these wetlands are necessary for redevelopment, the project would comply with applicable requirements (i.e. in the Seattle Municipal Code Title 25; see **FEIS Section 3.4, Plants and Animals**, for details).

Operation

- (MODIFIED) Detailed hydraulic modeling, using EPA's SWMM5, of the stormwater drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment to determine the capacity of the existing system and any necessary improvements to the City's and site's drainage and wastewater infrastructure. Improvements could include: additional GSI and stormwater flow control facilities onsite, and/or upsizing of downstream combined sewer pipes.
- The design and construction of the permanent stormwater control system, including conveyance and GSI flow control facilities, would be in accordance with the City's Drainage Code.
- The Yesler Terrace Redevelopment would mitigate for the increases in impervious surface area and at the minimum provide flow control for stormwater runoff. The flow control facilities would reduce the peak stormwater discharge from the site relative to existing conditions and could help reduce CSOs, which can occur during heavy rainfall events.
- A Stormwater Operation and Maintenance Plan would be prepared for both public and private stormwater systems.

Other Possible Mitigation Measures

- Specialized products, such as Chitosan or Electrocoagulation (sediment coagulation agents), and other water quality treatment systems could be used during construction if warranted and approved by the City.
- (NEW) If the combined sewer facilities, where construction de-watering would be discharged, are determined to be at capacity, additional construction de-watering storage with flow control could be provided.

3.3.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated/modified in this FEIS, no significant unavoidable impacts to water resources would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.4 PLANTS AND ANIMALS

The following section compares the probable significant impacts from the Preferred Alternative on existing plants and animal species and habitat on and in the vicinity of the Yesler Terrace site to those analyzed under the DEIS Alternatives 1-4 in DEIS Chapter 3.4 and identifies any new increased impacts and mitigation. This section also describes the existing conditions and the impacts of the Preferred Alternative on the East of 12th Sector. This section is based on the April 2011 *Plants and Animals Report Addendum* prepared by Landau Associates and provided in **FEIS Appendix D** to this FEIS.

3.4.1 Affected Environment

DEIS Site

In DEIS Section 3.4.1, the affected environment of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) is described including the existing regulatory requirements, plants, animals and habitat conditions. With the exception of the updated description of the existing tree canopy and the two potential wetlands in the SW Sector described below, the existing plants, animals and habitat conditions on the DEIS Site and in the site vicinity have generally remained the same as presented in the DEIS; therefore, no additional descriptions of the existing conditions is warranted.

Tree Canopy

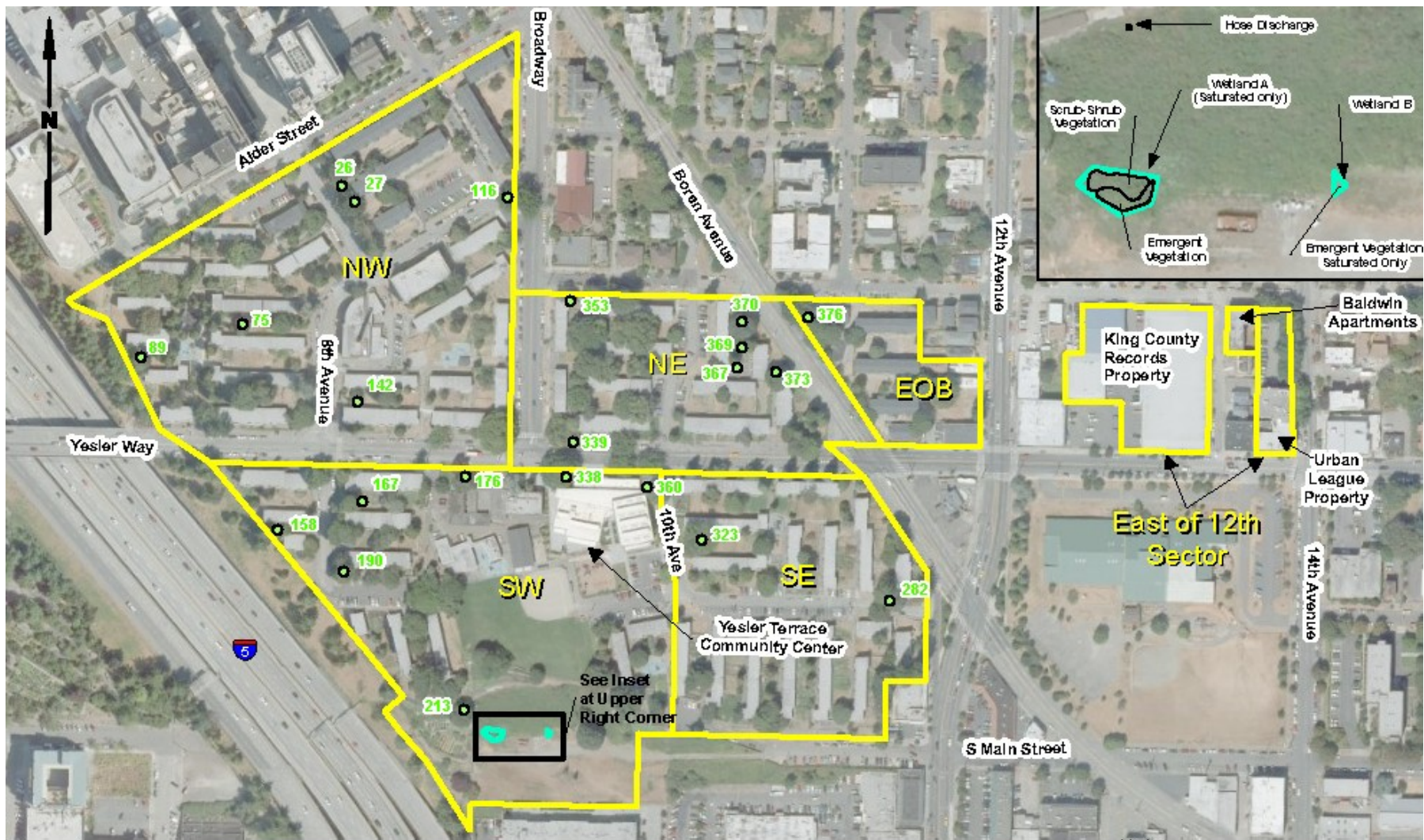
The methodology used for estimating existing tree canopy coverage has been refined from what was presented in the DEIS based on more detailed grading plans. The existing amount of tree canopy coverage on the DEIS Site has been revised from 353,802 SF, or 22.2 percent, to 374,500 SF, or 23.5 percent. The updated existing tree canopy analysis is provided in **FEIS Appendix D**.

Habitat

As stated in DEIS Section 3.4.1, an onsite wetland delineation was performed in June 2010. During that site investigation, two areas at the base of the steep slope area in the SW Sector were identified as potential wetland areas. These two potential wetlands are shown in **FEIS Figure 3.4-1**. A leaking irrigation line was discovered in the area and subsequently fixed. Because it could not be determined that the irrigation line was the sole source of the potential wetland hydrology, a determination as to wetland status was deferred until conditions stabilized.

Additional site investigation of the potential wetland areas was completed by Landau Associates on March 2 and March 18, 2011 to review site hydrology, and is summarized in **FEIS Appendix D**. The wetland delineation determined that the two areas were likely to be determined to be wetlands based on vegetation, hydrology, and soil characteristics. Both potential wetlands are slope wetlands and provide low habitat functions. Below is a preliminary description of the two the two potential wetlands:

- Wetland A is a 645 SF, Category IV palustrine emergent wetland.
- Wetland B is a 38 SF, Category IV palustrine emergent wetland located east of Wetland A.



Legend



Data Source: King County, Bing Maps Aerial

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. EOT= East of Boren

Source: Landau Associates, 2011



Figure 3.4-1
Wetlands and Exceptional Trees

Yesler Terrace
Redevelopment EIS

These two potential wetlands have undergone a Preliminary Jurisdictional Determination (JD) review by the United States Army Corp of Engineers (USACE) to establish the classification and jurisdiction of the wetlands. This Preliminary JD finds that there “may be” waters of the United States on the subject project site for the purpose of advancing permit application review. Undertaking any activity in reliance on any form of USACE permit authorization based on a Preliminary JD constitutes agreement that the wetlands on the site affected in any way by that activity are jurisdictional waters of the United States. SHA has the option to request an Approved JD before accepting the terms and conditions of permit authorization; basing a permit authorization on an Approved JD could possibly result in less compensatory mitigation being required or different special conditions. A permit application for unavoidable impacts to the potential wetlands would occur upon development of project plans. Final determination of any required mitigation by the USACE would occur after issuance of this FEIS and submittal of a complete permit application, but prior to issuance of permits for construction activities that would impact these areas.

If mitigation is required by the USACE, mitigation strategies and ratios pursuant to USACE/Ecology joint guidance (Ecology et al., 2006) would be pursued and the mitigation requirements of SMC 25.09.160E would apply (see **FEIS Section 3.4.3** for details). The requirements of SMC 25.09.160E are consistent with, and incorporate by reference, a previous version of the Ecology/USACE joint guidance (Ecology, 1994).

As presented in the DEIS, mitigation standards for the City per SMC 25.09.160.C.3 include wetland creation among other strategies. The mitigation standards in SMC 25.09.160.C.3 allow the City flexibility in approving mitigation for the relatively small size and low quality of the potential wetlands located in the SW Sector of the Yesler Terrace project site, such that installation of native plantings, stormwater bioretention/infiltration facilities, and/or LID features could apply as mitigation (see **FEIS Section 3.4.3** for details). These mitigation strategies are not recognized in the USACE/Ecology joint guidance (Ecology et al. 2006), and could be applicable if mitigation is not required by the USACE.

East of 12th Sector

This section describes the existing plants, animals and habitat conditions on the East of 12th Sector. This description is based on background information review and field reconnaissance performed on October 12, 2010 (see **FEIS Appendix D** for details).

Plants

Plant conditions on the East of 12th Sector are similar to the conditions on the DEIS Site (as described in DEIS Section 3.4.1 and Appendix G). The East of 12th Sector is located in a highly urbanized area of the City of Seattle and the plants that are currently present on the East of 12th Sector are typical of urban environments. Approximately 95 percent of the sector is comprised of built areas including building footprints, streets, sidewalks, parking and hardscaped public and private open spaces. The remaining 5 percent of the sector is comprised of vegetated areas including landscaped and non-pervious areas. The vegetation located in the sector is comprised of plant species such as: street trees, shrubs and groundcover and includes such species as ferns, salal, oaks and cedar.

In January 2011, a *Tree Evaluation* was completed by Urban Forestry Services on the East of 12th Sector. The *Tree Evaluation* identified 20 onsite trees. Of the 20 trees identified on the

site, no trees meet the criteria of “exceptional” trees or “groves” (as defined by the City’s Director’s Rule 16-2008). Of the 20 existing onsite trees, 18 trees were identified as “valuable”¹. Approximately 19.5 percent of the sector, or 20,667 SF, is currently covered in tree canopy. Detailed information about all of the onsite trees is provided in the *Tree Evaluation* for the East of 12th Sector in **FEIS Appendix D**. The remaining two onsite trees were classified as “other” and did not meet the criteria for “exceptional” or “valuable”.

No federally endangered or threatened plant species, as defined by City, State or Federal regulations, are located on or in the vicinity of the site.

Habitat

Habitat on the East of 12th Sector is similar to the conditions on the DEIS Site (as described in DEIS Section 3.4.1 and Appendix G) and is classified as Urban and Mixed Environs. More specifically, the East of 12th Sector is a high-density zone within the Urban and Mixed Environ, and characterized with minimal non-impervious surface area resulting in a low percentage of ground available for plants².

Vegetation characteristics in this zone are typically non-native species located in planting strips along sidewalks and roads, and native plants represent only a limited range of the natural diversity of the area. The East of 12th Sector consists of urban residential and institutional development. Residential areas consist of small landscaped areas associated with the Baldwin Apartments building.

No streams or waterways are located on or adjacent to the East of 12th Sector. The nearest waterway to the site is Puget Sound, located approximately 1 mile west of the site.

Stormwater runoff from developments such as the redevelopment of the East of 12th Sector could affect water quality offsite, and has the potential to affect the waterbodies, fish species, and habitats listed in the DEIS. The public storm drain system consists of catch basins and inlets located along the public streets to collect stormwater runoff and convey stormwater to the public combined sewer main, which is then pumped to the West Point Treatment Facility. Conveyance to and treatment of this runoff at the West Point Treatment Facility avoids water quality impacts to offsite waterbodies that contain critical habitat (i.e., Puget Sound, Lake Washington, and Lake Union).

No critical habitat listed under the Endangered Species Act (ESA), or protected habitat as defined by City, State or Federal regulations, is located on the East of 12th Sector. The closest critical habitat to the site is present in Lake Washington and Lake Union (both located more than 1.5 miles from the site).

Neither the Washington Department of Natural Resources nor the Washington Department of Fish and Wildlife Priority Habitat and Species databases identify any priority habitat in the site vicinity of the East of 12th Sector; the closest WDFW priority habitat is located approximately

¹ “Valuable trees” is not a term that is included in the City’s tree preservation regulations, nor do City regulations require that such trees be retained. However, “valuable trees” have been defined and assessed in the DEIS and this FEIS analysis in order to further describe the condition of the onsite trees and their potential to be preserved (see **FEIS Appendix D** for details).

² Johnson and O’Neil. *Wildlife-Habitat Relationships in Oregon and Washington*, 2001.

1,500 feet south of the site (and south of I-90), which is identified as a biodiversity area and corridor.

Animals

Wildlife observed on the East of 12th Sector is consistent with area of the DEIS Site (as described in DEIS Section 3.4.1 and DEIS Appendix G) and is consistent with other highly urbanized sites in the City.

Species observed during the October 2010 field investigation on the East of 12th Sector include the grey squirrel (likely nest), rock dove, glaucous-winged gull and domestic cat.

No federally endangered or threatened animal species or critical habitat, as defined by City, State or Federal regulations, are located on or in the vicinity of the site. The closest suitable habitat for known threatened or endangered species are Puget Sound, Lake Washington and Lake Union, all located at least 1 mile from the site.

3.4.2 Impacts

This section describes potential impacts to plants, animals and habitat during construction and operation of the Yesler Terrace Redevelopment under the Preferred Alternative. With respect to impacts to plants, animals and habitat, there would generally be little difference between the types and levels of potential impacts associated with the Preferred Alternative and Alternatives 1-4 analyzed in the DEIS; differences in impacts among these alternatives would primarily relate to the relative intensity of development. The general discussion of plants, animals and habitat impacts in Section 3.4.2 of the DEIS would also apply to the Preferred Alternative; therefore, the discussion below refers only to impacts specific to the Preferred Alternative and impacts related to the new East of 12th Sector.

Methodology

With the exception of the three items identified in this section, the methodology employed in the DEIS analysis, as described in DEIS Section 3.4.2, was also used for this plants, animals and habitat analysis of the Preferred Alternative.

Existing Tree Canopy

The estimated existing tree canopy impacts data in DEIS Table 3.4-6 for the DEIS Alternatives 1-4 has been revised from what was presented in the DEIS. Changes to this table are a result of a more refined analysis of the existing vegetation and potential grading activities associated with proposed redevelopment designs. This updated information is also provided in **FEIS Appendix D and Chapter 4, Updates to the DEIS Alternatives**.

Exceptional and Valuable Trees

Please note that the estimated exceptional and valuable tree impacts data in DEIS Table 3.4-4 and 3.4-5 for the DEIS Alternatives 1-4 has been revised from what was stated in the DEIS. Grading plans were not available at the time of the analysis of the DEIS, and impacts to exceptional trees were determined based on the estimated horizontal extent of impacts to root

zones. The analysis completed for the FEIS took into account grading plans, which allowed for both horizontal and vertical impacts to root zones. This updated information is also provided in **FEIS Appendix D** and **Chapter 4, Updates to the DEIS Alternatives**.

Projected Tree Canopy

Based on comments received during the DEIS comment period, a new tree canopy analysis has been completed for this FEIS which calculates the projected amount of tree canopy coverage 25 years after buildout is completed. The methodology used to perform this tree canopy analysis is detailed in **FEIS Appendix D**. This new analysis is also provided in **FEIS Chapter 4, Updates to the DEIS Analysis**.

DEIS Site

Plants

Construction

The type of construction activities on the DEIS Site under the Preferred Alternative would be similar to those assumed for DEIS Alternatives 1-4.

Vegetated Areas. Under the Preferred Alternative, the amount of vegetated area on the DEIS Site would be expected to decrease from 42 to 25 percent and the amount of built environment would be expected to increase from 58 to 75 percent, relative to existing conditions as shown in **FEIS Table 3.4-1**. The relative change in unvegetated area under the Preferred Alternative would be similar to DEIS Alternatives 1-4.

**Table 3.4-1
COMPARISON OF THE POST-DEVELOPMENT SITE BREAKDOWN
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(PERCENTAGE)**

Type of Area	Preferred Alternative	DEIS Alternative					No Action
		1	1A	2	3	4	
Built Areas ¹	75	73	73	73	73	74	58
Vegetated Areas ²	25	27	27	27	27	26	42

Source: CollinsWoerman, 2011.

¹ Built areas include building footprints, streets, sidewalks, parking and hardscaped open space.

² Vegetated areas include landscaped and natural open space areas.

Exceptional Trees. As shown in **FEIS Table 3.4-2**, construction activities assumed under the Preferred Alternative would result in removal of 15 of the 22 "exceptional"³ trees located on the DEIS Site, less than the number assumed under the DEIS Alternatives 1-4. (As stated previously in this section and **FEIS Chapter 4**, exceptional tree data for DEIS Alternatives 1-4 has been revised from what was presented in DEIS Section 3.4.)

³ This refers to "exceptional trees" as defined in the City of Seattle's Director's Rule 16-2008 (see DEIS Appendix G for details).

Although the Preferred Alternative assumes slightly more built area than DEIS Alternatives 1-4, the buildings and open space areas assumed under the Preferred Alternative have been configured such that more existing exceptional and valuable trees (and existing tree canopy) would be preserved than under DEIS Alternatives 1-4.

During the future site design and permitting process, an assessment would be conducted to determine the actual number and species of exceptional trees that would be required to be removed, and appropriate mitigation for this tree removal, per SMC 25.11 and Director’s Rule 16-2008.

**Table 3.4-2
COMPARISON OF THE ESTIMATED EXCEPTIONAL TREE IMPACTS
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE**

Type of Tree	Existing Conditions	Preferred Alternative		DEIS Alternatives							
				1 and 1A		2		3		4	
		Retain	Remove	Retain	Remove	Retain	Remove	Retain	Remove	Retain	Remove
Exceptional Trees	22	7	15	5	17	6	16	4	18	4	18

Source: Landau Associates, 2011.

Valuable Trees. As described in DEIS Section 3.4.1, evaluation of onsite trees was conducted to identify “valuable trees”⁴. The evaluation identified 105 "valuable trees" on the DEIS Site.

As shown in **FEIS Table 3.4-3**, approximately 65 valuable trees would be removed under the Preferred Alternative and 40 would be retained (more than under DEIS Alternatives 1-4). During the future site design and permitting process, an assessment would be conducted to determine the actual number, species and mitigation (if any) for valuable trees that would be required to be removed. (As stated previously in this section and **FEIS Chapter 4**, valuable tree data for DEIS Alternatives 1-4 has been revised from what was presented in DEIS Section 3.4.)

**Table 3.4-3
COMPARISON OF THE ESTIMATED VALUABLE TREE IMPACTS
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE**

Type of Tree	Existing Conditions	Preferred Alternative		DEIS Alternatives							
				1 and 1A		2		3		4	
		Retain	Remove	Retain	Remove	Retain	Remove	Retain	Remove	Retain	Remove
Valuable Trees	105	40	65	32	73	19	86	25	80	29	76

Source: Landau Associates, 2011.

⁴ “Valuable trees” is not a term that is included in the City’s tree preservation regulations, nor do City regulations require that such trees be retained. However, “valuable trees” have been defined and assessed in the DEIS and this FEIS analysis in order to further describe the condition of the onsite trees and their potential to be preserved (see **FEIS Appendix D** for details).

Other Trees. Similar to the DEIS, of the 410 total trees identified on the DEIS Site, approximately 283 did not meet the criteria for "exceptional" or "valuable" trees; therefore, as part of redevelopment under the Preferred Alternative, it is assumed these trees could be removed intentionally for consideration of public health and safety and/or as a result of further decline of hazardous and unhealthy trees.

Existing Tree Canopy. As trees are removed to accommodate redevelopment of the Preferred Alternative on the DEIS Site, the amount of existing tree canopy on the site would also decrease. As shown in **FEIS Table 3.4-4**, the amount of assumed existing tree canopy to remain on the DEIS Site under the Preferred Alternative would be greater than the amount assumed to remain under DEIS Alternatives 1-4. This remaining canopy cover analysis only includes existing trees identified as "exceptional" or "valuable" for the Preferred and DEIS Alternatives 1-4 whereas the No Action Alternative includes all trees. The 283 "other" trees identified during the *Tree Survey* (not categorized as "exceptional" or "valuable") would also be assumed to be removed over time under the No Action Alternative, for consideration of public health safety or as a result of further decline of hazardous or unhealthy trees.

**Table 3.4-4
COMPARISON OF THE REMAINING EXISTING TREE CANOPY AREA
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(SQUARE FEET)**

Sector	Preferred Alternative ²	DEIS Alternatives				
		No Action ¹	1 & 1A ²	2 ²	3 ²	4 ²
NW	8,988	122,566	13,538	11,540	11,540	9,239
NE	15,409	68,410	6,688	9,735	10,648	11,971
SE	14,679	67,703	5,172	4,653	4,996	8,365
SW	15,026	95,606	13,685	9,599	9,801	9,923
EOB	4,732	20,215	0	0	0	0
Total	58,834	374,500	39,083	35,527	36,985	39,498
Coverage of Total Project Area³	3.7%	23.5%	2.5%	2.2%	2.3%	2.5%

Source: Landau Associates, 2011.

¹ Canopy coverage is based on all existing trees within the project area, regardless of their condition. However, under the No Action Alternative, approximately 283 of 410 of the trees (70 percent) could be removed over time to ensure the health and safety to the public, as they are hazardous or unhealthy. Removal of these hazardous or unhealthy trees, could reduce the overall tree canopy coverage to 106,140 SF or 6.2 percent.

² Remaining canopy coverage for the Preferred and DEIS Alternatives 1-4 only includes existing valuable and exceptional trees as hazardous or unhealthy trees would be assumed to be removed as part of redevelopment.

³ This analysis assumes a DEIS Site area of 1,590,743.

Projected Tree Canopy. **FEIS Table 3.4-5**, shows the projected amount of tree canopy that would be assumed to exist on the DEIS Site for each of the DEIS Alternatives 1-4 and the Preferred Alternative 25 years after full buildout of the redevelopment. The estimated canopy cover includes the existing tree canopy that would remain and additional street trees or other trees that would be planted onsite as part of the redevelopment, including trees required to be planted as mitigation for tree removal.

Based on the future tree canopy assessment, the approximate total tree canopy within the DEIS Site as of the approximate 25-year timeframe ranged from 327,060 square feet to 329,958 square feet under Alternatives 1 through 4, and is assumed to be 371,852 square feet under the Preferred Alternative. This estimate may be an over-representation of canopy coverage, as tree growth is finite and there are limiting conditions to tree growth in an urban setting such as the DEIS Site. The projected growth rate does not consider trees that could be potentially removed over the approximate 25-year timeframe.

Although the Preferred Alternative assumes slightly more built area than DEIS Alternatives 1-4, the buildings and open space areas assumed under the Preferred Alternative have been configured such that more existing exceptional and valuable trees (and existing tree canopy) would be preserved than under DEIS Alternatives 1-4.

**Table 3.4-5
COMPARISON OF PROJECTED TREE CANOPY AREA
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(SQUARE FEET)**

Sector	Preferred Alternative	DEIS Alternatives				
		No Action	1 and 1A	2	3	4
NW	103,037	232,633	106,475	106,673	110,079	98,417
NE	64,918	129,843	42,805	54,864	57,878	56,360
SE	74,547	128,502	52,476	51,360	49,265	61,284
SW	106,764	181,463	112,704	102,348	100,583	100,654
EOB	22,586	38,368	12,600	12,605	12,153	12,151
Total	371,852	710,809	327,060	327,850	329,958	328,866
Coverage of Total Project Area¹	23.4%	44.7%	20.6%	20.6%	20.7%	20.7%

Source: Landau Associates, 2011.

¹ This analysis assumes a DEIS Site area of 1,590,743.

As discussed in DEIS Section 3.4.1, the City has drafted, but not adopted, 30-year City-wide goals for tree canopy coverage including 20 percent coverage for sites zoned multi-family residential and 15 percent for sites zoned commercial/mixed use. Under the Preferred Alternative and Alternatives 1-4, these goals are projected to be met or exceeded within the 25-year timeframe of this analysis.

In compliance with the Federal Executive Order 13112⁵, existing invasive species, such as the Himalayan blackberry located in the SW Sector, would be removed under the Preferred Alternative on the DEIS Site. Construction, design and landscaping would be implemented in such a way to reduce or preclude introduction of invasive species on the site in the future.

⁵ Federal Executive Order 13112, signed February 10, 1999. This EO addresses the prevention of the introduction of invasive species and provides for their control and minimization of the economic, ecological, and human health impacts the invasive species causes.

Operation

The existing P-patch community gardens, primarily located in the SW Sector would be displaced under the Preferred Alternative. The private yards utilized by residents to plant gardens would also be displaced. New P-patch Community Gardens could be provided onsite to offset the loss of the existing P-patches onsite. Specific locations and amounts of P-Patch area to be provided would be determined during future design and permitting. Residents could also apply for space at the existing P-Patch located in the vicinity of the site near the intersection of 14th Avenue and E Fir Street (See **FEIS Section 3.15.1.1, Public Services - Parks** for details).

There would be no significant operational impacts to plant species at the DEIS Site with redevelopment under the Preferred Alternative.

Animals

Construction and operational impacts to wildlife on the DEIS Site under the Preferred Alternative would be as described for the DEIS Alternatives 1-4 in DEIS Section 3.4.2. There would be no significant impacts to wildlife at the DEIS Site with redevelopment under the Preferred Alternative.

Habitat

Impacts to habitat under the Preferred Alternative would be similar to those described in DEIS Section 3.4.1 for DEIS Alternatives 1-4 with the exception of the construction impacts to the wetlands in the SW Sector described below.

Construction

Under the Preferred Alternative, the southern portion of the SW Sector where the two potential wetlands are located would be graded and redeveloped, resulting in impacts to the potential wetlands in the form of fill activities or impacts to wetland hydrology. Once redevelopment plans are prepared that identify specific impacts to these potential wetlands, applicable regulations may require wetland mitigation to offset habitat functions adversely impacted by the development (see **FEIS Section 3.4.3** for detail).

East of 12th Sector

Plants

Construction

Vegetated Areas. Under the Preferred Alternative, the amount of vegetated area on the East of 12th Sector would be expected to increase from 5 to 27 percent and the amount of built environment would be expected to decrease from 95 to 73 percent, relative to existing conditions.

Exceptional Trees. No exceptional trees are located on the East of 12th Sector; therefore, no impacts would be anticipated.

Valuable Trees. None of the 18 valuable trees identified in the East of 12th Sector would be removed under the Preferred Alternative; therefore, no significant impacts would be anticipated.

Other Trees. Of the 20 total trees identified on the East of 12th Sector, two trees did not meet the criteria for "exceptional" or "valuable" trees; therefore, as part of redevelopment under the Preferred Alternative, it is assumed these trees could be removed intentionally for consideration of public health and safety and/or as a result of further decline of hazardous and unhealthy trees. No significant impacts would be anticipated.

Tree Canopy. The existing tree canopy of the East of 12th Sector would decrease from 20,667 SF under existing conditions to 19,335 SF under the Preferred Alternative.

Approximately 56 percent (or 57,608 SF) of the East of 12th Sector is projected to be covered in tree canopy 25 years following completion of construction. The estimated canopy cover includes the existing tree canopy that would remain and additional street trees or other trees planted onsite as part of the redevelopment, including trees required to be planted as mitigation for tree removal.

Operation

There would be no significant operational impacts to plant species at East of 12th Sector with redevelopment under the Preferred Alternative.

Animals

Construction and operational impacts to wildlife on the East of 12th Sector under the Preferred Alternative would be as described for the DEIS Alternatives 1-4 in DEIS Section 3.4.2. There would be no significant impacts to wildlife at the DEIS Site with redevelopment under the Preferred Alternative.

Habitat

Construction

No significant impacts to onsite or offsite habitat would be anticipated to occur as a result of redevelopment construction activities under the Preferred Alternative on the East of 12th Sector.

Operation

No significant impacts to onsite or offsite habitat would be anticipated to occur as a result of operations under the Preferred Alternative on the East of 12th Sector.

As under existing conditions, it is anticipated that all stormwater on the redeveloped East of 12th Sector under the Preferred Alternative would be conveyed to the West Point Treatment Facility via the City's stormwater system where it would be treated prior to discharge to Puget Sound and/or its tributaries. During large storm events, combined sewer overflows into Elliott Bay and Lake Washington may occur. A hydraulic analysis would be completed during the design phase of the Yesler Terrace Redevelopment to determine appropriate mitigation measures to address these combined sewer overflows (see DEIS Section 3.3, Water Resources, and Appendix O for

details). Therefore, the development of the Preferred Alternative on the East of 12th Sector would not be expected to impact the critical habitat provided in these waterways.

FEIS Site/Conclusion

This section describes the impacts of the Preferred Alternative to plants, animals and habitat on the FEIS Site (DEIS Site and East of 12th Sector).

Construction

Vegetated Areas

As shown in **FEIS Table 3.4-6**, under the Preferred Alternative, the relative amount of vegetated versus built area on the FEIS Site would be the same as is assumed for the DEIS Site under the Preferred Alternative. The addition of the East of 12th Sector does not significantly alter the ratios.

**Table 3.4-6
COMPARISON OF THE POST-DEVELOPMENT SITE BREAKDOWN
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(PERCENTAGE)**

Type of Area	Preferred Alternative	DEIS Alternative					No Action
		1	1A	2	3	4	
Built Areas ¹	75	73	73	73	73	74	58
Vegetated Areas ²	25	27	27	27	27	26	42

Source: CollinsWoerman, 2011.

¹ Built areas include building footprints, streets, sidewalks, parking and hardscaped open space.

² Vegetated areas include landscaped and natural open space areas.

Exceptional Trees

Since no exceptional trees are located on the East of 12th Sector (and no impacts are assumed), impacts to exceptional trees on the FEIS Site under the Preferred Alternative would be the same as those assumed for the DEIS Site.

Valuable Trees

Since none of the 18 valuable trees located on the East of 12th Sector are impacted under the Preferred Alternative, impacts to valuable trees on the FEIS Site under the Preferred Alternative would be the same as those assumed for the DEIS Site.

Other Trees

Similar to the DEIS, of the 430 total trees identified on the FEIS Site, approximately 285 did not meet the criteria for "exceptional" or "valuable" trees; therefore, as part of redevelopment under the Preferred Alternative, it is assumed these trees could be removed intentionally for

consideration of public health and safety and/or as a result of further decline of hazardous and unhealthy trees.

Existing Tree Canopy

As discussed for the DEIS Site and East of 12th Sectors, as trees are removed to accommodate redevelopment of the Preferred Alternative on the FEIS Site, the amount of existing tree canopy on the site would also decrease from existing conditions. As shown in **FEIS Table 3.4-7**, the amount of assumed existing tree canopy to remain under the Preferred Alternative on the FEIS Site would be greater than the amount assumed to remain under DEIS Alternatives 1-4 on the DEIS Site but less than existing conditions.

**Table 3.4-7
COMPARISON OF THE REMAINING EXISTING TREE CANOPY AREA
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(SQUARE FEET)**

Sector	Preferred Alternative ²	DEIS Alternatives				
		No Action ¹	1 & 1A ²	2 ²	3 ²	4 ²
DEIS Site	58,834	374,500	39,083	35,527	36,985	39,498
East of 12 Sector	19,335					
FEIS Site	78,169	374,500	39,083	35,527	36,985	39,498
Coverage of FEIS Site³	4.6%	23.5%	2.5%	2.2%	2.3%	2.5%

Source: Landau Associates, 2011.

¹ Canopy coverage is based on all existing trees within the project area, regardless of their condition. However, under the No Action Alternative, approximately 285 of 430 of the trees (66.3 percent) could be removed over time to ensure the health and safety to the public, as they are hazardous or unhealthy. Removal of these hazardous or unhealthy trees, could reduce the overall tree canopy coverage to 133,566 SF or 7.9 percent.

² Remaining canopy coverage for the Preferred and DEIS Alternatives 1-4 only includes existing valuable and exceptional trees as hazardous or unhealthy trees would be assumed to be removed as part of redevelopment.

³ The Preferred Alternative includes the East of 12th Sector (and assumes 1,693,384 SF site area) whereas the No Action and DEIS Alternatives 1-4 do not include this sector (and assume a 1,590,743 SF site area) .

Projected Tree Canopy

FEIS Table 3.4-8, shows the projected amount of tree canopy that would be assumed to exist on the FEIS Site 25 years following completion of construction for the Preferred Alternative and DEIS Alternatives 1-4. The estimated canopy cover includes the existing tree canopy that would remain and additional street trees or other trees planted onsite as part of the redevelopment, including trees required to be planted as mitigation for tree removal.

The addition of the new landscaping and trees provided as mitigation for tree removal could increase tree canopy coverage to approximately 25 percent on the FEIS site under the Preferred Alternative, which exceeds Seattle's 30-year goal of 20 percent coverage for all sites zoned as multi-family residential or 15 percent coverage for all sites zoned commercial/mixed use.

**Table 3.4-8
COMPARISON OF PROJECTED TREE CANOPY AREA
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(SQUARE FEET)**

Sector	Preferred Alternative	DEIS Alternatives				
		No Action	1 & 1A	2	3	4
DEIS Site	371,852	710,809	327,060	327,850	329,958	328,866
East of 12 Sector	55,159					
FEIS Site	427,011	710,809	327,060	327,850	329,958	328,866
Coverage of FEIS Site¹	25.2%	44.6%	21%	21%	21%	21%

Source: Landau Associates, 2011.

¹ The Preferred Alternative includes the East of 12th Sector (and assumes 1,693,384 SF site area) whereas the No Action and DEIS Alternatives 1-4 do not include this sector (and assume a 1,590,743 SF site area).

Operation

Plants

Under the Preferred Alternative, operational impacts to plants on the FEIS Site would be the same as described for the DEIS Site; no significant impacts would be anticipated.

Animals

Construction and operational impacts to wildlife on the FEIS Site under the Preferred Alternative would be within the range described for the DEIS Alternatives 1-4 in DEIS Section 3.4.2. There would be no significant impacts to wildlife on the FEIS Site with redevelopment under the Preferred Alternative.

Habitat

Construction and operational impacts to habitat on the FEIS Site under the Preferred Alternative would be within the range described for the DEIS Alternatives 1-4 in Section 3.4.2 of this FEIS. There would be no significant impacts to wildlife on the FEIS Site with redevelopment under the Preferred Alternative.

Cumulative Impacts

Cumulative impacts to plants, animals and habitat resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.4.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential impacts to plants, animals and habitat resources resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as

those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

The following mitigation measures are recommended to reduce potential impacts to plants, animals, and their habitat during and after the construction phase.

- (NEW) Incorporate techniques that could preserve or prevent existing exceptional trees from being damaged or destroyed, which would potentially minimize the quantity of exceptional trees that require mitigation. Prevention and preservation are considered mitigation techniques. Also, incorporate design techniques that could increase tree survivability over time. Techniques could include:
 - a. Incorporate creative site planning and architectural design.
 - i. Set the lower levels of the buildings away from the trees and their critical root zone (CRZ) (a cantilever or balcony effect).
 - ii. Design the edges or portions of buildings and underground structures to avoid trees and their CRZ.
 - iii. Install porous pavement (concrete, asphalt, pavers, or cells) or landscape areas in urbanized areas that will potentially assist in tree preservation.
 - iv. Design sidewalks, roads, streets, and other impervious hardscape elements such that they avoid trees and their CRZ.
 - v. Locate existing overhead and proposed utilities underground, to the extent practicable, to avoid maintenance pruning and removal of trees in conflict with overhead utilities.
 - vi. Consider future growth patterns of trees so that they will not need to be pruned to prevent harm to architectural features.
 - b. Incorporate practical and creative landscape design and installation practices.
 - i. New trees and other plant material should be installed in areas that will not conflict with the health of the remaining trees.
 - ii. New trees and other plant material should be installed such that they do not conflict with each other or architectural features.
 - iii. Consider the vertical and horizontal layering of the vegetation as it grows over time. A varied vertical and horizontal layering is ideal.
 - iv. Design should consider incorporating elements of Seattle's Green Stormwater Infrastructure (GSI)/Green Factor program.

- c. Implement construction methods and sequencing to preserve trees proposed to be retained onsite. Examples include:
 - i. Install chain-link fencing around trees before mobilization to prevent damage from construction activities.
 - ii. Locate root systems visually or by other means (such as using underground radar equipment) to determine where construction activities should not occur.
 - iii. Consider the following when selecting vegetation species for the site:
 - 1. Invasive species, noxious weeds, and/or vegetation that contain allelochemicals that cause detrimental effects to other vegetation should not be planted within or near the project boundaries.
 - 2. Native plants have a higher chance of surviving regional weather conditions and are more suited for attracting native animals.
 - 3. Certain trees are considered harmful to hardscape surfaces. Trees that should be avoided in areas that have hardscape within the CRZ at maturity include, but are not limited to species of maples, American elm, tulip tree, pin oak, sweetgum, ash, cottonwood, and willows (Rindels 1995).
 - 4. Native evergreen species are ideal (especially evergreen conifers) for Low-Impact Development (LID) concepts in terms of assisting in matching pre-existing conditions and mimicking the hydrologic cycle.
- (NEW) A 1:1 or greater replacement ratio for all exceptional trees damaged or destroyed during construction activities is required by the City. Mitigation techniques that could potentially assist in matching or exceeding the 1:1 replacement ratio for exceptional trees damaged or destroyed during construction activities include:
 - a. Install trees at a 1:1 or greater ratio within the project boundaries (first priority).
 - b. Install trees at a 1:1 or greater ratio within the project boundaries and in off-site areas or areas adjacent to the project site, assuming that off-site mitigation is acceptable.
- (MODIFIED) For exceptional trees that cannot be preserved in place, transplant within the project area as a means of preservation. Transplanting should only occur if feasible and per the direction of the City.
- Nest removal for species protected under the Migratory Bird Treaty Act should occur outside of nesting season after birds have fledged.
- (MODIFIED) Install native plants, as possible, and remove invasive plants, in accordance with Washington State Executive Order 13112, to provide habitat for native animals.

- (MODIFIED) If potential wetlands are permanently impacted, mitigation is required. If the USACE does not take jurisdiction, the City's mitigation requirements under its critical areas regulations (SMC 25.09.160.C.3) for unavoidable impacts to wetlands would apply. Potential mitigation techniques for Category IV wetlands under City regulations include:
 - Construct a wetland of equal function to the lost wetland function.
 - Plant an area of native vegetation equal or greater in size to the area of the developed wetland, and remove invasive species in the area to be planted.
 - Construct a bioengineered/infiltration facility, such as a bioretention cell or bioretention plant, that replicates the hydrologic and/or water quality benefit of the developed wetland. This facility shall be designed according to the requirements of Chapters 22.800 through 22.808 of the Stormwater Code and associated Director's Rules.
 - Construct a green roof or roof garden that replicates the hydrologic and/or water quality benefit of the developed wetland. These facilities shall be designed according to the requirements of Chapters 22.800 through 22.808 of the Stormwater Code and associated Director's Rules.
- (NEW) If mitigation is required by the USACE for impacts to wetlands, the potential wetlands are within the Duwamish-Green River Watershed, and any offsite mitigation could include areas within the Duwamish-Estuary Subwatershed. Mitigation could consist of any combination of wetland creation, restoration, enhancement, and/or preservation on one or more sites within the subwatershed. Mitigation ratios vary depending on the type of wetland impacted and mitigation strategy undertaken. In this case, the following could apply as taken from the USACE/Ecology joint guidance (Ecology et al., 2006) on wetland mitigation in Washington State:
 - a. 1.5:1 Re-establishment or Creation
 - b. 3:1 Rehabilitation only
 - c. 1:1 Re-establishment or Creation and 1:1 Rehabilitation
 - d. 1:1 Re-establishment or Creation and 2:1 Enhancement
 - e. 6:1 Enhancement
 - f. Preservation of existing wetlands is also a recognized mitigation strategy. Ratios of mitigation credit provided by preservation vary between 10:1 and 20:1 and are determined on a case-by-case basis. Preservation ratios depend on the significance of the preservation project and the quality of the wetland resources lost. Preservation is used only after the other mitigation strategies have been considered and is approved on a case-by-case basis by the agencies.

If mitigation is required by the USACE, the mitigation ratios cited in SMC 25.09.160E5a would apply for City critical area approval. In the case of the potential wetlands onsite, these ratios would include:

- i. 1.5:1 Restoration or Creation
- ii. 6:1 Enhancement

Per Ecology/USACE guidance, “restoration” includes re-establishment and rehabilitation as described above. If restoration were used, in whole or in part, as a mitigation strategy, the higher mitigation ratio between City and USACE standards would be applied (e.g. 3:1 for Rehabilitation only).

- ~~• If the potential wetlands onsite are determined to be “waters of the U.S.,” pursuant to the CWA, the project would comply with the Army Corps of Engineers’ regulations for any impacts to these wetlands.~~
- ~~• Construction methods and sequencing would be implemented to preserve exceptional trees proposed to be retained onsite, including:
 - ~~— Install chain-link fencing around exceptional trees before mobilization to prevent damage from construction activities;~~
 - ~~— Locate root systems visually or by other means (such as using underground radar equipment) to determine where construction activities should not occur;~~
 - ~~— Remove or replace impervious areas near exceptional trees with permeable surfaces to provide more water to root systems; and,~~
 - ~~— Preserve trees that have a preservation value lower than moderate and are adjacent to an exceptional tree because removing the tree would harm the trees intended for preservation during construction activities.~~~~

Possible Mitigation Measures

The following mitigation measures are recommended to reduce potential impacts to plants, animals, and their habitat during and after the construction phase.

- (MODIFIED) Incorporate techniques that could preserve or prevent existing valuable trees from being damaged or destroyed. Prevention and preservation are considered mitigation techniques. Also, incorporate design techniques that could increase tree survivability over time. Techniques include all items listed as mitigation techniques for exceptional trees, with the exception of any discussion regarding a 1:1 or greater mitigation ratio.
- (NEW) Exceed a 1:1 replacement ratio for all exceptional trees damaged or destroyed during construction activities. Also, meet or exceed a 1:1 ratio for valuable trees damaged or destroyed during construction activities. Mitigation techniques that could potentially assist in exceeding a 1:1 replacement ratio for exceptional trees and meeting or exceeding a 1:1 ratio for valuable trees include:
 - Install tree quantities that exceed the required 1:1 ratio within the project boundaries, such as a 2:1 replacement ratio.
 - Install tree quantities that exceed the required 1:1 ratio within the project boundaries and in off-site areas or areas adjacent to the project site in an effort to increase tree populations and create canopy beyond the project area, assuming that off-site mitigation is acceptable.
- (NEW) For valuable trees that cannot be preserved in place, transplant within the project area as a means of preservation. Transplanting should only occur if feasible and per the direction of the City.

- (MODIFIED) Establish a thorough landscape maintenance program during and after construction to ensure the vegetation remains healthy and free of invasive/undesirable plants.
- (MODIFIED) Apply arboriculture practices to all plants to ensure a prolonged and healthy tree life.

3.4.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and this FEIS, no significant unavoidable adverse impacts to plants, animals or habitat resources would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.5 CLIMATE CHANGE, GREENHOUSE GAS EMISSIONS AND ENERGY

The following section compares the probable significant impacts from the Preferred Alternative on global climate change, greenhouse gas emissions and energy use on and in the vicinity of the Yesler Terrace site to those analyzed under the DEIS Alternatives 1-4 and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the climate change impacts assumed in this sector under the Preferred Alternative. The *Yesler Terrace Air Quality Technical Report* by ENVIRON (April 2011) is provided in **FEIS Appendix C**. The *Yesler Terrace Projected Electricity Consumption Analysis* (April 2011) by Gibson Economics is provided in **FEIS Appendix E**.

3.5.1 Affected Environment

DEIS Site

In DEIS Section 3.5.1, the affected environment of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) is described including the existing climate change and greenhouse gas emissions regulatory framework and current climate change scientific findings. The existing climate change and greenhouse gas emissions conditions on the DEIS Site and in the site vicinity have generally remained the same as presented in the DEIS.

The following description supplements the affected environment discussion regarding energy provided in the DEIS.

Energy

One source of greenhouse gas emissions are the fossil fuels (especially coal) used to produce power used by consumers for electrical power and home heating needs. In the Pacific Northwest - unlike other regions in the United States - power companies are generally able to utilize hydro-electric energy sources which are considered renewable.

Electricity provided by Seattle City Light is the primary source of energy for the buildings in the Yesler Terrace area. Puget Sound Energy also supplies natural gas to the area for some building uses. There are no significant energy supply, transmission, or distribution capacity issues in the area.

Electrical service provided by Seattle City Light has a variety of sources of power including: hydro-electric (91.2 percent), nuclear (4.4 percent), wind (2.3 percent), coal (1.4 percent), natural gas (0.6 percent) and Biomass (0.1 percent)¹. Only a small percentage (less than 2 percent) of the power provided by Seattle City Light is generated from fossil fuels. Seattle City Light offers consumers options for reducing or offsetting their energy carbon footprint, such as providing energy audits and providing the option to participate in the "green-up" program which allows customers to purchase renewable energy sources (solar and wind) for a portion of their electricity use.

¹ Seattle City Light, <http://www.seattle.gov/light/FuelMix/>, accessed March 2011.

Other strategies that can be employed to further reduce greenhouse gas emissions from energy use are: employing design features that naturally reduce energy use such as daylighting and use of green roofs; retaining mature trees to provide carbon sequestration, air purification and cooling; and providing onsite power generation such as solar panels or wind turbines.

East of 12th Sector

The affected environment of the East of 12th Sector concerning climate change and greenhouse gas emissions, and the regulatory context would be the same as described in DEIS Section 3.5.1 for the DEIS Site.

3.5.2 Impacts

This section describes the potential impacts of redevelopment under the Preferred Alternative on climate change, greenhouse gas emissions and energy use.

Projects, such as the Yesler Terrace Redevelopment, that increase residential density and provide new employment opportunities in urban centers can reduce greenhouse gas emissions and climate change impacts by reducing private car trips and, therefore, greenhouse gas emissions associated with transportation demands. The reduction in car trips would be a result of providing housing in close proximity to employment, educational institutions, entertainment and recreational opportunities and a variety of transit services. Some of these measures have been incorporated into the Transportation analysis (See DEIS Appendix N for mode split assumptions) but the available methodology for calculating greenhouse gas emissions does not consider these vehicle trip reductions.

As in the DEIS, this analysis of impacts does not quantify or take into consideration any potential development features that would reduce climate change impacts by incorporating sustainable features into the redevelopment. However, as sustainable design is a guiding principle for Yesler Terrace (see **FEIS Section 3.9** for details), it is assumed that some sustainable features would be incorporated into the final development plan to reduce the impacts quantified in this section (see Section 2.8.2 of the DEIS and the Sustainable District Study² for additional details about potential sustainable design features). These sustainable features would be incorporated into the design of the neighborhood as a whole, in the design of the street and infrastructure systems, in the design of buildings and sites, or in ongoing site programming and management.

DEIS Site

Climate Change

Under the Preferred Alternative, impacts of climate change on the DEIS Site would be as described in Section 3.5.2 of the DEIS and would not be anticipated to have a disproportionate impact on the DEIS Site as compared to other sites in Seattle.

² Sustainable District Study, CollinsWoerman and Gibson Economics, Inc, December 2010.

Greenhouse Gas Emissions

The same methodology for estimating greenhouse gas emissions used in the DEIS Section 3.5.2 for DEIS Alternatives 1-4 was used to estimate emissions for the Preferred Alternative on the DEIS Site and is described in detail in DEIS Appendix E.

The available methodology for estimating greenhouse gas emissions focuses on a quantitative calculation of emissions from new construction. As such, the methodology shows that redevelopment of the Yesler Terrace site would generate new greenhouse gas emissions as shown in **FEIS Table 3.5-1**. The detailed greenhouse gas emissions analysis for the Preferred Alternative is provided in **FEIS Appendix C**.

The methodology does not take into consideration any reductions in carbon footprint of the redevelopment at Yesler Terrace (see **FEIS Section 3.5.3** below), such as adding density in an Urban Center Village; reducing vehicle trips by building a walkable community where residents can live, work, and play; and incorporating LEED building techniques or other energy and resource conservation measures. While some of these measures have been incorporated into the Transportation analysis (See DEIS Appendix N for mode split assumptions), the available methodology for calculating greenhouse gas emissions does not consider these vehicle trip reductions. Therefore, the estimates below are only one part of the analysis and should be considered a worst-case assessment.

**Table 3.5-1
COMPARISON OF ESTIMATED LIFE SPAN GREENHOUSE GAS EMISSIONS
FOR THE PREFERRED ALTERNATIVE AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(MTCO₂e)¹**

Building Type	Preferred Alternative	DEIS Alternative				
		1	1A	2	3	4
Parking Structure/ Surface Parking	283,355	223,852	189,842	293,589	363,198	62,633
Pavement/ROW	19,830	21,999	21,413	21,102	20,923	27,018
Office High-Rise	880,237	800,406	539,052	979,469	1,175,665	--
Residential Mid-Rise	2,193,708	2,127,918	2,127,329	2,166,365	1,633,409	1,634,262
Residential High-Rise	2,003,221	567,014	567,014	1,384,687	2,761,260	--
Total Emissions	5,380,351	3,741,190	3,444,650	4,845,212	5,954,455	1,723,913

Source: *ENVIRON, 2011*.

¹ MTCO₂e is defined as Metric Tonne Carbon Dioxide Equivalent; equates to 2204.62 pounds of CO₂. This is a standard measure of amount of equivalent CO₂ emissions.

Unmitigated greenhouse gas emissions on the DEIS Site under the Preferred Alternative at build-out would be approximately 5,380,351 MTCO₂e and would fall between the amount assumed for DEIS Alternatives 2 and 3.

Energy

The methodology employed for the DEIS energy analysis calculated energy consumption by multiplying square footage of different uses by simple factors from the Washington State Energy

Code (WSEC). In order to provide a more refined energy analysis for the Preferred Alternative and comparison to the DEIS Alternatives, a detailed energy analysis was completed for this FEIS using modeling to simulate the WSEC standards for estimating the requirements for space heating, space cooling, water heating, plug loads and lighting. Details regarding the methodology of the energy analysis, key assumptions and detailed conclusions are provided in **FEIS Appendix E**.

Similar to DEIS Alternatives 1-4, redevelopment on the DEIS Site under the Preferred Alternative would result in energy usage exceeding existing consumption levels due to the increased building square footage, number of residents and employees. **FEIS Table 3.5-2** compares the energy use assumed in the DEIS Site under the Preferred Alternative and DEIS Alternatives 1-4.

To interpret the scale of these total energy use estimates, the current estimated energy load of Seattle City Light is 1100 average megawatts. The 3.51 average megawatts assumed under the Preferred Alternative on the DEIS Site at buildout would represent about 0.3 percent of the current total system demand for Seattle City Light. The energy demand of the Preferred Alternative on the DEIS Site would fall between the estimated demand for DEIS Alternatives 2 and 3.

For purposes of providing a worst-case scenario for this FEIS energy analysis, the construction of all electric building energy systems is assumed. These calculations have not taken into consideration any potential mitigation efforts to reduce the energy use of the Yesler Terrace Redevelopment (see **FEIS Section 3.5.3** below) such as LEED® building techniques, a potential district energy system or energy conservation measures, even though these features may be incorporated into the final development.

**Table 3.5-2
COMPARISON OF ESTIMATED ENERGY USE UNDER
THE PREFERRED ALTERNATIVE AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(megawatt hours/year)**

Sector	Preferred Alternative	DEIS Alternatives				
		1	1A	2	3	4
Housing	20,671	13,658	13,658	17,632	21,967	7,121
Office/Lodging	8,622	7,694	3,844	9,639	9,862	191
Neighborhood Commercial	833	397	396	549	737	102
Neighborhood Services	577	445	445	422	277	449
Total MWH/Year	30,703	22,195	18,343	28,243	32,844	7,863
Average MW	3.51	2.53	2.09	3.22	3.75	0.9

Source: Gibson Economics, 2011.

East of 12th Sector

Climate Change

Under the Preferred Alternative, impacts of climate change on the East of 12th Sector would be as described in DEIS Section 3.5.2 and would not be anticipated to have a disproportionate impact on the East of 12th Sector as compared to other sites in Seattle.

Greenhouse Gas Emissions

The same methodology for estimating greenhouse gas emissions used in the DEIS Section 3.5.2 for DEIS Alternatives 1-4 was used to estimate emissions for the Preferred Alternative on the East of 12th Sector. As shown in **FEIS Table 3.5-3**, approximately 221,809 MTCO_{2e} would be assumed on the East of 12th Sector under the Preferred Alternative at build-out in this sector.

**Table 3.5-3
ESTIMATED LIFE SPAN GREENHOUSE GAS EMISSIONS UNDER
THE PREFERRED ALTERNATIVE
ON THE EAST OF 12TH SECTOR
(MTCO_{2e})¹**

Building Type	Emissions
Parking Structure/ Surface Parking	8,663
Pavement/ROW	200
Office Building High-Rise	
Residential Mid-Rise	212,946
Residential High-Rise	0
Total Emissions	221,809

Source: ENVIRON, 2011.

¹ MTCO_{2e} is defined as Metric Tonne Carbon Dioxide Equivalent; equates to 2204.62 pounds of CO₂. This is a standard measure of amount of equivalent CO₂ emissions.

Energy

Redevelopment on the East of 12th Sector under the Preferred Alternative would result in an average of approximately 0.15 megawatts, as shown in **FEIS Table 3.5-4**. These calculations have assumed an all-electricity development and do not take into consideration any potential efforts to reduce the energy use of the Yesler Terrace Redevelopment (see **FEIS Section 3.5.3** below), such as LEED® building techniques and energy conservation measures, even though these features may be incorporated into the final development. Therefore, these estimates could be considered worst-case.

Table 3.5-4
ESTIMATED ENERGY USE UNDER THE PREFERRED ALTERNATIVE
ON THE EAST OF 12TH SECTOR
(megawatt hours/year)

Building Type	Energy Use
Housing	1,284
Office/Lodging	0
Neighborhood Commercial	34
Neighborhood Services	7
Total MWH/year	1,324
Average MW	0.15

Source: Gibson Economics, 2011.

FEIS Site/Conclusion

Climate Change

Under the Preferred Alternative, impacts to climate change on the FEIS Site (DEIS Site and East of 12th Sector combined) would be as described in DEIS Section 3.5.2 and would not be anticipated to have a disproportionate impact on the FEIS Site as compared to other sites in Seattle.

Greenhouse Gas Emissions

Under the Preferred Alternative, levels of greenhouse gas emissions on the FEIS Site (DEIS Site and East of 12th Sector combined) would be within the range evaluated in the DEIS and would be between DEIS Alternatives 2 and 3 as shown in **FEIS Table 3.5-5**. No significant unavoidable adverse impacts would be anticipated.

Table 3.5-5
COMPARISON OF ESTIMATED LIFE SPAN GREENHOUSE GAS EMISSIONS
FOR THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(MTCO_{2e})¹

Building Type	Preferred Alternative	DEIS Alternative				
		1	1A	2	3	4
Parking Structure/ Surface Parking	292,018	223,852	189,842	293,589	363,198	62,633
Pavement/ROW	20,030	21,999	21,413	21,102	20,923	27,018
Office High-Rise	880,237	800,406	539,052	979,469	1,175,665	--
Residential Mid-Rise	2,406,654	2,127,918	2,127,329	2,166,365	1,633,409	1,634,262
Residential High-Rise	2,003,221	567,014	567,014	1,384,687	2,761,260	--
Total Emissions	5,602,160	3,741,190	3,444,650	4,845,212	5,954,455	1,723,913

Source: ENVIRON, 2011.

¹ MTCO_{2e} is defined as Metric Tonne Carbon Dioxide Equivalent; equates to 2204.62 pounds of CO₂. This is a standard measure of amount of equivalent CO₂ emissions.

Energy

Under the Preferred Alternative, redevelopment on the FEIS Site (DEIS Site and East of 12th Sector) would result in energy usage exceeding levels used on the site under existing conditions, as shown in **FEIS Table 3.5-6**, and within the range evaluated in the DEIS for Alternatives 1-4. These calculations have assumed an all-electricity development and have not taken into consideration any potential efforts to reduce the energy use of the Yesler Terrace Redevelopment (see **FEIS Section 3.5.3** below) such as LEED® building techniques and energy conservation measures, even though these features may be incorporated into the final development. Therefore, these estimates could be considered worst-case. The energy consumed on the FEIS Site under the Preferred Alternative would be between the amount assumed for Alternatives 2 and 3. No significant unavoidable adverse impacts would be anticipated, as City Light is assumed to have available capacity to serve the proposed redevelopment.

**Table 3.5-6
COMPARISON OF ESTIMATED ENERGY USE
FOR THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(kilowatt hours per year)**

Building Type	Preferred Alternative	DEIS Alternative				
		1	1A	2	3	4
DEIS Site	30,703 3.51	22,195 2.53	18,343 2.09	28,243 3.22	32,844 3.75	7,863 0.9
East of 12 th Sector	1,324 0.15					
Total	32,028 3.66	22,195 2.53	18,343 2.09	28,243 3.22	32,844 3.75	7,863 0.9

Source: Gibson Economics, 2011.

Cumulative Impacts

Cumulative impacts to climate change, energy and greenhouse gas emissions resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.5.3 Mitigation Measures

The following possible mitigation measures would address potential impacts to climate change, greenhouse gas emissions and energy resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Possible Mitigation Measures

The following possible mitigation measures would address potential impacts to climate change, energy use and greenhouse gas emissions from the Yesler Terrace Redevelopment. The following provides a list of broad categories of potential sustainable features that could be

incorporated in the final redevelopment site to offset potential impacts from climate change, greenhouse gas emissions and energy use. Through continued planning efforts, such as development of the "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics that was issued December 12, 2010, SHA will continue to refine this list to identify specific potential sustainable features that would be appropriate to include in the redevelopment.

- **Natural Drainage and Green Roofs** – Green roofs can provide additional open space, opportunities for urban agriculture and decreased energy demands by reducing the cooling load for the building. Green Stormwater Infrastructure (GSI) would be developed for flow control and water quality treatment to the maximum extent feasible.
- (MODIFIED) **Tree Protection** –Protection of existing trees, as feasible, and careful attention to new tree planting could help provide stormwater management, habitat value, noise buffering, air purification, carbon sequestration, and mitigation of the urban heat island effect.
- (MODIFIED) **Urban Agriculture** – New P-patch Community Gardens and rooftop gardens could be provided within the site for residents to grow food. A farmer's market could be established for residents to sell locally grown food, and small micro-retail spaces and food vendor carts could also be allowed where value-added food products could be sold.
- **Native Plants** – Native plants are adapted to the local climate and do not depend upon irrigation after plant establishment for ultimate survival. Landscaping with native plants, beyond that required by code, could be planted to reduce water demand and integrate with the local ecosystem.
- **District Infrastructure Systems for Energy, Water and Waste** – District Infrastructure Systems aggregate enough service demands to make local neighborhood utility solutions feasible. District infrastructure systems could be used as one approach to provide necessary infrastructure services, if determined to be feasible. District solutions may reduce greenhouse gases by utilizing renewable sources of energy and increasing the use of local resources, materials and supplies. District parking solutions and car sharing are designed to reduce vehicle trips. Water reuse and anaerobic digesters may reduce sewer flows. Rainwater capture may reduce stormwater flows. Water reuse and rainwater capture could also reduce potable water demands. District systems for Yesler Terrace could potentially include energy, potable water, wastewater, and solid waste.
- **Waste Management and Deconstruction** – When existing buildings need to be demolished, there are often opportunities to reduce the amount of waste being sent to the landfill with sustainable waste management strategies. In the Seattle area, standard practice for building construction and demolition results in fairly high recycling rates of over 50 to 60 percent. However, these rates can be increased by implementing aggressive demolition recycling. Such efforts can require considerable additional effort on the part of the contractor. Some of the options under consideration that could mitigate waste generated by the Yesler Terrace project include on-site source separated recycling, potential reuse of demolition materials on-site, deconstruction of existing buildings, and salvage and reuse of building components.

Due to the presence of asbestos and lead-based paint in the majority of the existing onsite buildings, it is unlikely that solid waste resulting from most building demolition would be recyclable. Building materials would be tested as part of demolition activities in order to determine the levels of contamination present. The test results would be used to determine whether building materials could be recycled, would be sent to a landfill or to a specialized facility that handles hazardous waste (see DEIS Section 3.6, Environmental Health, for details).

- **Building Design** – Building design at Yesler Terrace could integrate a wide variety of green building features. Green building encompasses energy and water conservation, waste reduction, and good indoor environmental quality. Tools and standards that are used to measure green building performance could be used at Yesler Terrace. Some options include: Built Green, LEED, and the Evergreen Sustainable Development Criteria. Custom green building guidelines could also be developed to guide building design and construction. Some of the specific building design strategies that might be considered include solar panels for electricity generation or domestic solar hot water, energy star rated appliances, water conserving fixtures beyond code, low toxic materials, finishes, and flooring, energy and water sub-metering for individual units, high efficiency fixtures such as dual flush toilets, toilet flushing and irrigation supplied by recaptured wastewater or rainwater, dual plumbing systems for all new buildings to accommodate water reuse, and wind generated alternative energy.
- **(NEW) District Heat System.** The Yesler Terrace Sustainable District Study identified a set of on-site renewable energy sources that could provide most of the space heating and cooling and water heating requirements of the Yesler Terrace redevelopment. The most economically viable of such systems was determined to be a geo-exchange/solar hot water strategy, which could reduce the net annual electricity consumption of the project by 25 percent relative to the estimates in **FEIS Table 3.5-6**, while reducing peak electricity demand by over 40 percent. This geo-thermal/solar strategy would lower the production of greenhouse gas emissions associated with electricity generation, and would replace those electrical energy needs with renewable energy from some combination of geo-thermal, passive solar and sewer heat recovery sources.
- **(NEW) Increased Energy Conservation Efforts.** It is always possible to both construct buildings and make choices within buildings that conserve energy beyond the minimum requirements of the Washington State Energy Code. This analysis does not assume such investments or behavior, but they remain a potential source of mitigation, and could be further supported by external factors such as rising energy prices and conservation assistance programs.

3.5.4 Significant Unavoidable Adverse Impacts

Declaring the impacts of climate change and greenhouse gas emissions significant or not significant implies an ability to measure incremental effects of global climate change. The body of research and adopted regulations necessary to connect individual land uses, development projects, operational activities, etc. with the broader issue of global warming do not currently exist. Scientific research and analysis tools sufficient to determine a numerical threshold of significance have not been established at this time and any conclusions regarding impact significance would be speculative. As discussed in the DEIS, SHA is considering opportunities to employ sustainable development strategies, when feasible, to reduce greenhouse gas emissions and to reduce the carbon footprint of the Yesler Terrace Redevelopment. In addition, increasing housing opportunities in close proximity to transit, and co-location of housing and jobs, can be considered beneficial impacts in terms of overall greenhouse gas emissions from the transportation sector.

The direct and indirect impacts of energy use of the Preferred Alternative, including redevelopment of the East of 12th Sector, would not be expected to be significant.

3.6 ENVIRONMENTAL HEALTH

The following section compares the probable significant impacts from the Preferred Alternative on the Yesler Terrace site with those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.6 of the DEIS) related to contaminated site conditions/hazardous materials. Any changes in impacts and mitigation measures are identified. This section is based on the April 2011 *Environmental Health Technical Report Addendum, Yesler Terrace Redevelopment Project* prepared by Landau Associates and provided in **Appendix F** to this FEIS.

3.6.1 Affected Environment

Information on the existing framework of applicable environmental health-related regulations; present and historic land uses on and adjacent to the site; and known presence or potential presence of contaminants and/or hazardous materials on and adjacent to the site were based on data from existing reports, historical information and site reconnaissance (see DEIS Appendix I for details). Additional review of existing data and site-specific analyses were conducted for the East of 12th Sector in support of this FEIS (see **FEIS Appendix F** for details).

DEIS Site

In DEIS Section 3.6.1, the affected environment on and in the vicinity of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) including the existing regulatory framework, physical setting and existing uses, historic uses, and environmental health-related conditions are described. The existing conditions related to site contamination/hazardous materials on the DEIS Site and in the site vicinity have generally remained the same as presented in the DEIS with the exception of the update for the East of Boren Sector provided below; therefore, no other additional descriptions of the existing conditions is warranted.

East of Boren Sector

As described in DEIS Section 3.6.1, four parcels located in the northeastern portion of the East of Boren Sector, where historic residential, retail and laundry/dry cleaner facilities were located, were designated by the Department of Ecology as a "brownfields" site. Brownfields sites are abandoned or underused properties where there may be environmental contamination requiring clean-up in order for redevelopment to occur. Since issuance of the DEIS in October 2010, cleanup activities have been completed and the Department of Ecology has issued a "No Further Action" determination for the site.

East of 12th Sector

Onsite

Four buildings are located on the East of 12th Sector: two King County Archives warehouses, the Baldwin Apartments building and the Urban League building.

King County Archives

In the late 1800s, the King County Archives site was undeveloped and was part of a larger property used as a garden. Sometime prior to 1949, the site was developed with five residential apartment buildings. By 1954, the apartment complex had been demolished and King County had developed the site with two large warehouses, which have been used as an evidence room for the King County Sheriff's department, miscellaneous equipment storage and records storage and archives.

According to King County staff¹, the King County Archives buildings previously underwent asbestos-containing building materials (ACBM) and lead-based paint abatement and/or removal, but specific details about this abatement were unavailable.

Baldwin Apartments Building

The Baldwin Apartments property was reportedly vacant and undeveloped until the construction of the Baldwin Apartments building in 1918. The building was used for residential housing until 2009, when the building was vacated due to maintenance issues.

Due to the age of the Baldwin Apartments building, it is likely that ACBM and lead-based paint are present within the building. Future uses or remodeling plans for the Baldwin Apartments building would need to take into account the potential presence of ACBM and lead-based paint.

Urban League Building

In the late 1800s, the Urban League property was an undeveloped portion of a property used as a botanical nursery. In 1910, the existing onsite building was constructed and has since been used for various operations including retail sales, a restaurant, residential housing and office space.

Due to the age of the Urban League building, it is likely that ACBM and lead-based paint are present within the building. Future uses or remodeling plans for the Urban League building would need to take into account the potential presence of ACBM and lead-based paint.

Based on research performed in support of this FEIS, a laundry/dry cleaner facility may have operated within the Urban League building; however, because there have been no reported releases of hazardous materials and there are no planned ground-disturbing activities at the Urban League property, the potential presence of a historical laundry/dry cleaner at the property is not considered to be an environmental concern for redevelopment activities.

Offsite

Research performed in support of this FEIS analysis identified four offsite properties adjacent to the East of 12th Sector that have known environmental conditions, as shown on **FEIS Figure 3.6-1**: the Universal Auto site, the B&B Auto Repair Seattle, Northshore Hawaiian BBQ & Bar (formerly Lloyd's Rocket gas station), and the Garda Company site.

¹ Adams, T., 2011, personal communication. See **FEIS Appendix F** for additional detail and a complete citation.

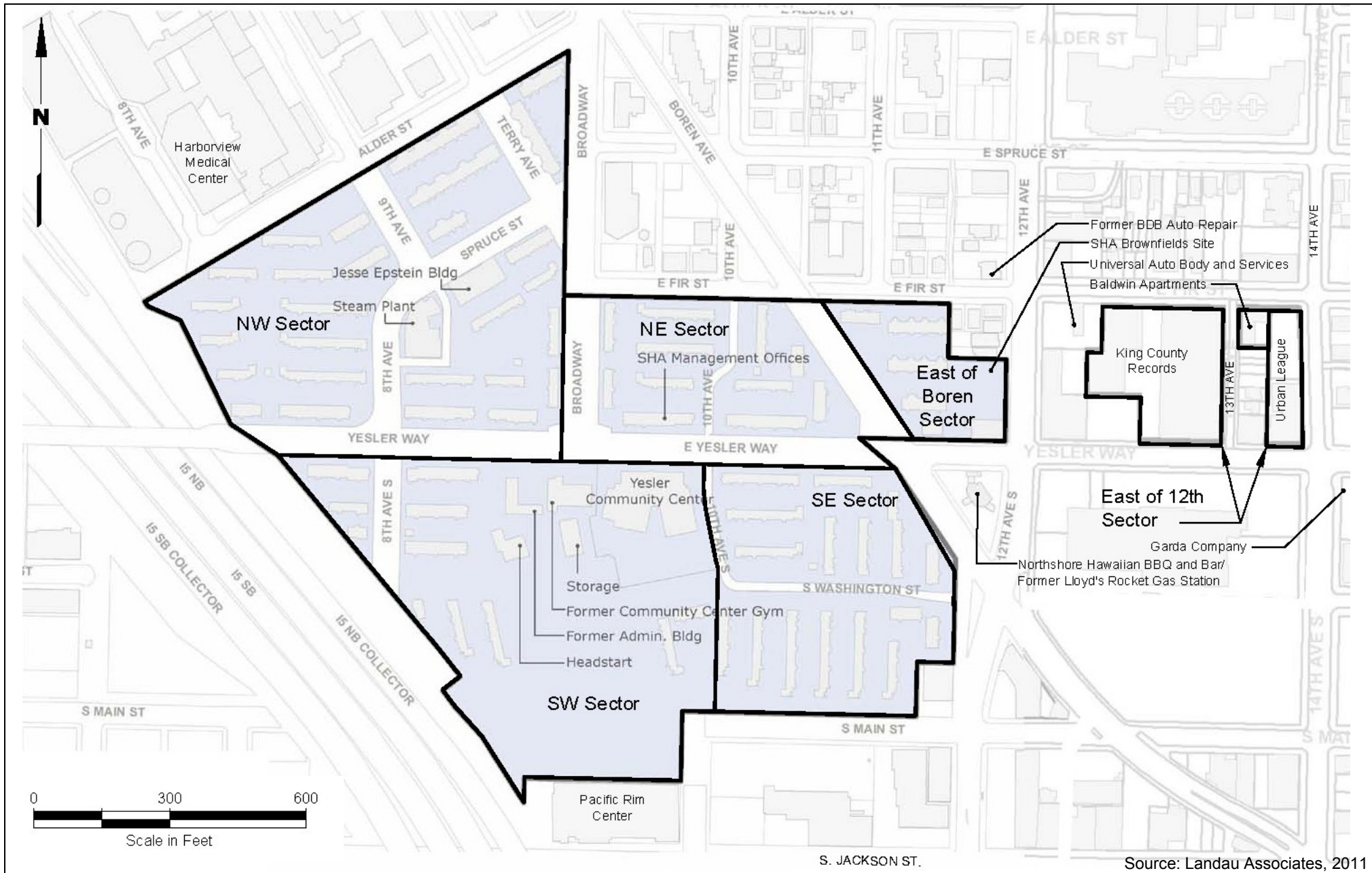


Figure 3.6-1
Environmental Health Condition on the East of 12th Sector

Yesler Terrace
Redevelopment EIS



Universal Auto Site

There is confirmed soil contamination at the Universal Auto site (located within the East of 12th Sector block adjacent to the west of the King County Archives site, and not part of the redevelopment site) likely resulting from illegal dumping of hazardous materials that reportedly included solvents, paint thinners, lacquer and enamel thinners, bonding material, used motor oil, and antifreeze. Based on topography, the Universal Auto site is located hydraulically upgradient from the King County Archives site; therefore, any contaminants in groundwater have the potential to migrate onto the King County Archives site. The Preferred Alternative assumes that the King County Archives building and warehouse would be demolished and redeveloped with residential uses. Under the Preferred Alternative, a site-specific health and safety plan would be necessary to meet the safety requirements of WAC 296-843, Hazardous Waste Operations, and WAC 296-155, Safety Standards for Construction Work, to minimize the potential for workers to be exposed to any hazardous materials during demolition and construction and to address appropriate handling and disposal of any soil with contaminant concentrations greater than the MTCA cleanup levels. Primary potential exposure pathways to construction workers that would be addressed in the health and safety plan include direct contact with contaminated soil, groundwater, and petroleum product; inhalation of hazardous compounds present in construction-generated dust; and inhalation of volatile petroleum compounds.

B&B Auto Repair

The B & B Auto Repair Seattle site (located on the northwest corner of 12th Avenue and E Fir Street) has had confirmed releases of petroleum products to soil and groundwater. Remedial actions are underway at the site; however, the current status of these activities is not known. The site is not adjacent to the East of 12th Sector. Based on topography, the B & B Auto Repair Seattle site is potentially hydraulically upgradient to the site. However, due to the distance from the King County Archives site, the potential for contaminants in groundwater to migrate onto the King County Archives site from this site is considered low.

Northshore Hawaiian BBQ & Bar

The Northshore Hawaiian B.B.Q. & Bar (the former Lloyd's Rocket Gas Station) is a triangle-shaped property located at the intersection of 12th Avenue S, Boren Avenue and E Yesler Way. The environmental conditions on this site were described in the DEIS Section 3.6.1 and DEIS Appendix I. This site has had confirmed releases of petroleum products to soil and groundwater. Remedial actions are underway at the site; however, the current status of these activities is not known. The site is not adjacent to the East of 12th Sector but it is adjacent to the SE Sector. Based on topography, the Northshore Hawaiian B.B.Q. & Bar is potentially hydraulically crossgradient; thus, the potential for contaminants in groundwater to migrate onto the King County Archives site from this site is considered low. However, as stated in DEIS Section 3.6.1 and DEIS Appendix I, while migration of contaminants onto the NE and SE Sectors of the DEIS Site is unlikely due to the groundwater flow direction, there is still a potential for contaminant migration to the NE and SE Sectors due to the close proximity.

Garda Company Site

The Garda Company site is located on the SE Corner of Yesler Way/14th Avenue to the southeast of the Urban League property. There has been a confirmed release of petroleum products to soil at this site. Remedial actions that were completed did not remove all total

petroleum hydrocarbon (TPH)-contaminated soil; however, because the two sites are separated by the E Yesler Way and the 14th Avenue rights-of-way and because there is no reported groundwater contamination, it is unlikely that contaminants would have migrated from the Garda Company site to the Urban League property.

3.6.2 Impacts

DEIS Site

Construction

Under the Preferred Alternative, construction activities on the DEIS Site would be similar to the activities assumed under the DEIS Alternatives 1-4; therefore, the impacts to environmental conditions on the DEIS Site would be similar (as described in detail in DEIS Section 3.6.2). Construction impacts related to contaminated site conditions/hazardous materials could include:

- Air pollutants generated as a result of dust from demolition activities, earth work and emissions from construction vehicles;
- Exposure to ACBM and lead-based paint from demolition or rehabilitation of onsite buildings;
- Exposure to asbestos-containing pipe wrap from uncovered underground steam pipes from the existing Steam Plant;
- Impacts to receiving waters (i.e. combined sewer) if the construction of below-grade structures and utilities requires dewatering and the facility is located in an area where contaminants are present in groundwater;
- Potential for accidental spills of construction-related chemicals; or,
- Discovery of undocumented contaminants.

With adherence to existing federal, state and local regulations regarding contaminated site conditions and handling of hazardous materials and with implementation of the required/proposed mitigation measures identified in **FEIS Section 3.6.3**, no significant impacts would be anticipated as a result of redevelopment under the Preferred Alternative.

Similar to DEIS Alternatives 1 and 4, the Preferred Alternative assumes adaptive reuse of the existing Steam Plant building. As described in the DEIS Section 3.6.1, the types of material burned to fuel the Steam Plant have not been fully documented. The residual material within the smokestack and the stack itself may contain potentially hazardous materials. Testing of the residual material and the smokestack would be conducted prior to any activities that would affect the smokestack. Proper characterization of any hazardous materials identified within the smokestack would be performed in order to select an appropriate offsite disposal site. Construction activities on the DEIS Site under the Preferred Alternative would include contingencies for appropriate site-specific health and safety procedures that meet the requirements of WAC 296-843, Hazardous Waste Operations, to minimize the potential for workers to be exposed to hazardous materials from this source during construction.

Operation

Remedial measures implemented prior to or during construction of the Preferred Alternative on the DEIS Site are expected to mitigate potential adverse impacts within contaminated areas,

including exposure of future site users to hazardous substances in soil, groundwater, and/or air, and no significant impacts would be expected.

East of 12th Sector

Construction

The Preferred Alternative would include redevelopment on the King County Archives site. As described in **FEIS Section 3.6.1** and **FEIS Appendix F**, hazardous materials including solvents, paint thinners, lacquer and enamel thinners, bonding material, used motor oil, and antifreeze were reportedly dumped in an area that is immediately adjacent to the west of the King County Archives site. In offsite areas where illegal dumping has occurred, contaminant (i.e., heavy oil and lead) concentrations in soil or groundwater may be above the MTCA Method A soil cleanup levels for unrestricted land uses. If groundwater has been impacted in offsite areas where illegal dumping has taken place, contaminants may have migrated to groundwater or soil on the King County Archives site. The presence of heavy oil, lead, or other contaminants in soil or groundwater could pose a health risk for construction workers during site redevelopment. Planning for construction would include contingencies for appropriate site-specific health and safety procedures that meet the requirements of WAC 296-155-176 to minimize the potential for workers to be exposed to hazardous materials during construction. In addition, due to the residential uses proposed for the King County Archives site under the Preferred Alternative, additional characterization, removal, and proper disposal of soil with contaminant concentrations greater than the MTCA cleanup levels would be necessary. If groundwater contamination is encountered, then characterization, remediation and/or monitoring would be necessary in accordance with MTCA cleanup standards.

Other construction-related impacts to environmental conditions on the East of 12th Sector would be similar to those described for the DEIS Site above and for DEIS Alternatives 1-4 (as described in detail in DEIS Section 3.6.2). Construction impacts related to contaminated site conditions/hazardous materials could include:

- Air pollutants generated as a result of dust from demolition activities, earth work and emissions from construction vehicles;
- Exposure to ACBM and lead-based paint from demolition or rehabilitation of onsite buildings;
- Impacts to receiving waters (i.e. combined sewer) if the construction of below-grade structures and utilities requires dewatering and the facility is located in an area where contaminants are present in groundwater;
- Potential for accidental spills of construction-related chemicals; or,
- Discovery of undocumented contaminants.

With adherence to existing federal, state and local regulations regarding contaminated site conditions and handling of hazardous materials and with implementation of the required/proposed mitigation measures identified in **FEIS Section 3.6.3**, no significant impacts would be anticipated as a result of redevelopment under the Preferred Alternative on the East of 12th Sector.

Operation

Remedial measures implemented prior to or during construction activities on the East of 12th Sector are expected to mitigate potential adverse impacts within contaminated areas, including exposure of future site users to hazardous substances in soil, groundwater, and/or air, and no significant impacts would be expected.

FEIS Site/Conclusion

The probable significant impacts from the Preferred Alternative on the FEIS Site (the DEIS Site and the East of 12th Sector) related to contaminated site conditions and hazardous materials would be slightly greater than those analyzed under the DEIS Alternatives 1-4 on the DEIS Site, due to the potential to disturb potentially hazardous materials (from illegal dumping) noted at the site located immediately adjacent to the King County Archives site on the East of 12th Sector.

With implementation of the new and modified mitigation measures noted in **Section 3.6.3** below, the cumulative impacts on the FEIS Site would not be anticipated to be significant.

Cumulative Impacts

Cumulative impacts to environmental health conditions related to contamination and hazardous materials resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.6.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential impacts to humans or the environment from existing hazardous materials/conditions as a result of the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

- (MODIFIED) Additional characterization, removal, and proper disposal of soil with lead concentrations greater than the MTCA Method A cleanup level for unrestricted land uses would be conducted.
- A site-specific health and safety plan would be prepared that includes the safety requirements of WAC 296-843, Hazardous Waste Operations, and WAC 296-155, Safety Standards for Construction Work, to minimize the potential for workers to be exposed to hazardous materials during construction and to address appropriate handling and disposal of any soil with contaminant concentrations greater than the MTCA cleanup levels.
- Conventional dust control measures would be implemented to minimize the exposure of workers and the immediate surrounding populations to construction-generated dust (see **FEIS Section 3.2, Air Quality**, for details).

- Spill prevention and response planning would be conducted prior to the start of construction to prevent and, if needed, respond to hydraulic oil or fuel spills.
- Proper characterization of contaminated soil and/or asphaltic concrete pavement, as part of site clearing, grading, or general excavating, would be conducted in order to select an appropriate offsite disposal site.
- Dewatering may be needed for construction of underground structures (e.g., parking garages) and utilities, depending on the depth of the facility. Monitoring, and potentially treatment, of dewatering discharges would be performed, as necessary, to limit impacts to receiving waters in the event the dewatering water contains contaminated or turbid groundwater.
- A King County Waste Discharge permit would be required to discharge any dewatering water to the combined sewer. Monitoring of dewatering discharges would be necessary to determine whether physical and chemical parameters are within King County discharge limits. If parameters are outside acceptable limits, treatment would be necessary prior to discharging to combined sewer.
- During construction activities, possible contaminants in soil could become entrained in stormwater. Stormwater treatment and monitoring would be conducted during demolition and/or construction activities (see **FEIS Section 3.3, Water Resources**, for details on water quality treatment).
- Building demolition would be conducted after a hazardous building materials survey has been completed to identify the presence of such materials (e.g., ACBM or lead-based paint) and remove or stabilize them prior to demolition.
- If underground steam pipes (associated with the former Steam Plant) are uncovered during site grading or excavation activities, they would need to be evaluated for the potential presence of hazardous materials (i.e., asbestos-containing pipe wrap).
- ~~The SHA Brownfields site would need to remain in the Department of Ecology's Voluntary Cleanup Program until a "No Further Action" letter is issued.~~
- (MODIFIED) At the Steam Plant, residual material within the smokestack and the stack itself may contain potentially hazardous materials. Testing of the residual material and the smokestack would be performed prior to any activities that would affect the smokestack. Proper characterization of any hazardous materials identified within the smokestack would be conducted in order to select an appropriate offsite disposal site.
- If unanticipated contamination is discovered, the project would need to comply with applicable cleanup provisions, based on MTCA regulations.
- (NEW) Additional characterization, removal, and proper disposal of soil with lead, heavy oil, or other contaminant concentrations greater than the MTCA cleanup levels for unrestricted land uses within the East of 12th Sector would be necessary.

- (NEW) If groundwater contamination is encountered (i.e. contaminant concentrations greater than MTCA Method A cleanup levels or other applicable standards), then characterization, remediation and/or monitoring would be necessary in accordance with MTCA cleanup standards.
- (NEW) Building remodeling on the Baldwin Apartments building and the Urban League building would be conducted after a hazardous building materials survey has been completed to identify the presence of such materials (e.g., ACBM or lead-based paint) and to remove or stabilize them prior to remodeling activities, as applicable. In addition, ACBM or lead-based paint abatement records for the King County Archives site, if available, would need to be reviewed prior to the demolition of the warehouses, or a hazardous building materials survey would need to be completed for the site. If there is any ACBM or lead-based paint remaining at the King County Archives site, removal or stabilization would be needed prior to demolition.

3.6.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse environmental health-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.7 NOISE

The following section compares the probable significant impacts from the Preferred Alternative on noise conditions on and in the vicinity of the Yesler Terrace site to those analyzed under the DEIS Alternatives 1-4 in DEIS Section 3.7, and identifies any changes in impacts and mitigation. This section is based on the *Noise Technical Report Addendum* prepared by ENVIRON International Corporation (ENVIRON) and provided in **FEIS Appendix G**.

3.7.1 Affected Environment

DEIS Site

Under the Preferred Alternative, the noise-related Affected Environment at the DEIS Site (including the noise level terminology, regulatory overview and the existing sound environment) would be generally as described in the DEIS in Section 3.7.1.

The project site is subject to the Seattle Noise Control Ordinance (SMC Chapter 25.08), which sets levels and durations of allowable daytime\nighttime operation noise, based on the zoning of the source and receiving properties. Because federal funding may be used for the project, noise criteria established by the U.S. Department of Housing & Urban Development (HUD) are also applicable to the redevelopment that would contain noise-sensitive uses, including but not limited to residences, as identified by HUD. Refer to Section 3.7.1 of the DEIS for additional information. Measurements and observations indicate that noise receivers near the southwestern and western edges of the site are exposed to traffic noise from I-5 at levels that would be classified as “unacceptable” for residential uses according to HUD noise criteria. Sound levels are slightly lower along the northern and eastern edges of the site, but are still above normally acceptable levels at many locations due to traffic noise from I-5, Boren Avenue and Yesler Way. Sound levels in interior portions of the site, in particular those interior locations with buildings between them and all major roadways, are more typical of an urban residential environment, with levels in these areas at 65 decibels (dBA) L_{dn} or less.¹

East of 12th Sector

The East of 12th Sector contains three zoning designations: the King County Archive property is zoned Commercial (C2-65) and Neighborhood Commercial (NC3-65); the Baldwin Apartments building property is zoned Lowrise Residential-3 (LR-3); and, the Urban League building is zoned NC3-65, while the building’s parking area is zoned LR-3 (see **FEIS Figure 2-3**). Adjacent areas to the immediate west and northwest of the sector are zoned as NC3P-65 (Neighborhood Commercial), areas to the north and northeast are zoned as LR-3, areas to the east are zoned as NC2-40 (Neighborhood Commercial), and areas to the south are zoned NC3-65.

To document existing sound levels in the East of 12th Sector, sound level measurements were taken using the same methods described in Section 3.7.1 of the DEIS. The new measurement location is depicted in **FEIS Figure 3.7-1**. To provide context for this new data, the summary

¹The day-night sound level, L_{dn} , is similar to a 24-hour Leq, except that a 10-decibel penalty is added to sound levels between 10 p.m. and 7 a.m. to account for potential increased sensitivity to noise during nighttime hours when most people sleep. The Leq can be considered an energy-average sound level over a specified time interval.



Figure 3.7-1
East of 12th Sector Sound Level Measurement Location

Yesler Terrace
Redevelopment EIS

table of measurements from the DEIS is reproduced in **FEIS Table 3.7-1**, together with the new data for the East of 12th Sector. As shown in **FEIS Table 3.7-1**, existing sound levels in the East of 12th Sector are within the HUD "acceptable" range, because they do not exceed 65 dBA Ldn.

**Table 3.7-1
MEASURED EXISTING SOUND LEVELS (dBA)**

SLM Location	Duration	Hourly Leq Range		L _{dn} ^{(b), (c)}
		Day ^(a)	Night ^(a)	
SLM-1	24 hours	65-68	61-68	72
SLM-2	24 hours	60-65	56-63	67
SLM-3	24 hours	61-66	57-63	67
SLM-4	24 hours	67-71	60-69	72
SLM-5	24 hours	52-66	46-57	61
SLM-6	24 hours	58-69	53-60	65
SLM-7	48 hours	71-75	68-74	78
SLM-8	25 hours	76-82	70-78	81
SLM-9	25 hours	66-69	62-69	72
SLM-10	24 hours	59-63	54-60	65
SLM-11	24 hours	67-73	57-69	73
SLM-12	24 hours	53-66	46-59	62
YeslerCommunity Center	2 hours	59 (10AM – 12PM)	NA	NA
East of 12 th Sector	51 hours	59-65	51-59	63-65

^(a) The ranges are shown for daytime hours (7 AM to 10 PM) and nighttime hours (10 PM to 7 AM).
^(b) The reported Ldn levels are based on measurements over the entire period. For those measurement periods longer than 24-hours, Ldn values were calculated for each progressive 24-hour period, but the values for the different periods were the same.
^(c) Cells with diagonal stripes indicate locations with measured sound levels greater than 65 dBA Ldn and less than or equal to 75 dBA Ldn and considered "Normally Unacceptable." Cells with solid shading indicate locations with measured sound levels greater than 75 dBA Ldn, areas classified as "Unacceptable" according to HUD noise standards.

Source: Sound level measurements by ENVIRON International Corporation, 2010, 2011.

3.7.2 Impacts

DEIS Site

Construction

Under the Preferred Alternative, noise from demolition and construction activities on the DEIS Site (including the West of Boren and East of Boren Sectors) has the potential to impact nearby off-site receivers, particularly sensitive uses such as residences and the Harborview Medical Center, generally as described in the DEIS for Alternatives 1-4. As noted in the DEIS, the temporary nature of construction coupled with restriction to daytime hours minimizes the potential for significant impacts from construction activities and equipment, and no significant impacts would be anticipated.

Operation

Similar to DEIS Alternatives 1-4, building placement and configuration under the Preferred Alternative on the DEIS Site would have limited potential to result in off-site noise impacts. As well, neither project-related traffic nor project-required road alternations would be expected to result in any significant noise impacts. Heating, venting and air conditioning (HVAC) and

mechanical equipment associated with new buildings on the project site could emit noise audible at off-site locations, as described in Section 3.7.2 of the DEIS. However, noise from all such equipment would be required to comply with the applicable Seattle noise limits and would have minimal noise impacts on surrounding uses.

East of 12th Sector

Construction

Construction activities in the East of 12th Sector would be similar to those described above for the DEIS Site. Measures would need to be taken during construction within the East of 12th Sector to ensure that construction-related noise received in adjacent areas does not exceed the Seattle construction noise limits during day or nighttime hours. As noted above for the DEIS Site, the temporary nature of construction coupled with restriction on work to daytime hours would minimize the potential for significant impacts from construction activities and equipment.

Operation

Operational noise impacts within the East of 12th Sector would be similar to those described above for the DEIS Site. That is, neither project-related traffic nor project-required road alterations would be expected to result in any significant noise impacts on and in the vicinity of the East of 12th Sector. HVAC equipment would be required to comply with the applicable Seattle noise limits and minimal noise impacts on surrounding uses would be anticipated.

FEIS Site/Conclusion

Under the Preferred Alternative, noise from demolition and construction activities, and operational site components (traffic and HVAC units) would be within the range analyzed in the DEIS. As concluded in the DEIS, the temporary nature of construction coupled with restriction on work to daytime hours would minimize the potential for significant impacts from construction activities and equipment. Also, neither project-related traffic nor project required road alterations would be expected to result in any significant noise impacts, and noise from all HVAC equipment would be required to comply with applicable City of Seattle noise limits.

Site Suitability Assessment under HUD Noise Criteria

Noise criteria established by HUD are applicable to the proposed residential portions of the Yesler Terrace site, since federal funding may be used for the project. HUD's noise limits are intended to provide suitable acoustic environments in both outdoor use areas where "quiet outdoor space" is anticipated, and in interior residential spaces. 24 CFR 51.103(c). HUD's goal for interior sound levels is a day-night sound level (L_{dn}) of 45 dBA with particular emphasis given to noise sensitive interior spaces, such as bedrooms. 24 CFR 51.101(a)(9). Under HUD standards, sites with an exterior day-night average sound level of 65 dBA and below are in the "acceptable" noise zone, and require no noise attenuation for development of noise-sensitive uses, as defined by HUD. 24 CFR 51.101(a)(8). Areas with sound levels between 65 and 75 dBA fall into HUD's "normally unacceptable" noise zone. 24 CFR 51.104(a)(2). For these areas, noise attenuation measures must be incorporated into the project to reduce the noise to acceptable levels, and a "Special Environmental Clearance" is required from HUD, except in situations where an EIS is prepared. 24 CFR 51.104(a)(2), (b)(1). Finally, where residential

projects will be located in areas in which sound levels fall in the “unacceptable” noise zone (above 75 dBA), HUD regulations require that an EIS be prepared, and that the project be submitted to the NEPA Certifying Officer for approval. 24 CFR 51.104(b)(2).

The conceptual site layout and building placements under the Preferred Alternative present some of the same potential for on-site noise impacts as were described in the DEIS for Alternatives 1-4. Noise modeling with the same tools and methods described in the DEIS were performed to assess future traffic noise levels across the project site, and assess site suitability for proposed residential uses. Noise modeling created noise contours (a line on a map representing equal levels of noise exposure) for the site. The findings of this analysis are summarized in **FEIS Figures 3.7-2 to 3.7-4**, which depict the modeling results for three different elevations: ground-level, 60 feet above ground, and 200 feet above ground, as a means of illustrating noise levels at both the lower levels of buildings and the upper levels of high-rise buildings. Note that these figures present color coded noise “contours” that correspond to the noise levels criteria applied by HUD policy, as follows:

- Uncolored areas of the figures off site were not included in the modeling
- Uncolored areas of the figures on the project site (other than buildings) indicate sound levels in the range of 0-55 dBA L_{dn}, which HUD would consider "acceptable"
- Green areas indicate sound levels between 55 and 65 dBA L_{dn}, which HUD would consider "acceptable"
- Yellow zones indicate sound levels between 65 and 70 dBA L_{dn}, which HUD would consider "normally unacceptable"
- Orange zones indicate sound levels between 70 and 75 dBA L_{dn}, which HUD would consider "normally unacceptable"
- Red zones indicate sound levels between 75 and 80 dBA L_{dn}, which HUD would consider "unacceptable"
- Dark Blue zones indicate sound levels of 80 dBA L_{dn} or higher, which HUD would consider "unacceptable"

As shown in **FEIS Figure 3.7-2**, model-predicted day-night sound levels at ground-level (i.e., 5 feet) locations where traffic noise levels would be considered "acceptable" to HUD (i.e., requiring no special review or approvals) are shown as the white and green areas towards the center of the site, along the northern boundaries and within clusters of buildings within the West of Boren Sectors, and in most of the East of Boren/East of 12th Sectors. Ground-level sound levels in the "normally unacceptable" range (>65 and <75 dBA) include the yellow and orange areas near major surface streets. Ground-level sound levels in the "unacceptable" range (>75 dBA) include the red and blue areas near Boren Avenue (not affecting any buildings), and the western edge of the site. Sound levels in the >75 dBA range affect the northern most office building in the NW Sector, and sound levels exceeding 79 dBA affect three residential buildings in the SW Sector nearest I-5. Thus, sound levels at ground level locations within the red and blue zones would require the application of extensive noise control measures to provide interior sound levels that are both consistent with HUD guidelines and appropriate for a livable interior environment.



Source: ENVIRON International Corporation, 2011



Figure 3.7-2
Preferred Alternative - Day-Night Sound Levels (Ldn)
at Ground Level Locations

Yesler Terrace
Redevelopment EIS

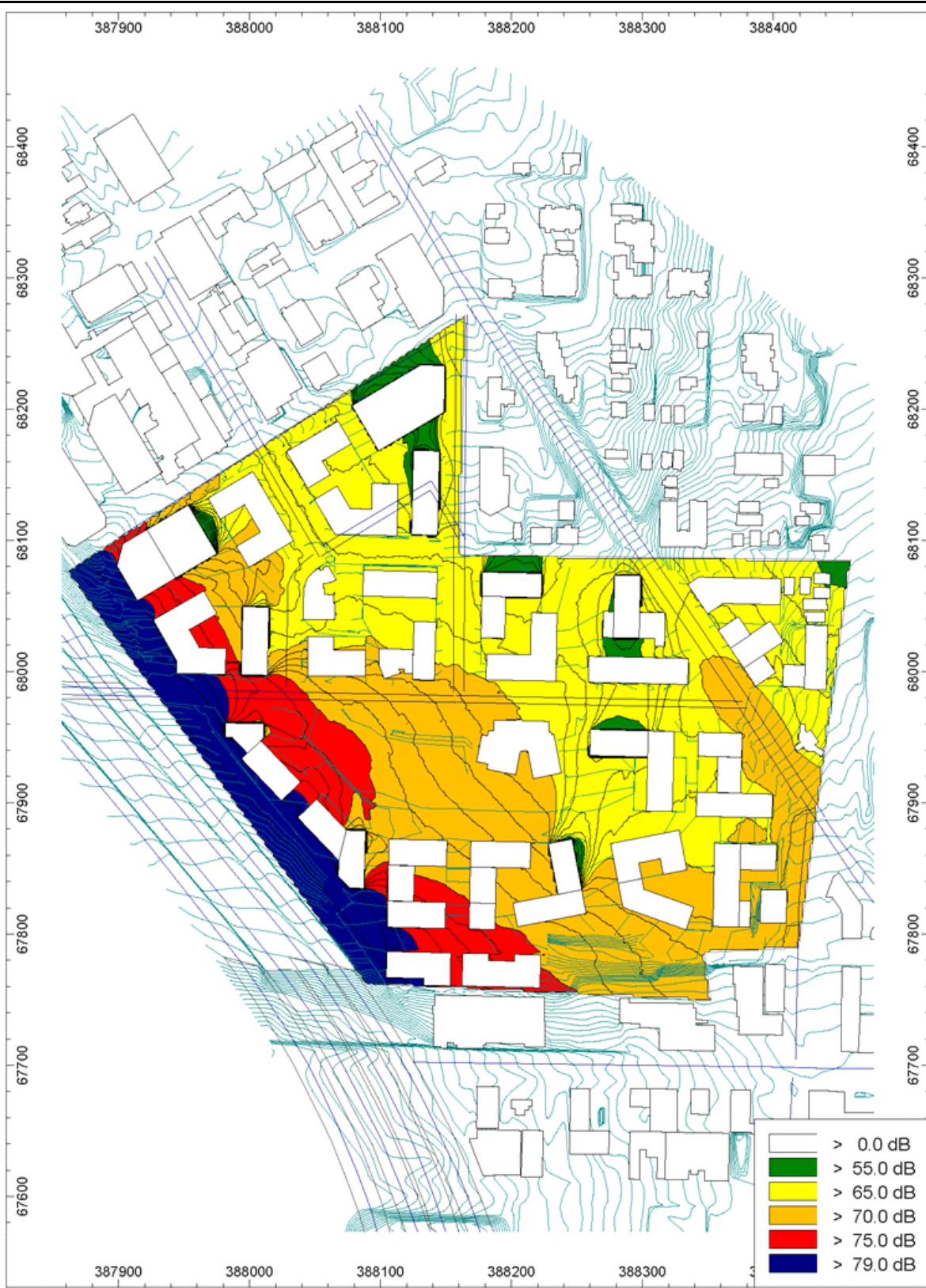


Source: ENVIRON International Corporation, 2011



Figure 3.7-3
Preferred Alternative - Day-Night Sound Levels (Ldn)
at 60-Foot Elevations

Yesler Terrace
Redevelopment EIS



Source: ENVIRON International Corporation, 2011



Figure 3.7-4
 Preferred Alternative - Day-Night Sound Levels (Ldn)
 at 200-Foot Elevations

Yesler Terrace
 Redevelopment EIS

FEIS Figure 3.7-3 shows the modeling results for receptor locations at an elevation of 60 feet above the ground. The depicted traffic noise contours represent day-night levels on the 5th or 6th floors of buildings. As shown, model-predicted day-night sound levels at this elevation that would be considered "acceptable" to HUD are shown as the white and green areas towards the center of the site, along the northern boundaries, and within clusters of buildings within the West of Boren Sectors, and in most of the East of Boren/East of 12th Sectors. Sound levels at 60 feet in the "normally unacceptable" range (>65 and <75 dBA) include the yellow and orange areas near major surface streets, including Boren Avenue. Sound levels in the "unacceptable" range (>75 dBA) include the red and blue areas along the entire western edge of the site. Sound levels in the >79 dBA range affect the office building and the residential building nearest the freeway in the NW Sector. Sound levels exceeding 79 dBA also affect the four buildings in the SW Sector nearest I-5. Thus, sound levels at elevated locations within the red and blue zones would require the application of extensive noise control measures to provide interior sound levels that are both consistent with HUD guidelines and appropriate for a livable interior environment.

FEIS Figure 3.7-4 shows the modeling results for receptor locations at an elevation of 200 feet above the ground. The depicted traffic noise contours represent day-night levels on about the 20th floor of buildings, and thus pertains only to the high-rise towers. Note that **FEIS Figure 3.7-4** does not include the East of 12th Sector, because no high-rise buildings are proposed in this area of the site. As shown, model-predicted day-night sound levels at this elevation that would be considered "acceptable" to HUD are shown as the small green areas towards the center of the site, along the northern boundaries, and within clusters of buildings. Sound levels at 200 feet in the "normally unacceptable" range (>65 and <75 dBA) include the yellow and orange areas over most of the site. Sound levels in the "unacceptable" range (>75 dBA) include the red and blue areas along the entire western side of the site, but would actually affect only the two residential towers in the SW Sector. On the 20th floors of these buildings nearest I-5, day-night levels are in the 80 dBA range. Thus, sound levels at elevated locations within the red and blue zones would require the application of extensive noise control measures to provide interior sound levels that are both consistent with HUD guidelines and appropriate for a livable interior environment.

As described above, the noise modeling indicates that certain residential buildings under the Preferred Alternative would be located in areas that have sound levels classified as "unacceptable" according to HUD noise criteria. Accordingly, in addition to the preparation of this EIS, the project would require the approval of a noise waiver by the City of Seattle Human Services Department (HSD) on behalf of HUD. Following is a brief description of how the Preferred Alternative relates to these criteria.

Although the HUD regulations permit the NEPA Certifying Officer to approve a project in the unacceptable noise zone, the regulations do not contain the criteria for such an approval. However, guidance regarding factors important to HUD can be found in another portion of the HUD noise regulations, related to exceptions granted for applicants seeking to have the maximum decibel limit of the "acceptable noise zone" shifted upward from 65 decibels to 70 decibels. 24 CFR 51.105(a). For purposes of that exception, projects are to be evaluated on a case by case basis, and the exception may be approved if certain conditions are met. Those exception criteria served as a useful tool for determining appropriate noise waiver criteria for projects in the unacceptable noise zone. In addition, SHA also consulted with the HSD, the entity that would be responsible for approval of a noise waiver on behalf of HUD.

This analysis resulted in development of the following suggested criteria for HUD approval of a noise waiver for those residential portions of the project located in the unacceptable noise zone:

1. An EIS has been prepared for the project that addresses noise impacts and mitigation measures;
2. The project meets other HUD program goals to provide housing in proximity to employment, public facilities and transportation;
3. The project is in conformance with local goals and policies;
4. The project incorporates appropriate noise attenuation measures in accordance with HUD criteria;
5. Other sites which are not exposed to noise above 65 dBA L_{dn} and which meet program objectives are generally not available; and,
6. The noise levels will not pose a problem for marketability of the residences.

Item 1 is addressed by publication of the DEIS and FEIS. Discussion related to how the Preferred Alternative addresses items 2 and 3 is included throughout the FEIS. Discussion in **Chapter 4, Updates to the DEIS Analysis**, addresses items 2, 3, 5 and 6 as related to DEIS Alternatives 1-3, and is also applicable to the Preferred Alternative. The following is a detailed discussion of the Preferred Alternative as it relates to item 4.

Project incorporates appropriate noise attenuation measures (Item 4)

Careful consideration has been given to the development of noise mitigation measures for the project. Potential noise attenuation was analyzed in accordance with HUD guidelines, which establish the following prioritization for attenuation measures: (i) can the noise impacts be eliminated altogether by utilizing a different arrangement of uses on the site? (ii) can the sound levels in exterior and interior environments be improved by use of barriers or berms, or by modifications to the site design?, and (iii) can the interior sound levels be improved by incorporation of acoustical construction measures into the building design?²

In analyzing potential noise mitigation measures, the first consideration was whether the noise impacts for residential uses could be eliminated altogether. This involved examination of the arrangement of uses on the site, i.e. whether high-rise office buildings could be distributed along the portions of the site adjacent to I-5 and Boren Avenue in order to buffer interior residential uses. However, for a variety of planning reasons, it was not appropriate to locate office uses at different locations other than in the northwestern portion of the site. For example, locating office uses, which may include medical service offices, in the northwestern portion of the site would place them closest to similar uses, such as the Harborview, Swedish, and Virginia Mason medical centers, creating land use compatibility, and also allowing the office buildings to serve as a buffer between the existing ongoing emergency room operations at Harborview, and the residential uses at Yesler Terrace. In addition, if office uses were located elsewhere on the site, then traffic from the office uses would need to travel through the residentially-focused Yesler community in order to reach major arterials. That level of traffic would degrade the residential quality of the Yesler Terrace site. Therefore, short of leaving major portions of the site vacant or as passive open space, residential uses would be located in portions of the site with noise levels above 75 dBA L_{dn}.

² See The Noise Guidebook, HUD (1985) at p. 21; see also HUD Handbook 1390.2, *Environmental Assessment Guide for Housing Projects* (1985), at p. 3-5.

In addition, as presented in DEIS Section 3.7.2, noise barriers, such as sound walls and berms, were studied as potential noise mitigation strategies for portions of the site adjacent to Interstate-5. However, such barriers, even if several stories tall, would not be sufficient to reduce noise levels to 65 dBA L_{dn} or less throughout the site. Also, due to topographic conditions, installation of such barriers along the southern half of the western site boundary would provide virtually no noise reduction at all. Thus, although analyzed and considered, these devices are not viable mitigation measure options.

It is assumed that buildings placed along the western boundary of Yesler Terrace could, to the extent feasible, be oriented parallel with I-5 in order to shield the site's interior open spaces from noise. Depending upon the location, the elevations of those buildings could be up to forty feet uphill from the freeway, with associated building heights of up to twenty stories. As demonstrated by **FEIS Figure 3.7-2**, the Commons Park would be mostly buffered from I-5 under the Preferred Alternative, thereby allowing the noise to be mitigated to acceptable levels within much of the site's central outdoor space. Smaller open space areas internal to the site, such as pocket parks, would also benefit from the perimeter structures adjacent to I-5, as well as additional interior structures, that further shield noise from I-5. In addition, the buildings adjacent to Boren Avenue and I-5 would be designed with internal courtyards oriented away from the traffic noise. These courtyards would provide open space with reduced noise for use by residents.

Because few mitigation measures are feasible for reducing exterior noise levels to less than 65 dBA L_{dn}, buildings subjected to exterior levels above 65 dBA L_{dn} would require acoustical design and construction techniques and materials intended to reduce interior levels to 45 dBA L_{dn} or less. The specific techniques and materials required will vary depending on the noise exposure of the building. However, for buildings in the very high noise zones (i.e., above 75 dBA L_{dn}), extensive and unique methods could be required. A detailed list of suggested techniques and materials is provided below in **FEIS Section 3.7.3, Mitigation Measures**.

With proper construction materials, techniques, and installation, it is anticipated that interior noise levels could be effectively mitigated for residential uses.

3.7.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential noise impacts to sensitive on and offsite receivers as a result of the Yesler Terrace Redevelopment. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

- Construction activities would be subject to applicable City of Seattle noise limits.
- HVAC equipment, particularly equipment proposed to be located outside or on the tops of buildings, would need to be selected, located and designed to ensure compliance with the City of Seattle's daytime and nighttime noise limits at nearby receiving locations.

- (MODIFIED – moved from Other Possible to Required/Proposed) Construction materials and techniques would be used in all buildings that would reduce interior sound levels in residences to 45 dBA Ldn or less.
- (NEW) Along the western edge of the site along I-5, most outdoor use areas would not be located on the western sides of the buildings or at or at any other locations in this area that have an unobstructed view to the freeway.
- (NEW) Buildings adjacent to Boren Avenue should be designed with internal courtyards oriented away from the traffic noise.
- (NEW) Special building materials and techniques would be employed to reduce the transmission of noise from outside to inside spaces for all residential buildings exposed to sound levels greater than 65 dBA Ldn. Effectively controlling exterior-to-interior sound level transmission would also require careful attention to detail during installation of noise-reducing building components. Examples of measures that are likely to be necessary for buildings exposed to levels greater than 75 dBA Ldn, specifically those buildings nearest the western edge of the site, include the components and restrictions listed below.
 - (NEW) "Acoustic" or "noise-reducing" exterior wall components (i.e., wall, windows, and doors) that provide an outside to inside transmission class (OITC) rating of at least 45. In order to achieve the specified OITC ratings, special measures will be necessary to install doors and windows. These include the use of non-hardening (acoustical) caulk at all hidden surfaces, flexible caulk at all exposed surfaces, and solid continuous blocking to fill all voids over 1/4" around windows and doors.
 - (NEW) Double-studded (i.e., staggered stud) exterior walls to provide a physical break in the structure of the walls to eliminate the noise path through the structural components of the wall, except at the top and bottom plates.
 - (NEW) Masonry façade ranging from 4-8 inches thick.
 - (NEW) Double layers of 5/8" sheetrock on the interior side of exterior walls.
 - (NEW) Double sheeting or extra insulation to provide extra mass on the exterior side of exterior wall, or a brick or masonry façade ranging from 4-8 inches thick.
 - (NEW) Prohibition of in-window or through-wall air-conditioning, ventilating, or heating units.
 - (NEW) All vent ducts, including those for bathroom exhaust fans and dryers, connecting the interior space to the outdoors constructed of rigid metal and containing at least two 90° bends, or one 90° bend and a total length of at least 20 feet (or the maximum length allowed by the dryer manufacturer).
 - (NEW) Mechanical ventilation systems that would provide the minimum air circulation, fresh air supply, heating, and cooling requirements for various uses in occupied rooms, as specified in the state building code, without the need to open

windows, doors, or other openings to the exterior. This measure would also apply to residential units exposed to levels between 65 and 75 dBA L_{dn} (i.e., those units in “normally unacceptable” locations as defined by HUD noise criteria).

Other Possible Mitigation Measures

Construction

Some relatively simple and inexpensive practices can reduce the extent to which people are affected by construction noise and ensure that construction noise levels stay within the applicable daytime sound level limits. Examples include the following:

- Use properly sized and maintained mufflers, engine intake silencers, engine enclosures, and turn off idle equipment.
- Make construction contracts specify that mufflers be in good working order and that engine enclosures be used on equipment when the engine is the dominant source of noise.
- Locate stationary equipment as far away from sensitive receiving locations as possible. Where this is not feasible, or where noise impacts are still significant, place portable noise barriers around the equipment, with the opening directed away from noise-sensitive receiving locations.
- To the extent feasible, substitute hydraulic or electric models for impact tools such as jack hammers, rock drills and pavement breakers to reduce construction and demolition noise. Electric pumps could be specified if pumps are required.
- Explore the feasibility of using broad-band or ambient sensing vehicle back-up alarms, which are typically less noticeable than traditional pure-tone alarms.
- Locate construction staging areas expected to be in use for more than a few weeks as far as possible from sensitive receivers, particularly residences.
- Use quiet equipment and temporary noise barriers to shield sensitive uses, and orient work areas to minimize noise transmission to sensitive off-site locations.

Operation

Sound levels at numerous locations on the project site currently exceed HUD guidelines for residential locations and would continue to do so in the future. Therefore, some or all of the following mitigation measures should be considered:

- Place outdoor use areas (where quiet conditions are required for optimal use) both away from the perimeter of the site and in locations that are "shielded" by buildings (i.e. where buildings are located between the exterior use area and major roadways).
- ~~If feasible, locate office buildings on the western edge of the SW Sector adjacent to I-5, instead of residences.~~

- Minimize site grading that increases on-site ground-level elevations that would give lower portions of buildings near I-5 a more direct line-of-sight to the freeway (thereby increasing noise levels).
- (NEW) As an element of the overall decision-making criteria for determining/selecting residential building locations when development occurs, SHA could consider locating family housing away from noisy areas of the site.
- (NEW) Buildings placed along the western boundary of Yesler Terrace could, to the extent feasible, be oriented to be parallel with I-5 in order to shield the site's interior open spaces from noise.
- ~~Use dynamic venting systems (or air conditioning units) for those residences that are in "normally unacceptable" or "unacceptable" locations to eliminate the need to open windows for ventilation. This would be useful for office buildings in order to provide interior spaces conducive to typical office operations (i.e., reading, writing, conversations, etc.).~~

3.7.4 Significant Unavoidable Adverse Impacts

Based upon the consideration of noise impacts at the site, no significant unavoidable adverse noise impacts are anticipated to result from the construction or operation of the Preferred Alternative. Implementation of appropriate noise control mitigation measures, including the required/proposed mitigation measures listed above, would be necessary to provide interior sound levels that are both consistent with HUD noise criteria and appropriate for a livable environment. In addition, for those portions of the site in which residential uses are proposed in areas of the site that have sound levels classified as "unacceptable" under HUD noise criteria, City HSD approval of a noise waiver as part of its Record of Decision on behalf of HUD is required prior to a Request for Release of Funds for the project from HUD.

3.8 LAND USE

This section compares the probable significant impacts from the Preferred Alternative on land use on the Yesler Terrace site and in the site vicinity to those analyzed under the DEIS Alternatives 1-4 and identifies the potential for any new or increased significant impacts and/or mitigation. This section also describes the affected environment on the East of 12th Sector and the potential land use impacts of the Preferred Alternative on this area.

3.8.1 Affected Environment

DEIS Site

In Section 3.8.1 of the DEIS, the historic and existing land use conditions within the DEIS Site boundary (NW, NE, SW, SE and East of Boren Sectors) are described. These sectors are shown on **FEIS Figure 3.8-1**. The land use and building characteristics of the surrounding areas are also described. The existing Comprehensive Plan and zoning designations of the DEIS Site and surrounding vicinity are highlighted.

With the exception of the updated information regarding the proposed zoning changes in the area to the south of the site discussed below, the existing land use conditions on the DEIS Site and in the site vicinity have generally remained the same as presented in the DEIS; therefore, no other changes to the discussion of existing conditions are warranted in this FEIS.

Zoning

Immediately Adjacent to the Site

According to the Seattle Land Use Code, the following are the zoning classifications for the areas immediately adjacent to the Yesler Terrace site:

- **South.** The area south of S Main Street is presently zoned C1-65 and NC3-65. As discussed in the *Livable South Downtown Plan* (2009), the zoning of the Little Saigon neighborhood to the south of the site is currently under review by the City Council and is likely to be revised to Downtown Mixed Residential/Commercial (DMR/C 65/65-85 (150)). Since issuance of the Executive's Recommendations for zoning changes in the South Downtown area, the Seattle City Council has been considering those zoning changes at public meetings throughout 2010, and in the first quarter of 2011. City Council adoption of zoning changes is anticipated in April or May of 2011.

In terms of zoning changes near the Yesler Terrace site, the Executive's Recommendation was for the zoning in the area south of S Main Street, and east of 10th Ave S, to change from Commercial 1 with a 65-foot height limit, to Downtown Mixed Residential/Commercial with varying height limits of 65, 85, and 150 feet, depending on the building use. As part of Council review of the zoning changes, it is possible that this particular recommendation will be revised. At the time of this FEIS, the Council is considering allowing buildings up to 150 feet only in the area south of S King Street, with

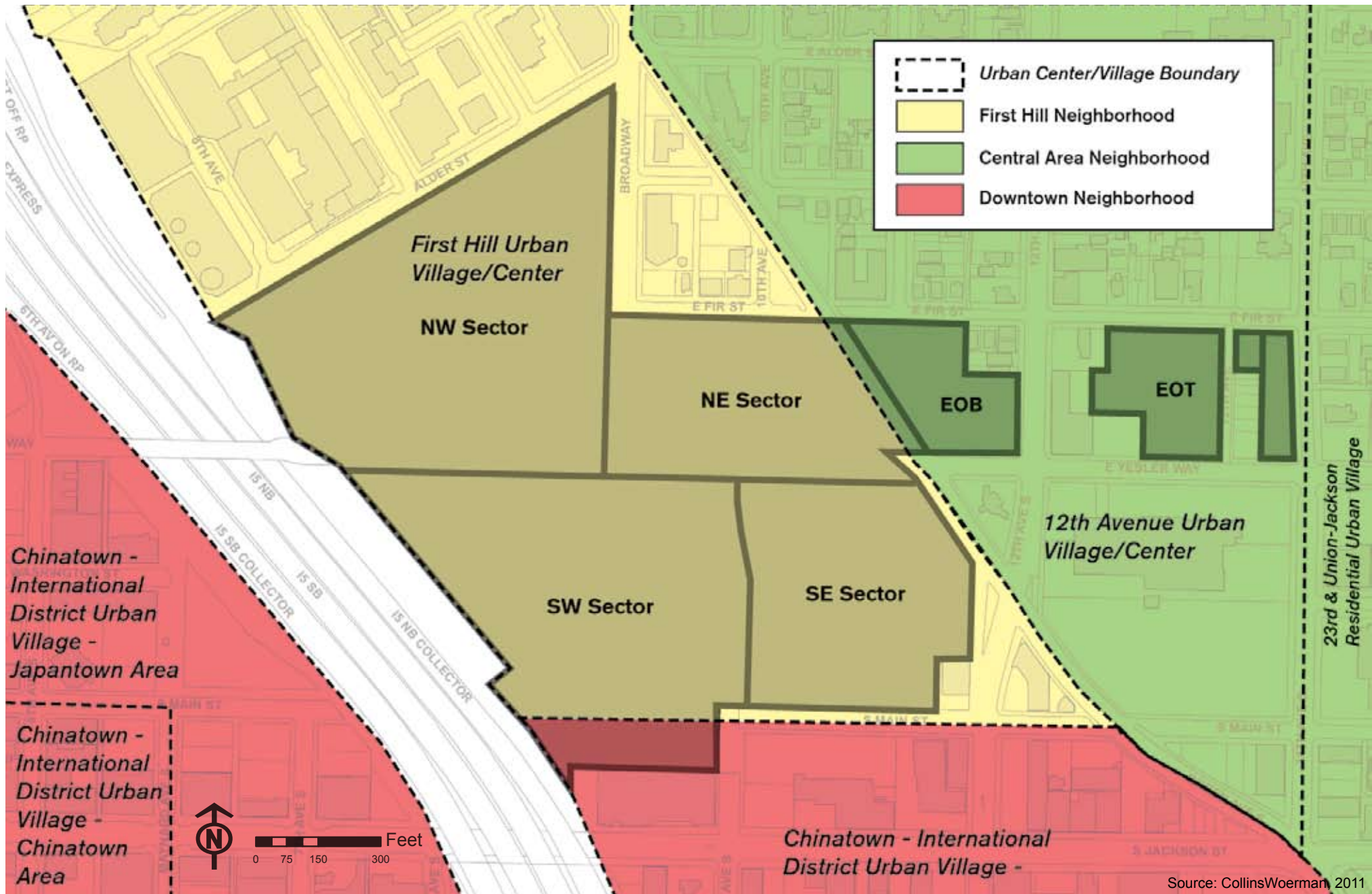


Figure 3.8-1
Seattle Neighborhoods

Yesler Terrace
Redevelopment EIS



a maximum height of 85 feet north of S King Street. If enacted, an 85-foot height limit would apply south of S Main Street, across the street from the southern boundary of Yesler Terrace.

Site Vicinity

According to the Seattle Land Use Code, the following are the zoning classifications for the general vicinity of the Yesler Terrace site:

- **South.** This area is presently zoned Neighborhood Commercial, Commercial and Low-rise Residential. As discussed in the *Livable South Downtown Plan* (2009), the zoning of the Little Saigon neighborhood to the south of the site is currently under review and is likely to be revised to DMR/C 65/65-85 (150).

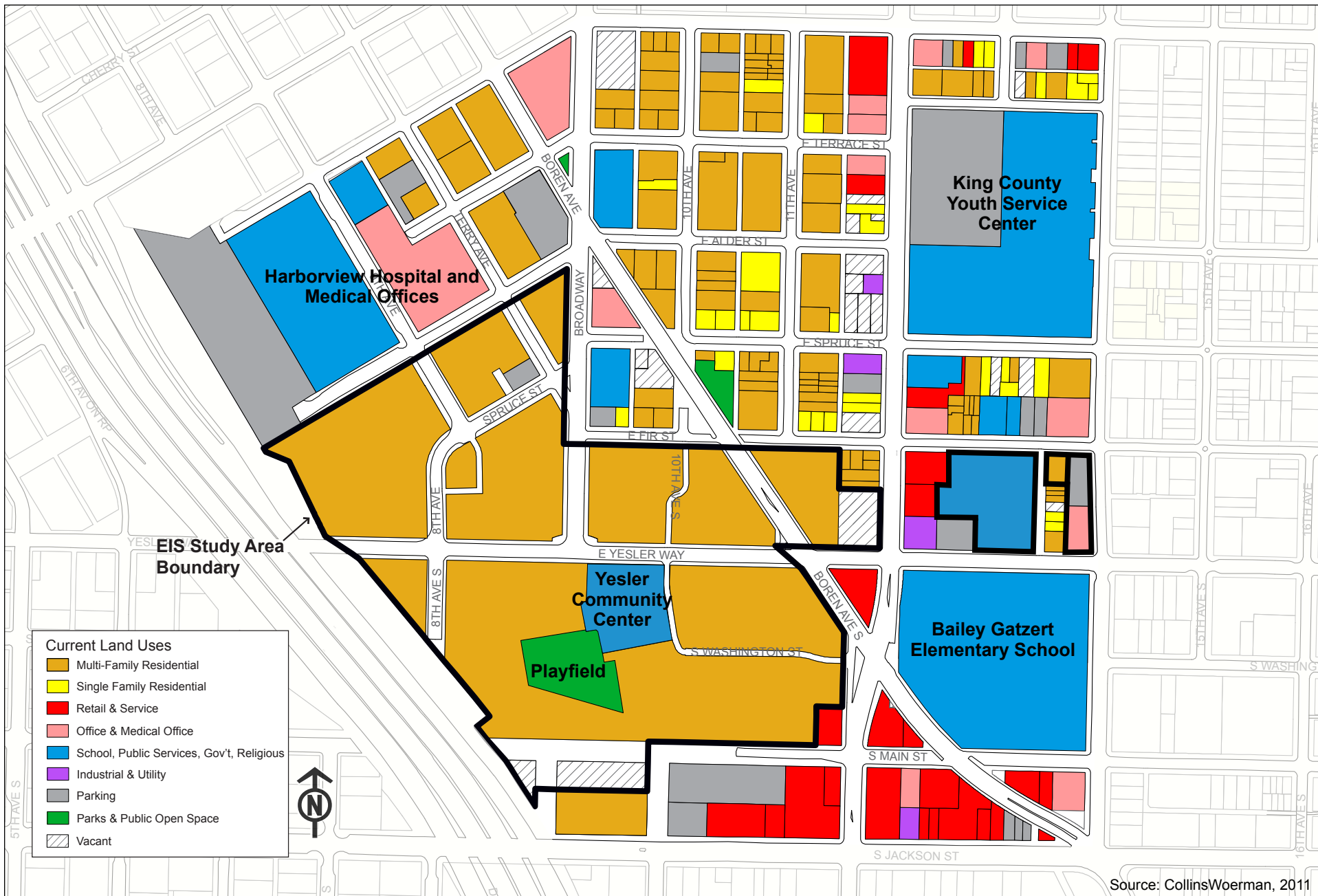
East of 12th Sector

Onsite Land Uses

The 2.36-acre East of 12th Sector is generally bound by E Fir Street on the north, 14th Avenue on the east, E Yesler Way on the south, and a strip of retail development on 12th Avenue, to the east. This sector does not encompass the entire two blocks between 12th and 14th Avenues (see the Immediately Adjacent Land Uses subsection for a description of the land uses outside of the East of 12th Sector within these two blocks). The boundary of this sector is shown on **FEIS Figure 3.8-1**. This sector is located approximately ½ block to the east of the East of Boren Sector. Please see **FEIS Figure 3.8-2** which illustrates the existing land uses on the site.

The East of 12th Sector contains four buildings including two warehouses (King County Archives) and its associated parking lot, the Baldwin Apartments building, and the Urban League building and its associated parking lot. **FEIS Table 3.8-1** shows the existing site area breakdown and **FEIS Table 3.8-2** shows the existing building uses within the East of 12th Sector.

The site currently accommodates neighborhood commercial and light industrial uses. Residential space is located on the site within the Baldwin Apartments building, which is currently vacant.



**Table 3.8-1
SITE AREA BREAKDOWN
ON THE EAST OF 12TH SECTOR
UNDER EXISTING CONDITIONS
(ACRES)**

Site Use	East of 12 th Sector
Building Footprint	1.6
Surface Parking	0.6
Parks/Public and Semi-Private Open Space	0.1
Rights-of-Way	0
Private Access Drives and Roads	0
Total Acreage	2.3

Source: CollinsWoerman, 2011.

**Table 3.8-2
BUILDING USES
ON THE EAST OF 12TH SECTOR
UNDER EXISTING CONDITIONS
(SQUARE FEET)**

Uses	East of 12 th Sector
Housing	11,120 ¹
Office/Lodging	32,700
Neighborhood Commercial	
Neighborhood Services	0
Light Industrial (warehouse)	58,500
Total SF	102,320

Source: CollinsWoerman, 2011.

¹ Residential space is located on the site but is currently vacant.

Baldwin Apartments Building

The Baldwin Apartments building is located in the central-east portion of the East of 12th Sector, along 13th Avenue and E Fir Street. This is a currently vacant, 3-story, 11,120 SF brick building with 30 studio and 1BR units.

Urban League Building

The Urban League building, constructed in 1910, is located in the southeast corner of the East of 12th Sector, along 14th Avenue and E Yesler Way. The 3-story, 32,700 SF office building is currently owned and partially occupied by the Urban League of Metropolitan Seattle, a non-profit organization (see **FEIS Section 3.15.6**, for additional information about the Urban League organization). The portion of the building not occupied by the Urban League uses is currently vacant. The Urban League building has a parking lot located to the north of the site.

King County Archives

The King County Archives facility is located on the west half of the East of 12th Sector, to the west of 13th Avenue. This facility contains two, 1-story warehouses that were built in 1954, as well as surface parking; a chain-link fence surrounds the property. The larger, 42,000 SF warehouse is located along 13th Avenue, and the smaller, 17,000 SF warehouse is located to the west of the larger building. A surface parking lot is located between the two warehouse buildings. The King County Archives is the repository for certain county government records.

Immediately Adjacent Land Uses

Land uses immediately adjacent to the site include:

Within East of 12th Sector Block –The East of 12th Sector is not a contiguous block. Within the East of 12th Sector block and to the immediate west of the King County Archives building, there are three 1-story commercial buildings including auto repair, retail and light manufacturing uses. East of the King County Archive building and west of the Urban League building are: a 4-story, 30-unit apartment building owned by SHA (the Ritz Apartments), 2 single-family buildings (one owned by SHA), a vacant lot (currently used for parking for the non-SHA single family building) and a 3-unit multifamily residential (townhouse) building.

North – a one-story office building, several small parking lots, a 3-story multifamily residential building, a 1-story church and the 3-story historic Washington Hall building are located in this area.

East – a 2-story condominium building, a 3-story group home for the elderly and a 3-story multifamily residential building are located in this area.

South – the Bailey-Gatzert Elementary School is located in this area.

West – The East of Boren Sector and six detached single-family dwellings are located in this area.

Land Uses in the Vicinity

The East of 12th Sector is located within the 12th Avenue Urban Center Village of Seattle's Central District Urban Village. Land uses in the vicinity of the East of 12th Sector primarily include 1 to 5 story low-rise multi-family residential uses. Other uses in the area include the the Langston Hughes Performing Arts Center, Bailey-Gatzert Elementary School, Horiuchi Park, a neighborhood P-patch, and neighborhood retail, such as dining, grocery, and auto repair services. Washington Hall, a former performing arts center and City of Seattle landmark adjacent to this sector, is currently being renovated and will likely be used as a performance space upon completion.

Comprehensive Plan Designation

According to the *2009 City of Seattle Comprehensive Plan Future Land Use Map*, all of the East of 12th Sector is designated as Commercial/Mixed Use except for the northeastern portion which is designated as Multi-family (see **FEIS Figure 3.8-3**).

Adjacent areas immediately to the northwest, west, south and southeast of the East of 12th Sector are designated as Commercial/Mixed Use. Areas to the immediate north and northeast are designated as Multi-Family Residential.

Zoning

The East of 12th Sector contains three zoning designations: The King County Archive site is zoned Commercial (C2-65) and Neighborhood Commercial (NC3-65); the Baldwin Apartments building site is zoned Lowrise Residential-3 (LR-3); and, the Urban League building is zoned NC3-65, while the building's parking area is zoned LR-3 (see **FEIS Figure 3.8-4**, Zoning Map).

Adjacent areas to the immediate west and northwest of the sector are zoned as NC3P-65 (Neighborhood Commercial), areas to the north and northeast are zoned as LR-3, areas to the east are zoned as NC2-40 (Neighborhood Commercial), and areas to the south are zoned NC3-65.

In the vicinity of the East of 12th Sector, areas to the north have a variety of Major Institution Overlay zoning areas (including Seattle University), neighborhood commercial and mid-rise multi-family residential zones. Areas to the east are primarily zoned as low and mid-rise multi-family residential and single-family residential. Areas to the south are zoned as mid-rise multifamily residential and neighborhood commercial. Areas to the west are zoned as low and mid-rise multifamily residential, including the Yesler Terrace East of Boren Sector. The Yesler Terrace NW, NE, SW and SE Sectors are also located to the west of the East of 12th Sector and are the subject of this EIS and proposed to be rezoned, as described in **FEIS Section 2.3.2** of this FEIS.

3.8.2 Impacts

This section describes the land use impacts from redevelopment on the Yesler Terrace site under the Preferred Alternative.

Proposed Actions

The Proposed Actions for the Preferred Alternative are presented in **FEIS Section 2.3.1**.

Methodology

The methodology employed for the land use analysis in the DEIS, as described in DEIS Section 3.8.2, was also used for this FEIS analysis.

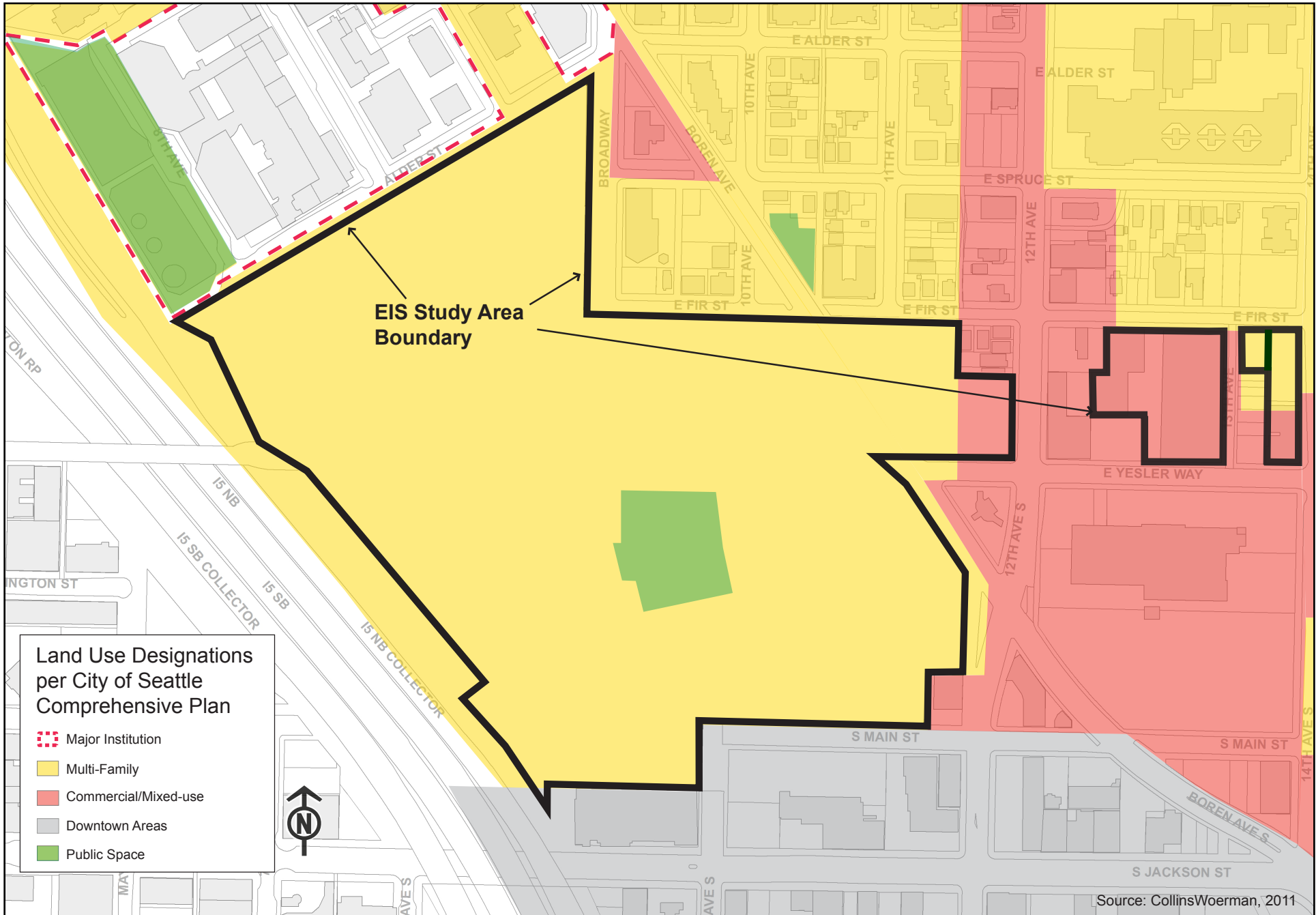


Figure 3.8-3
Comprehensive Plan Future Land Use Designations

Yesler Terrace
Redevelopment EIS



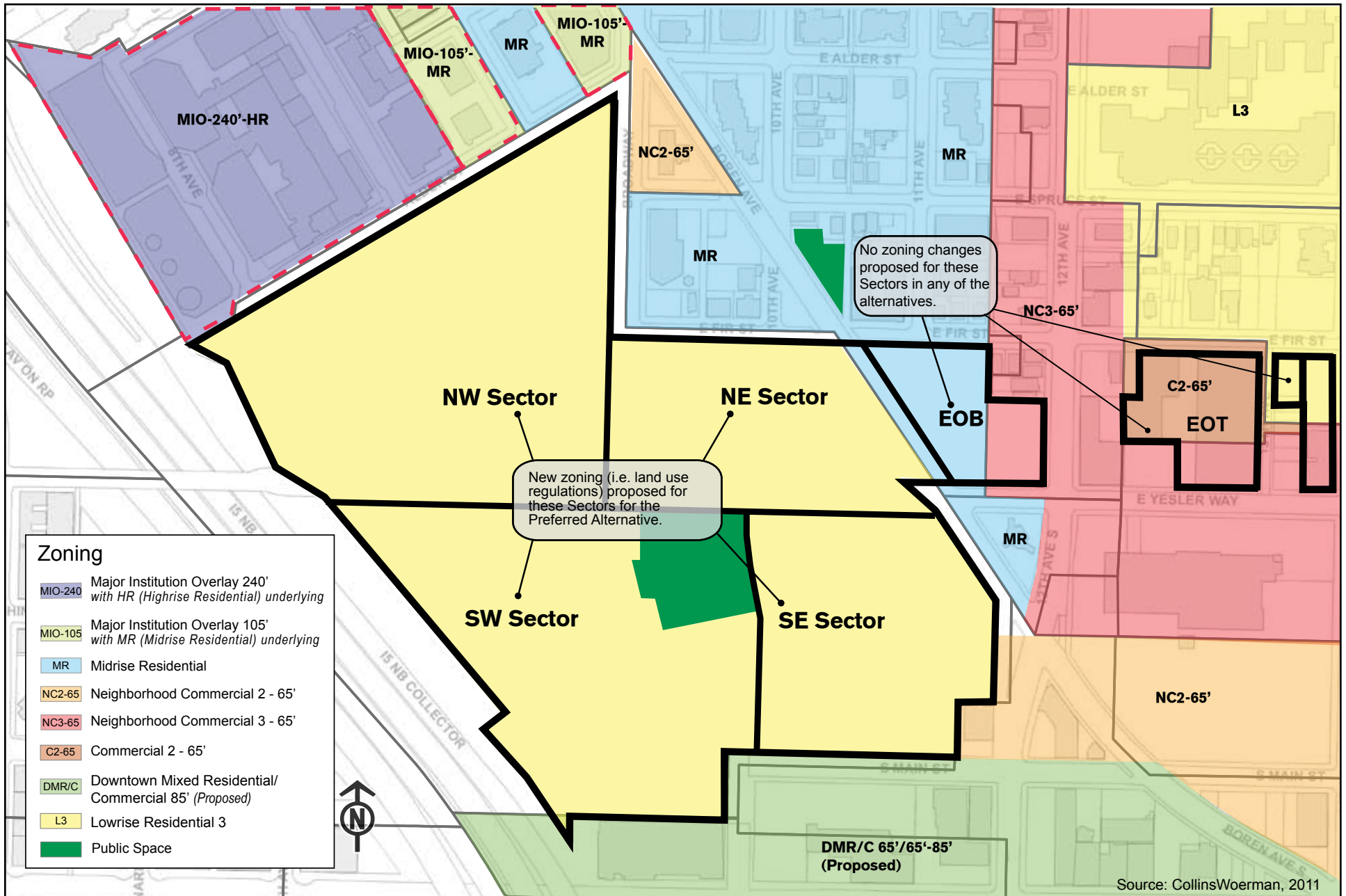


Figure 3.8-4
Zoning

DEIS Site

As described in **FEIS Chapter 2**, levels of redevelopment under the Preferred Alternative on the DEIS Site (NW, NE, SW, SE and East of Boren Sectors) would primarily be within the range of redevelopment assumed for DEIS Alternatives 1-4.

Construction Impacts

As described in the DEIS for Alternatives 1-4, temporary impacts to adjacent land uses could occur during the phased construction of the Preferred Alternative on the DEIS Site. Construction-related impacts that could occur over the buildout period include dust and emissions from construction equipment and vehicles; increased noise levels and vibration from construction equipment and vehicles; and, increased traffic associated with construction works and vehicles. Although construction activities would occur incrementally over the long-term buildout period, such activity would move around the site and could result in temporary impacts to adjacent areas, when site construction occurs near the boundary of the site or in close proximity to these adjacent uses.

During redevelopment activities associated with the Preferred Alternative, existing DEIS Site uses would be displaced as described in Section 3.8.2 of the DEIS. Displacement of existing uses to accommodate redevelopment activities under the Preferred Alternative would be as described in DEIS Section 3.8.2 for DEIS Alternatives 1-4.

Operational Impacts

Operation of the DEIS Site under the Preferred Alternative would convert the Yesler Terrace site from its current low-rise lower density multi-family residential development into a more densely developed mixed use, mixed-income community similar to DEIS Alternatives 1-3.

As described in **FEIS Chapter 2**, under the Preferred Alternative, redevelopment of the DEIS Site would include a total of 5.2 million SF of mixed use development at full buildout. The level of redevelopment proposed under the Preferred Alternative would be within the range of development assumed for Alternatives 1-4 of the DEIS; the proposed redevelopment would generally incorporate elements of Alternatives 2 and 3.

FEIS Table 3.8-3 provides a comparison breakdown of the DEIS Site area assumed under the Preferred Alternative and DEIS Alternatives 1-4 at full buildout, including the area in building footprint, parking, parks and open space, roads and drives, and rights-of-way.

The overall amount of DEIS Site area in building footprint would be more than Alternatives 2 and 3, and similar to DEIS Alternative 1. The amount of parks and rights-of way would be similar to DEIS Alternative 2. The amount of private access drives and roadways would be less than DEIS Alternatives 2 and 3, and similar to Alternative 1 and 4.

**Table 3.8-3
COMPARISON OF SITE AREA BREAKDOWN
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(ACRES)**

Site Use	FEIS Preferred Alternative	DEIS Alternative					No Action
		1	1A	2	3	4	
Building Footprint	11.9	11.9	11.5	11.2	11.3	9.8	5.7
Surface Parking	0	0	0	0	0	3.2	1.7
Parks/Public and Semi-Private Open Space	14.5	13.3 ¹	13.8 ¹	14.5	14.7	13.1 ¹	12.1 ¹
Private Open Space ²	n/a	n/a	n/a	n/a	n/a	n/a	8.7
Rights-of-Way	7.4	8.4	8.4	7.2	7.2	7.8	7
Private Access Drives and Roads	1.4	1.5	1.5	2.2	2.2	1.3	0
Yesler Community Center ³	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Total Acreage	36.6⁴	36.5⁴	36.6	36.5⁴	36.8⁴	36.6	36.6

Source: CollinsWoerman, 2011.

¹ Includes approximately 1.4 acres of steep slope area and unusable open space due to inaccessibility.

² The No Action Alternative includes approximately 8.7 acres of private open space in the form of ground level private yards. Under the Preferred Alternative and Alternatives 1-4, private open space, such as balconies, would be provided for some units but cannot be quantified at this time. The specific amount of private open space that would be provided as part of redevelopment would be determined during the design and permitting process of individual projects.

³ Includes the Yesler Community Center parcel.

⁴ Site acreage is assumed to be 36.6 acres under all alternatives. Differences in totals are due to rounding.

Building Uses

FEIS Table 3.8-4 summarizes the range of building uses on the DEIS Site under the Preferred and DEIS Alternatives at full buildout, including the housing, office/lodging, neighborhood commercial and neighborhood services uses. The 4.2 million SF of housing provided on the DEIS Site under the Preferred Alternative would be between the amounts provided in DEIS Alternatives 2 and 3. The 900,000 SF of office/lodging uses assumed on the DEIS Site under the Preferred Alternative would be between the amounts provided in DEIS Alternatives 1 and 3. The 84,000 SF of neighborhood commercial space assumed on the DEIS Site would be similar to Alternative 3, whereas the 64,500 SF of neighborhood services space would exceed the amount assumed under the DEIS Alternatives.

**Table 3.8-4
COMPARISON OF SITE BUILDING USES
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(SQUARE FEET)**

Uses	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
Housing	4,200,090	2,757,903	2,757,854	3,634,213	4,496,700	1,415,680	468,242
Office/Lodging	899,691	800,103	401,000	1,001,126	1,201,660	20,259	20,259
Neighborhood Commercial	84,247	40,000	40,000	60,000	88,000	10,000	0
Neighborhood Services	64,561	49,971	49,971	49,971	49,971	49,938	49,342
Total	5,248,589	3,647,977	3,248,825	4,745,310	5,836,331	1,495,877	537,843

Source: CollinsWoerman, 2011.

Conversion of Land Uses

Development of the DEIS Site under the Preferred Alternative would result in the transition of the 36.6-acre DEIS Site from a low-rise, multi-family residential development to a denser mixed use community with a broad range of residential, lodging/office, neighborhood commercial and neighborhood service uses and a variety of building types, similar to DEIS Alternatives 1-4.

Redevelopment of the Preferred Alternative would require demolition of all of the existing buildings on the DEIS Site except for the Steam Plant and the Yesler Community Center. The existing residents and tenants would be temporarily or permanently displaced. Residential tenant relocation under the Preferred Alternative would be in accordance with DEIS Section 2.8.4 and DEIS Section 3.16.3 and **FEIS Section 3.16.3**.

As shown in **FEIS Table 3.8.3**, approximately 60 percent of the DEIS Site would be developed with buildings, roadways, right-of-ways and drives, as opposed to 39 percent under existing conditions, similar to DEIS Alternatives 1 and 2. Approximately 40 percent of the DEIS Site would be in public and semi-private parks and open space, as compared to 37 percent under existing conditions¹, similar to DEIS Alternatives 1 and 2.

Density

Under the Preferred Alternative, the density of development on the DEIS Site would increase from existing conditions, similar to DEIS Alternatives 1-4. The intensity of development would be highest in the NE Sector and lowest in the East of Boren Sector. The average residential density across the site under the Preferred Alternative would be approximately 245 dwelling units per acre, as compared to 24 units per acre under existing conditions. The average office

¹ Approximately 23.7 percent of the existing DEIS Site is developed in private open space in the form of yards.

FAR² would be 7.5 on individual parcels under the Preferred Alternative as compared to 2.0 under existing conditions. The residential density and office FAR levels assumed under the Preferred Alternative are similar to the levels assumed for DEIS Alternatives 2 and 3, as discussed in **FEIS Section 2.6.3**.

Activity Levels

Similar to the DEIS Alternatives 2 and 3, activity levels on the site would be anticipated to increase under the Preferred Alternative due to an estimated increase in approximately 7,800 residents and 3,300 employees on the DEIS Site; this increase in activity levels would be between the levels analyzed for Alternatives 2 and 3. The general nature of new site activity would be consistent with an urban mixed-use neighborhood. Activity levels in the site vicinity primarily related to vehicular and pedestrian traffic would increase (see **Section 3.13**, for details).

Building Heights

As discussed in **FEIS Section 2.5.2** and shown in **FEIS Table 2-3**, the proposed maximum building heights for both residential and office uses in the Preferred Alternative on the DEIS Site would be similar to Alternative 2.

The exception is the portion of the SE Sector south of Washington Street adjacent to the Little Saigon neighborhood, which would be limited to 160 feet; the maximum heights proposed under the DEIS Alternatives range from 180-240 feet in this part of the site. The reduction in proposed building heights adjacent to the Little Saigon neighborhood would serve as mitigation for the potential significant impacts identified for DEIS Alternatives 1-3 due to height differences between onsite and offsite uses in this area (see **FEIS Section 3.10.1.2, Aesthetics**, (Height, Bulk and Scale) for additional details).

Mid-Rise and High-Rise Buildings

As discussed in **FEIS Section 2.4.3** and shown in **FEIS Table 2-1**, under the Preferred Alternative residential high-rise buildings are proportionally placed in each of the NW, NE, SE, and SW Sectors to accommodate the areas of lower density land use and maximize spacing between the high-rise buildings (see **FEIS Figure 2-8**)³. In the NW Sector, two high-rise office buildings, built to the maximum allowed height, are located adjacent to Alder Street to minimize view and shadow impacts on the DEIS Site (see **FEIS Section 3.10.1.2** and **FEIS Section 3.10.3.2**), and to approximately match the height and density of the adjacent zoning at Harborview Hospital. Ten residential high-rise buildings and 23 residential mid-rise buildings are distributed in the remaining sectors and are configured to minimize shadows on offsite parks and to maximize public and private views. The overall number and placement of mid-rise and

² Floor Area Ratio (FAR) is the ratio of the gross floor area to lot area and is used to describe density of non-residential uses. When FAR is referenced in this EIS impact analysis, it is based on assumed lot areas in order to compare density under the alternatives. However, this method of calculating average FAR differs from the FAR calculation method required under the City's Land Use Code (see **FEIS Chapter 2** for details).

³ Specific highrise locations would be determined as individual developments are proposed. Any of the high rise locations noted in **FEIS Figure 2-8** (highrises noted in both bold and dashed lines) could be proposed in the future if the highrise building impacts are within the range of highrise locations analyzed in the FEIS and DEIS (see DEIS Figures 2-15 thru 2-18).

high-rise buildings under the Preferred Alternative would be similar to the assumptions for DEIS Alternative 3.

Relationship to Onsite Uses

The relationship to onsite uses under the Preferred Alternative would be as described in DEIS Section 3.8.2 for the DEIS Alternatives 1-4. Proposed onsite uses would generally be compatible with remaining onsite residential uses as phased development occurs as well as with non-residential uses including the Steam Plant and Yesler Community Center.

Relationship to Surrounding Uses

Similar to DEIS Alternatives 1-4, the proposed land uses for the Preferred Alternative on the DEIS Site would be generally compatible with the existing surrounding land uses including institutional uses to the north, residential uses to the northeast and east, and retail and commercial uses to the south.

Similar to the descriptions for DEIS Alternatives 2 and 3 provided in DEIS Section 3.8.2, proposed building heights and density of development under the Preferred Alternative could be perceived as significant impacts in certain areas where proposed onsite development is adjacent to offsite uses; this could be the case in situations where buildings are built adjacent to existing one and two story residential structures to the north/east of the NE Sector and one and two-story retail commercial uses to the south of the SE and SW Sectors (in the Little Saigon neighborhood) without implementation of appropriate mitigation measures such as street level setbacks, upper level setbacks and landscape design guidelines (see **FEIS Section 3.10.1.2** for details). However, the topographic separation between Little Saigon's buildings to the south of the site and the location of the buildable areas on the site would provide significant separation and setback as a result of site development constraints.

East of 12th Sector

This section describes the potential direct and indirect land use impacts that would be associated with redevelopment of the 2.3-acre East of 12th Sector under the Preferred Alternative. The types of direct land use impacts that could potentially occur under the Preferred Alternative generally relate to conversion of land uses, changes in land use density, changes in activity levels, and compatibility of new land uses on the site with existing site uses to remain and surrounding land uses.

Indirect land use impacts that could occur include the potential for increased development pressure off-site, minor changes in land use, increased development density, the potential for increased requests for zoning changes, and changes in the overall character of the area from a land use perspective, which may affect the surrounding neighborhoods over time, particularly the Central District neighborhood to the east. However, this neighborhood has been experiencing such pressure for a number of years as a result of increasing land value. The East of 12th Sector is in close proximity to a number of amenities including Washington Hall, a Department of Neighborhoods P-Patch at 14th Avenue & Fir Street, Horiuchi Park, Bailey Gatzert playfield, and an emerging 12th Avenue commercial corridor on 12th Avenue. With the redevelopment of the East of Boren and East of 12th Sectors, together with related infrastructure improvements (specifically the First Hill Streetcar) and other public investments (such as open space) it is expected that the private sector will redevelop the surrounding underdeveloped

blocks. The proportion of affordable to market-rate units in the neighborhood would likely be less than that of the West of Boren Sectors.

A more detailed description of impacts from changes in the visual character, and the height, bulk and scale of the redevelopment in the East of 12th Sector are discussed in **FEIS Section 3.10, Aesthetics/Light and Glare/Shadows**; the relationship of the Proposed Actions to applicable land use plans and policies is contained in **FEIS Section 3.9, Relationship to Plans, Policies and Regulations**; and, impacts to historic resources are discussed in **FEIS Section 3.11, Historic Resources**.

Construction Impacts

Construction impacts associated with redevelopment of the East of 12th Sector under the Preferred Alternative would be as described for DEIS Alternatives 1-4 in **FEIS Section 3.8.2**.

Redevelopment in this sector would create construction impacts in closer proximity to certain sensitive uses such as the Bailey-Gaztert Elementary School to the immediate south, the elderly group home to the immediate east and the offsite residential uses located within the East of 12th Sector block. These temporary impacts would be mitigated by adhering to all applicable construction activity regulations, including Puget Sound Clean Air Agency air quality regulations, temporary erosion and sediment control measures, and City of Seattle noise regulations (see **FEIS Section 3.2, Air Quality** and **FEIS Section 3.7, Noise**, for details).

Operational Impacts

The East of 12th Sector contains three zoning designations: the King County Archive site is zoned Commercial (C2-65) and Neighborhood Commercial (NC3-65); the Baldwin Apartments building site is zoned Lowrise-3 (LR-3); and, the Urban League building site is zoned NC3-65, while the building's parking area is zoned LR-3. The East of 12th Sector would be redeveloped under the existing zoning and would not be included as part of the Planned Action area (see **FEIS Section 2.4.1** for details about the Planned Action). Development of residential uses on the King County Archive site within the C2-65 zone would require Administrative Conditional Use Permit approval. Proposed development at the site would meet the requirements for such approval (see also **Section 3.9** for additional information about the Conditional Use Permit process).

Site Area and Uses

The Preferred Alternative assumes that approximately 214,000 SF of new residential uses comprising 250 housing units would be developed on the East of 12th Sector. The Baldwin Apartments and Urban League buildings would be rehabilitated to accommodate 50 housing units. The King County Archive building, warehouses and parking lot would be demolished and would be redeveloped with approximately 200 housing units. Approximately 4,000 SF of neighborhood commercial uses would be provided in the ground level of the Urban League building. Over 180 parking spaces would be provided and 1.3 acres of open space would be developed on the site.

FEIS Table 3.8-5 shows the assumed site area breakdown for the East of 12th Sector and **FEIS Table 3.8-6** shows the assumed building uses.

**Table 3.8-5
SITE AREA BREAKDOWN
UNDER THE PREFERRED ALTERNATIVE
ON THE EAST OF 12TH SECTOR
(ACRES)**

Site Use	East of 12th Sector
Building Footprint	0.7
Surface Parking	0.2
Parks/Public and Semi-Private Open Space	1.3
Rights-of-Way	0
Private Access Drives and Roads	0.1
Total Acreage	2.3

Source: CollinsWoerman, 2011.

**Table 3.8-6
BUILDING USES
UNDER THE PREFERRED ALTERNATIVE
ON THE EAST OF 12TH SECTOR
(SQUARE FEET)**

Uses	East of 12th Sector
Housing	214,137
Office/Lodging	0
Neighborhood Commercial	4,000
Neighborhood Services	0
Total SF	218,137

Source: CollinsWoerman, 2011.

Conversion of Land Uses

Development of the East of 12th Sector under the Preferred Alternative would result in the transition of the King County Archives site from an industrial/warehouse use to a denser mid-rise multifamily residential development. The Urban League building footprint would remain intact but the uses would transition from an office building to a mixed-use building. The Baldwin Apartments building footprint would remain intact and the building would be developed in residential uses.

Displacement of Existing Uses

To accommodate redevelopment, the existing King County Archive warehouses and parking lot would be demolished. The displaced King County Archive use could be accommodated elsewhere within the City. The existing Urban League building would remain but the existing uses could be displaced and would likely relocate outside of the neighborhood. The existing Baldwin Apartments building is vacant; therefore, no existing uses would be displaced.

Density

Under the Preferred Alternative, the average residential density across the sector would be approximately 110 dwelling units per acre.

Activity Levels

Activity levels in the East of 12th Sector would increase as a result of the estimated 475 new residents and 7 employees assumed under the Preferred Alternative (see **FEIS Section 3.16, Socioeconomics** for additional details). Compared to the existing activity levels on the site (which are primarily limited to employee activity at the King County Archive buildings and Urban League offices), the activity levels on the site would substantially increase due to the increased residential population. The general nature of new site activity would be consistent with an urban mixed-use neighborhood. Activity levels in the vicinity of the sector primarily related to vehicular and pedestrian traffic would also increase (see **FEIS Section 3.13, Transportation**, for details).

Relationship to Surrounding Uses

The compatibility of the proposed land uses in the East of 12th Sector under the Preferred Alternative to existing surrounding land uses would primarily be a function of the type of proposed and existing uses and the height/bulk/scale of these uses. The proximity of proposed uses to existing surrounding uses, and the existence of any buffers between these uses would also factor into the compatibility of the uses.

Land Use. The Preferred Alternative assumes that approximately 214,000 SF of new residential uses comprising 250 housing units would be developed on the East of 12th Sector. Approximately 4,000 SF of neighborhood commercial uses would be provided in the ground level of the Urban League building.

Development of residential uses on the East of 12th Sector would be generally compatible with the existing offsite uses located within the East of 12th Sector block which are 1 to 5 story low-rise multi-family residential uses. Other uses in the area include the Langston Hughes Performing Arts Center, Bailey-Gatzert Elementary School, Horiuchi Park, a neighborhood P-patch, and neighborhood retail, such as dining, grocery, and auto repair services. Washington Hall, a former performing arts center and City of Seattle landmark, is currently being renovated and will likely be used as a performance space upon completion. In general, surrounding uses include the office, residential, school (Bailey-Gatzert Elementary) and institutional buildings. There are no proposed land uses that would be incompatible with the existing surrounding uses .

Development of residential uses on the East of 12th Sector would be compatible with existing adjacent uses surrounding the East of 12th Sector block, including the office, residential, school (Bailey-Gatzert Elementary) and institutional buildings.

Height, Bulk and Scale. Redevelopment under the Preferred Alternative in this sector would represent an increase in building height, bulk and scale, as compared to existing conditions.

The Preferred Alternative assumes residential development would occur on the King County Archives site in a mid-rise building of 65 feet (an increase from the existing 24-foot high

building), the Urban League building height would remain at 42 feet and the Baldwin Apartments building would remain at 34 feet.

Development of the proposed mid-rise residential building on the King County Archives site would be anticipated to be compatible with the existing surrounding 1-3 story commercial and residential development and similar to the proposed building heights at the adjacent East of Boren Sector.

Buffers. Redevelopment in the East of 12th Sector would be immediately adjacent to existing offsite commercial and residential uses located within the East of 12th Sector block. However, the land uses and height, bulk and scale of the development would be generally compatible with these uses.

The proposed redevelopment on the East of 12th Sector under the Preferred Alternative would be separated and buffered from uses adjacent to the East of 12th Sector block by roadways. Street trees planted along right-of-way as part of redevelopment would also provide a pedestrian and motorist-level visual buffer between the onsite and offsite uses.

FEIS Site/Conclusion

Redevelopment of the Preferred Alternative on the FEIS Site (the DEIS Site and the East of 12th Sector) would occur over a larger site area (38.9 acres) than the DEIS Alternatives but would be comprised of a total amount of development square footage (5.5M SF) that falls within the range of development analyzed within the DEIS Alternatives 2 and 3. The proposed land uses on the FEIS Site would be generally compatible with the offsite uses in the vicinity, as noted above.

FEIS Table 3.8-7 shows the assumed site area breakdown for the FEIS Site and **FEIS Table 3.8-8** shows the assumed building uses.

The density, height, bulk and scale of the proposed development on the West of Boren Sectors are within the range analyzed in the DEIS Alternative 1-4 and would not result in significant impacts if appropriate mitigation measures are implemented. The density, height, bulk and scale of the proposed development within the East of Boren and East of 12th Sectors would be consistent with existing zoning and compatible with existing adjacent development.

No significant adverse impacts from development of the Preferred Alternative on the FEIS Site would be assumed with implementation of appropriate mitigation measures, as discussed in **FEIS Section 3.8.3**, below.

**Table 3.8-7
COMPARISON OF SITE AREA BREAKDOWN
OF THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(ACRES)**

Site Use	FEIS Preferred Alternative	DEIS Alternative					
		1	1A	2	3	4	No Action
Building Footprint	12.6	11.9	11.5	11.2	11.3	9.8	5.7
Surface Parking	0.2	0	0	0	0	3.2	1.7
Parks/Public and Semi-Private Open Space	15.8	13.3 ¹	13.8 ¹	14.5	14.7	13.1 ¹	12.1 ¹
Private Open Space ²	n/a	n/a	n/a	n/a	n/a	n/a	8.7
Rights-of-Way	7.4	8.4	8.4	7.2	7.2	7.8	7
Private Access Drives and Roads	1.5	1.5	1.5	2.2	2.2	1.3	0
Yesler Community Center ³	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Total Acreage	38.9	36.5⁴	36.6	36.5⁴	36.8⁴	36.6	36.6

Source: CollinsWoerman, 2011.

¹ Includes approximately 1.4 acres of steep slope area and unusable open space due to inaccessibility.

² The No Action Alternative includes approximately 8.7 acres of private open space in the form of ground level private yards. Under Alternatives 1-4, private open space, such as balconies, would be provided for some units but cannot be quantified at this time. The specific amount of private open space that would be provided as part of redevelopment would be determined during the design and permitting process.

³ Includes the Yesler Community Center parcel.

⁴ Site acreage is assumed to be 36.6 acres under all alternatives. Differences in totals due to rounding.

**Table 3.8-8
COMPARISON OF BUILDING USES
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(SQURE FEET)**

Uses	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
Housing	4,414,227	2,757,903	2,757,854	3,634,213	4,496,700	1,415,680	468,242
Office/Lodging	899,691	800,103	401,000	1,001,126	1,201,660	20,259	20,259
Neighborhood Commercial	88,247	40,000	40,000	60,000	88,000	10,000	0
Neighborhood Services	64,561	49,971	49,971	49,971	49,971	49,938	49,342
Total	5,466,726	3,647,977	3,248,825	4,745,310	5,836,331	1,495,877	537,843

Source: CollinsWoerman, 2011.

Cumulative Impacts

Cumulative impacts to land uses resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.8.3 Mitigation Measures

Ultimately, the design guidelines, Land Use Code development standards and the Planned Action Ordinance for this proposal would guide redevelopment of the Yesler Terrace site over the long-term. These plans, regulations and standards, along with individual project review by the City, would serve as mitigation to preclude any potential significant land use impacts from future redevelopment under the Preferred Alternative and ensure compatibility among site uses and uses in the site vicinity.

The following required/proposed and possible mitigation measures would further address potential land use compatibility issues, particularly related to compatibility with adjacent uses and among uses within the site itself. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

- (MODIFIED) As part of the potential approval of the Proposed Actions, design guidelines would be prepared by SHA and adopted by the City, thereby regulating all future development accordingly.
- (MODIFIED) As part of the potential approval of the Proposed Actions, a new zone designation for the site would be adopted by the City and would establish zoning standards to further lessen potential land use, and height, bulk, and scale impacts on adjacent properties from long-term redevelopment.
- (MODIFIED) As the existing in-home day care businesses operating out of residential units are temporarily displaced as a result of redevelopment activity, a portion of the 1 low income housing units would be configured to meet the in-home daycare licensing requirements.
- ~~SHA's decision on which development plan to implement will likely include SHA imposed design standards to help mitigate land use, and height, bulk and scale impacts.~~

Other Possible Mitigation Measures

- (MODIFIED) Features that could be incorporated into the Development Plan approved by the SHA Board (see **FEIS Section 2.2**, Next Steps, for details), to further facilitate the compatibility of uses could include the following:
 - A mix of uses that creates opportunity for the establishment of a live-work-play environment for existing and new tenants.
 - Public parks and open space area that can serve as a resource to Yesler Terrace residents and employees.
 - Provision of landscaping and street trees around the site perimeter in order to provide a buffer between onsite redevelopment and existing offsite adjacent uses.

- (MODIFIED) Mitigation measures to ensure that new land uses are compatible with onsite existing retained/onsite uses and offsite uses, such as street level setbacks, upper level setbacks and landscape design guidelines, could be implemented. See **FEIS Section 3.10, Aesthetics/Light and Glare/Shadows**, for a complete list of specific mitigation measures, as well as DEIS Appendix Q, Urban Design Approach, for guidance for specific design guidelines. See **FEIS Section 2.5.2, Building Heights**, for criteria for spacing of high-rise buildings.
- (MODIFIED) Additional mitigation measures related to air quality, noise, views, transportation and public services could be provided to lessen the potential for impacts from redevelopment of the site (see **FEIS Section 3.2, Air Quality**; **FEIS Section 3.7, Noise**; **FEIS Section 3.10, Aesthetics/Light and Glare/Shadows**; **FEIS Section 3.13, Transportation FEIS** and, **FEIS Section 3.15, Public Services** for details).

3.8.4 Significant Unavoidable Adverse Impacts

Significant adverse land use impacts would not be anticipated under the Preferred Alternative as the proposed land uses would be compatible with existing offsite uses, including redevelopment of the East of 12th Sector.

No significant unavoidable adverse height, bulk or scale related impacts would be anticipated with implementation of appropriate required/proposed mitigation measures, including those listed above.

Redevelopment is assumed to occur consistent with the above required/proposed mitigation measures, and adopted standards, guidelines, and regulations for Yesler Terrace, including a Planned Action Ordinance.

3.9 RELATIONSHIP TO PLANS, POLICIES AND REGULATIONS

This section evaluates the consistency of the Preferred Alternative with adopted land use plans, policies and development regulations in effect at the time of publication of this FEIS. Because the Preferred Alternative is within the range of EIS Alternatives analyzed in the DEIS, the discussions presented in Section 3.9 of the DEIS generally apply to the Preferred Alternative. Where appropriate, updated discussions of the Preferred Alternative's relationship to relevant plans, policies and regulations are provided in this FEIS. The following evaluations of plans, policies and regulations have been updated:

Federal Plans, Policies and Regulations

- *HUD Environmental Regulations*
- *National Historic Preservation Act*

State and Regional Plans, Policies and Regulations

- *Washington Coastal Zone Management Program*

Local Plans, Policies and Regulations

- *City of Seattle Comprehensive Plan*
- *Livable South Downtown Planning Study*
- *City of Seattle Consolidated Plan for Housing and Community Development 2009-2012*
- *Harborview Medical Center Major Institution Master Plan*
- *City of Seattle Land Use Code*
- *City of Seattle Urban Forest Management Plan*
- *City of Seattle Street Vacation Policies*

Federal Plans, Policies and Regulations

The Preferred Alternative would generally be consistent with the federal plans and policies summarized and discussed in the DEIS. Following are updates to certain of the discussions.

U.S. Department of Housing and Urban Development

Summary: Refer to pages 3.9-2 through 3.9-4 of the DEIS for a summary of the U.S. Department of Housing and Urban Development's (HUD) National Environmental Policy Act (NEPA) environmental review procedures for entities assuming HUD environmental review, decision-making, and action responsibilities under NEPA and related federal laws and authorities (Title 24, Part 58 of the Code of Federal Regulations).

Discussion: Similar to the DEIS Alternatives, the Preferred Alternative would generally comply with the Federal environmental laws and authorities contained in 24 CFR 58.5 and 24 CFR 58.6. Additional wetlands evaluations have been conducted on the DEIS site and the East of 12th Sector since publication of the DEIS, as summarized below:

Section 3.4 of the DEIS noted that two wetlands were potentially present in the southwestern portion of the DEIS site. Additional site investigation was conducted subsequent to issuance of the DEIS and it was determined that these areas are likely to be determined wetlands based on vegetation, hydrology and soil characteristics. Both potential wetlands are slope wetlands and provide low habitat functions. These two potential wetlands have also undergone a Preliminary Jurisdictional Determination (JD) review by the United States Army Corps of Engineers (USACE), which finds that these “may be” waters of the United States. Undertaking any activity in reliance on any form of USACE permit authorization based on a Preliminary JD constitutes agreement that the wetlands on the site are jurisdictional waters of the United States. SHA has the option to request an Approved JD before accepting the terms and conditions of permit authorization; basing a permit authorization on an Approved JD could possibly result in less compensatory mitigation being required or different special conditions. Similar to DEIS Alternatives 2 and 3, redevelopment of the site under the Preferred Alternative would result in impacts to these potential wetlands through either filling and/or disrupting the hydrology sources. Appropriate mitigation measures would be implemented, including any Corps requirements, to address these impacts. See **FEIS Section 3.4, Plants and Animals** and **FEIS Appendix D**, for additional information. No wetlands (or streams) were identified on the East of 12th Sector.

Summary: Refer to page 3.9-5 of the DEIS for a summary of the HUD environmental standards in 24 CFR Part 51 and 58.5(i)(2) for determining project acceptability and necessary measures to insure that activities assisted by HUD achieve the goal of a suitable living environment. In particular, these standards relate to noise and hazardous operations/ materials.

Discussion: The relationship of the Preferred Alternative to these standards would generally be consistent with the discussion provided in the DEIS. Additional noise analysis has been conducted for the Preferred Alternative since publication of the DEIS, as summarized below.

Noise modeling indicates that certain residential buildings under the Preferred Alternative would be located areas that have sound levels classified as “unacceptable” according to HUD noise criteria (i.e. areas with sound levels above 75 decibels). Accordingly, in addition to the preparation of this EIS, the project would require the approval of a noise waiver by the City of Seattle Human Services Department (HSD) on behalf of HUD. Appropriate noise control mitigation measures would be implemented to provide interior sound levels that are both consistent with HUD goals and regulations and appropriate for a livable environment. In addition, for those portions of the site in which residential uses are proposed in areas of the site that have sound levels classified as “unacceptable” under HUD noise criteria, City HSD approval of a noise waiver as part of its Record of Decision on behalf of HUD is required prior to a Request for Release of Funds for the project from HUD. See **FEIS Section 3.7, Noise**, and **FEIS Appendix G** for additional information.

National Historic Preservation Act

Summary: Refer to page 3.9-8 of the DEIS for a summary of the National Historic Preservation Act of 1966 as it relates to the effects of federal agencies or federally assisted undertakings on districts, sites, buildings, structures or objects in or eligible for inclusion in the National Register of Historic Places (NRHP).

Discussion: As noted in the DEIS, the Yesler Terrace Redevelopment Project is considered a federal undertaking subject to compliance with Section 106 of the National Historic Preservation Act. When the DEIS was issued in October 2010, the Yesler Terrace site was undergoing a Section 106 review by the State's Historic Preservation Officer (SHPO) to determine whether the site was eligible for nomination to the NRHP. In November 2010, the SHPO determined that the Yesler Terrace site as a whole was not eligible for nomination to the NRHP, due to the low level of architectural integrity of the buildings. However, the SHPO determined that the Yesler Terrace Steam Plant building was individually eligible for nomination to the NRHP as an intact example of its building type and early concrete construction. Under the Preferred Alternative, retention and adaptive reuse of the Steam Plant is proposed, and significant impacts to the building would not be expected. See **FEIS Section 3.11, Historic Resources** and **FEIS Appendix I**, for additional information.

State and Regional Plans, Policies and Regulations

The Preferred Alternative would generally be consistent with the state and regional plans, policies and regulations, similar to DEIS for Alternatives 1-3. Following is an update to one policy discussion.

The Washington Coastal Zone Management Program

Summary: Refer to page 3.9-8 through 3.9-9 of the DEIS for a summary of the Washington Coastal Zone Management Program as it relates to activities that affect any land use, water use or natural resource of the coastal zone.

Discussion: The Yesler Terrace site is located outside the jurisdiction of the SMA. The EFSEC and ORMA do not apply to this project. The Yesler Terrace Redevelopment would be developed consistent with applicable provisions of the Clean Air Act; therefore, would be in compliance with this provision of the Coastal Zone Management Program. Stormwater facilities would be developed consistent with applicable provisions of the Clean Water Act; therefore, would be in compliance with this provision of the Coastal Zone Management Program.

DEIS Section 3.4 noted that two wetlands were potentially present in the southwestern portion of the DEIS site. Additional site investigation was conducted subsequent to issuance of the DEIS and it was determined that these areas have wetland hydrology and soil conditions and have the potential to be classified as wetlands. Both potential wetlands are slope wetlands and provide low habitat functions. These two potential wetlands have also undergone a Preliminary Jurisdictional Determination (JD) review by the United States Army Corps of Engineers (USACE) to establish the classification and jurisdiction of the wetlands; the Preliminary JD finds that these "may be" waters of the United States. SHA could request an Approved JD before any redevelopment and potential impacts to these areas occurs. If it is confirmed that these areas fall under the jurisdiction of the USACE (and, therefore, the provisions of the Clean Water Act), the City HSD as NEPA Responsible Entity will submit a Coastal Zone Management Program Certification application to the Washington State Department of Ecology signed by SHA, with supporting documentation in the form of this EIS. The Department of Ecology, in consultation with the USACE, will make a determination of consistency with the Coastal Zone Management Program.

Section 401 Water Quality Certification issued by Ecology is part of Clean Water Act compliance. Consultation by USACE with Ecology is not always needed. If potential impacts to the onsite wetlands were to fall under a USACE Nationwide permit, certain conditions would be required for Section 401 compliance and individual Ecology review would not be required. If individual review is required by Ecology under Section 401, this would also trigger their review for Coastal Zone Management Program consistency.

Local Plans, Policies and Regulations

Redevelopment of the Yesler Terrace site under the Preferred Alternative would generally be within the range of redevelopment assumed for DEIS Alternatives 1-3. Following are updated discussions of the relationship of the Preferred Alternative to local plans, policies and regulations.

City of Seattle Comprehensive Plan (1994, as amended)

Refer to pages 3.9-11 to 3.9-12 of the DEIS for a summary of the City of Seattle Comprehensive Plan.

Urban Village Element

Refer to pages 3.9-12 to 3.9-16 of the DEIS for a summary of Urban Village Element goals and policies that are most applicable to the proposed redevelopment of Yesler Terrace.

Discussion: According to the 2009 City of Seattle Comprehensive Plan and its Future Land Use Map, the Yesler Terrace site, including the East of 12th Sector, is located in the First Hill/Capitol Hill Urban Center. This Urban Center contains four Urban Center Villages: 12th Avenue, Capitol Hill, First Hill and Pike Pine. The West of Boren Sectors are located within the First Hill Urban Center Village, and the East of Boren and East of 12th Sectors are located within the 12th Avenue Urban Center Village.

Consistent with the goals and policies identified for Urban Centers, and similar to DEIS Alternatives 1-3, the Preferred Alternative would increase residential density in the area and would provide a variety of employment-generating uses onsite in a compact, mixed use pattern.

Yesler Terrace presently contains no commercial or retail development space; redevelopment under the Preferred Alternative would introduce 88,000 SF of neighborhood commercial space to the site (similar to DEIS Alternative 3). The Preferred Alternative includes 900,000 SF of office development, midway between the amounts proposed under DEIS Alternatives 1 and 2. Mixed use redevelopment under the Preferred Alternative, including residential and employment uses would be integrated with parks and open spaces, generally as described in the DEIS for Alternatives 1-3.

Similar to DEIS Alternatives 1-3, the Preferred Alternative would redevelop a site that is currently underutilized in terms of density, consistent with the Comprehensive Plan goal to use the limited land resources in Urban Centers more efficiently. The Preferred Alternative would contribute towards meeting or exceeding established growth targets identified in the Comprehensive Plan for housing and employment for both the 12th Avenue and First Hill Urban

Center Villages. **FEIS Tables 3.9-1 and 3.9-2** compare the Preferred Alternative and DEIS Alternatives 1-4 to the Comprehensive Plan growth targets.

**Table 3.9-1
REDEVELOPMENT ALTERNATIVES' CONTRIBUTION TO THE
2024 HOUSEHOLD GROWTH TARGETS**

First Hill/ Capitol Hill Center	Households (HH Growth)							
	Growth Target (2024 HH Growth)	Preferred Alt.	DEIS Alt. 1	DEIS Alt. 1A	DEIS Alt. 2	DEIS Alt. 3	DEIS Alt. 4	No Action Alt.
12 th Ave. UCV ¹	700	460	213	213	213	263	264	0
Capitol Hill* UCV	1,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
First Hill UCV	1,200	3,979	2,226	2,226	3,226	4,176	699	0
Pike/Pine* UCV	600	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	22,520	4,439	2,439	2,439	3,439	4,439	963	0

Source: City of Seattle Comprehensive Plan, 2009.

¹ Urban Center Village (UCV)

*No portions of the Yesler Terrace site are located within this Urban Center Village.

**Table 3.9-2
REDEVELOPMENT ALTERNATIVES' CONTRIBUTION TO THE
2024 EMPLOYMENT GROWTH TARGETS**

First Hill/ Capitol Hill Center	Employment (Jobs) Growth							
	Growth Target (2024 Job Growth)	Preferred Alt.	DEIS Alt. 1	DEIS Alt. 1A	DEIS Alt. 2	DEIS Alt. 3	DEIS Alt. 4	No Action Alt.
12 th Ave. UCV ¹	700	-19	8	8	8	22	8	0
Capitol* Hill UCV	900	n/a	n/a	n/a	n/a	n/a	n/a	n/a
First Hill UCV	2,000	3,134	2,668	1,338	3,371	4,074	-9	0
Pike/Pine UCV*	1,000	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	4,600	3,115	2,676	1,346	3,379	4,096	-1	0

Source: City of Seattle Comprehensive Plan, 2009.

¹ Urban Center Village (UCV)

*No portions of the Yesler Terrace site are located within this Urban Center Village.

In the East of Boren and East of 12th Sectors, the Preferred Alternative would result in a reduction in employment, as compared to existing conditions. There are currently approximately 32 employees based within the East of 12th Sector, and 9 based in the East of Boren Sector. Overall, it is estimated that the neighborhood commercial space that would be provided in these two sectors under the Preferred Alternative (13,000 SF) would accommodate approximately 22 employees. As indicated by **FEIS Table 3.9-2**, above, this would result in 19 less employees within these sectors as compared to existing conditions.

In the West of Boren Sectors, the Preferred Alternative would exceed the First Hill Urban Village household growth target by approximately 331 percent, and would exceed the job growth target by approximately 157 percent. The onsite residential population in the West of Boren Sectors would increase from approximately 1,231 residents to 7,324 residents. Employment capacity would increase from the existing 142 jobs to 3,134 jobs.

Overall, proposed redevelopment under the Preferred Alternative would increase residential densities and employment levels at the FEIS site (the DEIS site plus the East of 12th Sector), in accordance with the Comprehensive Plan policies and goals. See **FEIS Section 3.16, Socioeconomics**, for additional information about the City's employment and household growth targets.

The proposed infill redevelopment would consume less land than would lower density development, and could be viewed as being more efficient from a land use perspective. The Preferred Alternative would achieve similar density levels to those described in the DEIS for Alternative 3.

As described in the DEIS, the location of the site is conducive to walking and the use of public transit. The Preferred Alternative would improve pedestrian circulation throughout the site by creating a system of pedestrian linkages to connect public open spaces, streets and key commercial nodes, similar to DEIS Alternatives 1-3.

The East of 12th Sector is located a half block to the east of the East of Boren Sector, and approximately three blocks to the east of the central part of the DEIS Site. Residents in this area of the site would need to cross two roads in order to access the central part of the DEIS Site). As part of the project, SHA would coordinate with the First Hill Streetcar project to improve the crosswalks at the Boren Avenue/Yesler Way intersection (see **FEIS Section 3.13, Transportation**, for additional information). Alternatively, residents in the East of 12th Sector could access the central part of the DEIS Site (Yesler and Broadway) via the streetcar from a stop at 14th Avenue and S Washington Street.

Land Use Element

Refer to pages 3.9-19 to 3.9-20 of the DEIS for a summary of the Land Use Element goals and policies that are most applicable to the proposed redevelopment of Yesler Terrace.

Discussion: The City of Seattle *Future Land Use Map* currently designates the West of Boren Sectors as a Multi-Family Residential area. The East of Boren Sector is currently designated as a Multi-Family Residential and a Commercial / Mixed Use Area. Similar to DEIS Alternatives 1-3, the Preferred Alternative would introduce a mix of uses, building heights and densities within the West of Boren Sectors which are not consistent with the current land use designation depicted on the Future Land Use Map.

As part of the City's annual Comprehensive Plan Amendment cycle, in May 2010, the City's Department of Planning and Development proposed a Comprehensive Plan Amendment to establish Master Planned Community sites and policies. The intent is to establish a mechanism in the City's Comprehensive Plan to consider planning for large sites, such as Yesler Terrace, and also to designate Yesler Terrace as a Master Planned Community on the *Future Land Use Map* in the Plan. In July 2010, the City Council made a threshold decision to include the Master Planned Community amendment on the docket for further consideration. The City then conducted its own environmental review on the package of annual Comprehensive Plan Amendments, including the Master Planned Community amendment, separate from this DEIS. A City Council decision on whether to adopt this package of Amendments is anticipated to occur in April, 2011. If this action is approved, it would resolve the inconsistency with the current land use designation for the site.

East of 12th Sector

The redevelopment concept proposed in the East of 12th Sector under the Preferred Alternative would be consistent with the current Multi-family Residential and Mixed Use Commercial land use designations identified on the *Future Land Use Map*. Land uses in the East of 12th Sector would shift from office/archival uses, to multifamily residential uses, with some neighborhood commercial uses. This sector is not included in the Master Planned Community designation proposal for the DEIS Site.

Housing Element

Refer to pages 3.9-22 to 3.9-23 of the DEIS for a summary of Housing Element goals and policies that are most applicable to the proposed redevelopment of Yesler Terrace.

Discussion: The Preferred Alternative, including the proposed zoning changes that would be necessary to accommodate mixed use redevelopment, would increase the City's zoned development capacity and contribute to accommodating Seattle's share of King County's projected household growth, generally as described in the DEIS for Alternatives 1-3.

Redevelopment of the site under the Preferred Alternative would provide the opportunity to increase housing capacity to 5,000 units, similar to DEIS Alternative 3. Consistent with the Housing Element goals and policies, these households would be affordable to a diversity of incomes, household types and household sizes.

Similar to DEIS Alternatives 1-4, no net loss of housing would occur with redevelopment of the site under the Preferred Alternative, consistent with Policy H17. New low income housing would be added to the site over and above the one-for-one replacement of the existing extremely low income housing units. The new low income housing would be provided for a range of low income levels, including 290 very low income units serving people with incomes at or below 30-60 percent of the average mean income (AMI), and 950 units of low income housing serving people with incomes at or below 80 percent of the AMI. The total mix of new low income housing assumed under the Preferred Alternative would be similar to that assumed for DEIS Alternative 2 (335 very low income units and 950 low income units).

Approximately 3,200 market rate units would be developed under the Preferred Alternative, which is 327 more market rate units than assumed under DEIS Alternative 3, and 1,046 and 1,660 more market rate units than DEIS Alternatives 2 and 1, respectively. The new affordable

and market rate housing would be developed in proximity to the new First Hill Streetcar line, as described in the DEIS for Alternatives 1-3, to support a pedestrian-friendly community.

Similar to DEIS Alternatives 1-3, redevelopment under the Preferred Alternative would be intended to enhance and revitalize the quality and character of the site by creating a compact, mixed use community with job-creating spaces. Approximately 88,000 SF of neighborhood commercial space would be provided under the Preferred Alternative, similar to DEIS Alternative 3. Approximately 900,000 SF of office/lodging space would be provided, similar to DEIS Alternative 1. Also, approximately 65,000 SF of neighborhood services space would be provided, 15,000 SF greater than the levels assumed for DEIS Alternatives 1-4.

As assumed for DEIS Alternatives 1-4, some ground-related housing capacity at the base of residential buildings would be included under the Preferred Alternative to provide large households with direct access to yards or open space.

Neighborhood Planning Element

Refer to page 3.9-25 of the DEIS for a summary of the Neighborhood Planning Element. First Hill Neighborhood Plan

Refer to pages 3.9-25 to 3.9-27 of the DEIS for a summary of the First Hill Neighborhood Plan goals and policies that are most applicable to the proposed redevelopment of Yesler Terrace.

Discussion: The West of Boren Sectors are located within the First Hill Neighborhood and the First Hill Neighborhood's Urban Center Village, except for a small portion of the site, to the south of S Main Street, which is located within the Chinatown-International District.

The Preferred Alternative would establish a mixed-income residential community in First Hill integrating residential, neighborhood commercial, office/lodging, and neighborhood services uses, similar to that described in the DEIS for Alternatives 1-3.

Under the Preferred Alternative, approximately 75,000 SF of neighborhood commercial development and 900,000 SF of office/lodging space would be accommodated within the West of Boren Sectors. This new development would allow for an increased variety of businesses and more employment opportunities within the First Hill neighborhood, and would contribute to a more active street environment.

Under the Preferred Alternative, a variety of open space types and sizes would be provided throughout the site in order to accommodate the mix of assumed uses and user populations, generally similar to DEIS Alternatives 1-4. Public open space would be open to all members of the public and would include both active and passive recreational opportunities, as described in the DEIS for Alternatives 1-4 (see **FEIS Section 3.15.1, Parks**, for further information on parks and open space).

Under the Preferred Alternative, all the existing deteriorating extremely low income housing units would not be retained; however, these units would be replaced onsite, including within the East of 12th Sector. More low income housing units would be built under the Preferred Alternative than are currently present on the DEIS site, with the addition of 290 very low income units and 950 low income units, similar to DEIS Alternative 2.

Similar to Alternatives 1-3, the Preferred Alternative would provide a range of residential unit configurations and sizes, and would add to the diversity of housing stock available in the City. Redevelopment of Yesler Terrace under the Preferred Alternative would accommodate a portion of the housing growth projected for the City of Seattle over the next 20 years.

Pedestrian facilities and connections would generally be improved, as noted for DEIS Alternatives 1-4.

Central Area Neighborhood Plan/12th Ave. Urban Center Village

Refer to pages 3.9-29 to 3.9-30 of the DEIS for a summary of the Central Area Neighborhood Plan/12th Avenue Urban Center Village goals and policies that are most applicable to the proposed redevelopment of Yesler Terrace.

Discussion: The East of Boren and East of 12th Sectors are located within the 12th Avenue Urban Center Village, which is generally bounded by E Madison Street on the north, 14th and 15th Avenues on the east, Boren Avenue S on the south and Broadway on the west.

Under the Preferred Alternative these two sectors would be redeveloped according to the existing zoning. A portion of the King County Archive property in the East of 12th Sector would require a Conditional Use Permit to establish residential uses at this location (see the Land Use Code discussion below for more information).

The redevelopment would establish a mixed use, mixed income community with approximately 500 residential units (250 in the East of Boren Sector and 250 in the East of 12th Sector) and 13,000 SF of neighborhood commercial space (9,000 SF in the East of Boren Sector and 4,000 SF in the East of 12th Sector). The new development would contribute to a thriving mixed use residential and commercial area and improve existing conditions, as called for within this Urban Center Village.

The redevelopment would provide additional mixed use development along both 12th Avenue and E Yesler Way, consistent with the policy to encourage increased housing density in these areas. Semi-private open space would also be provided in both sectors (0.77 acres in the East of Boren Sector and 1.29 acres in the East of 12th Sector) to serve residents and employees in these sectors.

Downtown Urban Center – Chinatown/International District Urban Village Plan

Refer to pages 3.9-30 to 3.9-31 of the DEIS for a summary of the Chinatown/International District Urban Village Plan goals and policies that are most applicable to the proposed redevelopment of Yesler Terrace.

Discussion: The Preferred Alternative would create a new pedestrian connection in the SW Sector to the south of the site to S Jackson Street that would improve pedestrian access to the Chinatown/International District Urban Village as well as key transit routes along S Jackson Street and the International District and King Street Stations. The new connection would be designed to maximize personal safety through proximity to proposed buildings and lighting (see **FEIS Section 13, Transportation**, for details).

Environment Element

Refer to pages 3.9-32 to 3.9-33 of the DEIS for a summary of Environment Element goals and policies that are most applicable to the proposed redevelopment of Yesler Terrace.

Discussion: Creating an environmentally sustainable community is one of the objectives of the proposal, and sustainable design is and will be a guiding principle for the redevelopment of Yesler Terrace under the Preferred Alternative, generally as described in the DEIS for Alternatives 1-4. Sustainable design would be incorporated into the approach to the design of the neighborhood as a whole, in the future design of the street and infrastructure systems, and in the future design of buildings. See **FEIS Section 3.4** for additional information.

Livable South Downtown Zoning Changes

Refer to page 3.9-34 to 3.9-35 of the DEIS for a summary of the Livable South Downtown Planning Study Executive Recommendations issued in December 2009.

Discussion: Since issuance of the Executive's Recommendations for zoning changes in the South Downtown area, the Seattle City Council has been considering those zoning changes at public meetings throughout 2010, and in the first quarter of 2011. City Council adoption of zoning changes is anticipated in April or May of 2011.

In terms of zoning changes near the Yesler Terrace site, the Executive's Recommendation was for the zoning in the area south of S Main Street, and east of 10th Ave S, to change from Commercial 1 with a 65-foot height limit, to Downtown Mixed Residential/Commercial with varying height limits of 65, 85, and 150 feet, depending on the building use. As part of Council review of the zoning changes, it is possible that this particular recommendation will be revised. At the time of this FEIS, the Council is considering allowing buildings up to 150 feet only in the area south of S King Street, with a maximum height of 85 feet north of S King Street. If enacted, an 85-foot height limit would apply south of S Main Street, across the street from the southern boundary of Yesler Terrace. In comparison, the Preferred Alternative proposes buildings to a height of 160 feet north of S Main Street and east of 10th Ave S.

The Preferred Alternative would provide increased residential and employment density on the Yesler Terrace site, and would be consistent with the Livable South Downtown objectives, generally as described in the DEIS for Alternatives 1-3.

City of Seattle Consolidated Plan for Housing and Community Development, 2009-2012

Refer to page 3.9-36 of the DEIS for a summary of the Consolidated Plan for Housing and Community Development.

Discussion: Similar to DEIS Alternatives 1-4, the Preferred Alternative would promote a high quality living environment by replacing deteriorating housing (including within the East of 12th Sector) and developing an improved and sustainable system of streets with sidewalks and landscape plantings, meeting or exceeding current City of Seattle design standards.

Specifically, the Preferred Alternative would provide 88,000 SF of neighborhood commercial space (the same as was assumed for DEIS Alternative 3), 900,000 SF of office/lodging space (similar to Alternative 1), and 65,000 SF of neighborhood services space (15,000 SF greater than was assumed for DEIS Alternatives 1-4). The Preferred Alternative would further improve circulation and access to surrounding neighborhoods by reconfiguring the circulation infrastructure across the site. This would be achieved by vacating some existing streets, dedicating new streets and expanding some existing right-of-ways across the site. The street grid under the Preferred Alternative is essentially the same as the street grid assumed for DEIS Alternatives 2 and 3 (see DEIS Figures 2-6 and 2-7); however, it is designed to retain the Steam Plant building, to minimize utility relocation, and to work better with existing topography. Refer to **FEIS Section 2.4.3** for additional information.

Low income housing opportunities on the site would be preserved and expanded, as described previously. New low income housing (above the one-for-one replacement of the existing extremely low income units) would be provided for a range of income levels including 290 very low income units serving people with incomes at or below 30-60 percent of the AMI, and 950 units of low income housing serving people with incomes at or below 80 percent of the AMI. Overall, approximately 36 percent of the total housing units provided onsite under the Preferred Alternative would consist of low income housing, affordable to households earning between 0 and 80 percent of the AMI (as compared to 43 to 49 percent under DEIS Alternatives 1-3). The remaining units would consist of market rate housing.

The new low income housing developed onsite under the Preferred Alternative would be over and above the one-for-one replacement of the existing extremely low income housing units and would increase the City's overall stock of affordable rental/for-sale housing.

Harborview Medical Center Compiled Major Institution Master Plan –
October 2000

Refer to page 3.9-37 of the DEIS for a summary of the Harborview Medical Center Compiled Major Institution Master Plan.

Discussion: The Preferred Alternative would be generally consistent with the Comprehensive Plan's Urban Center goals and policies, as described in the DEIS for Alternatives 1-3, and would be compatible with the Harborview Major Institution Master Plan. See **FEIS Section 3.8, Land Use**, for further information about land use compatibility.

Seattle Land Use Code

Refer to the DEIS, pages 3.9-38 and 3.9-39, for a summary and discussion of the existing and proposed zoning on the DEIS Site. The Preferred Alternative would generally be consistent with these regulations, similar to the discussion presented for Alternatives 1-3 in the West of Boren Sectors, and Alternative 3 in the East of Boren Sector.

The following is an overview of the zoning and development code requirements for the East of 12th Sector, together with a discussion of the relationship of the Preferred Alternative to these regulations.

East of 12th Sector

The East of 12th Sector contains three zoning designations: The King County Archive property is zoned Commercial (C2-65) and Neighborhood Commercial (NC3-65); the Baldwin Apartments building property is zoned Residential Lowrise -3 (LR-3); and, the Urban League Building is zoned NC3-65, while the building's parking area is zoned LR-3 (see **FEIS Figure 2-3**, Zoning Map).

Zoning – NC3-65

- **Key Development Standards** – *Neighborhood Commercial 3 (NC3) zones are intended to support or encourage a larger pedestrian-oriented shopping district that serves the surrounding neighborhood and a larger community, citywide or regional clientele, and that provides comparison shopping for a range of retail goods and services. Typical land uses include supermarkets, restaurants, offices, hotels, clothing shops, business support services and residences that are compatible with the area's mixed use character. The maximum building height in this zone is 65 feet.*

Zoning – LR-3

Key Development Standards – *On December 14, 2010, the City Council adopted Ordinance 123495, establishing new development standards for Lowrise multifamily zones.¹ The new LR-3 zone standards provide for a variety of multifamily housing types in existing multifamily neighborhoods. A mix of small to moderate scale multifamily housing including apartments, townhouses and row-houses are encouraged. The maximum building height for apartments in this zone inside Designated Growth Areas (which includes the Urban Center in which the East of 12th Sector is located) are 40 ft. + 5 ft for a roof with minimum 6:12 pitch and + 4 ft. for partially below-grade parking.*

Zoning – C2-65

- **Key Development Standards** - *Commercial 2 zones are intended to be an auto-oriented, primarily non-retail commercial areas, characterized by larger lots, parking, and a wide range of commercial uses serving the community, citywide or regional markets. Typical land uses include warehouses, wholesale, research and development, and manufacturing uses. Residential uses are generally not allowed, but exceptions meeting specific criteria may be considered through a conditional use process. The maximum building height in this zone is 65 feet.*

Discussion: Under The Preferred Alternative, the Urban League building would be renovated for mixed uses with some neighborhood commercial uses at the ground level and apartments on the floors above. These uses are permitted outright. As noted in **FEIS Section 3.8, Land Use**, and **FEIS Section 3.16, Socioeconomics**, no adverse impacts from residential use of the Urban League building are anticipated.

¹ A "clean up" ordinance to 123495 was passed on March 21st, 2011 to clarify and correct several errors and omissions. The ordinance goes into effect on April 19, 2011.

The renovation and use of the Baldwin Apartments building would be consistent with the current LR-3 zoning.

Development of residential uses on the King County Archives site within the C2-65 zone would require an Administrative Conditional Use Permit. The site appears to meet all the criteria in the Land Use Code for allowing the conditional use, although this would need to be reviewed and confirmed by the City's Department of Planning and Development. As noted in **FEIS Section 3.8, Land Use**, and **FEIS Section 3.16, Socioeconomics**, no adverse impacts from residential development of the King County Archive site are anticipated.

Chapter 23.24 – Amendments to Official Land Use Map – Rezones

As with the DEIS Alternatives, subsequent to the Comprehensive Plan Amendment for Yesler Terrace, zoning changes would be necessary in order to accommodate the proposed mixed use redevelopment under the Preferred Alternative, including a Land Use Code text amendment and map change (legislative rezone). SMC 23.34.008, as summarized in the DEIS, sets forth general rezone criteria for rezoning property within the City of Seattle. Refer to pages 3.9-40 to 3.9-46 of the DEIS for a summary of these criteria.

Discussion: The Preferred Alternative would generally be consistent with the rezone criteria (A-1), as described in the DEIS for Alternatives 2 and 3. The following discussion highlights specific elements of the Preferred Alternative which differ from the DEIS Alternatives, and evaluates the Preferred Alternative's consistency with the rezone criteria.

General Rezone Criteria A (To be approved a rezone shall meet the identified growth targets)

Discussion: As noted in the DEIS, this criterion applies to rezones that decrease development potential; it does not limit rezones that result in growth that is greater than the growth targets established by the Comprehensive Plan. Nonetheless, for comparison purposes, the applicable growth targets are discussed below in relationship to the Preferred Alternative.

The growth targets identified for the First Hill Urban Village are 1,200 new households and 2,000 new jobs by 2024. Housing units under the Preferred Alternative would, at full buildout, result in a 331 percent increase in the aforementioned growth targets. Jobs under the Preferred Alternative would contribute 157 percent of the jobs growth target, as compared to 67 percent under DEIS Alternative 1A, and the 133-200 percent increase under DEIS Alternatives 1-3. See **FEIS Table 3.9-2** and **FEIS Table 3.9-3** for details. The residential densities assumed under the Preferred Alternative would exceed the First Hill residential density target of 32 households per acre, with a resulting 255 units per acre on the redeveloped site.

General Rezone Criteria B (Match Between Zone Criteria and Area Characteristics)

Discussion: As part of the City's annual Comprehensive Plan Amendment cycle, in May 2010 the City's Department of Planning and Development proposed a Comprehensive Plan Amendment to establish Master Planned Community sites and policies. The intent is to establish a mechanism in the City's Comprehensive Plan to consider planning for large sites, such as Yesler Terrace, and also to designate Yesler Terrace as a Master Planned Community on the *Future Land Use Map*. In July 2010, the City Council included this City-initiated Comprehensive Plan amendment on the docket for consideration in the annual cycle of

Comprehensive Plan amendments. Council action on the amendment is anticipated to occur in April, 2011.

In order to allow higher residential densities and non-residential uses, such as single-use office buildings, lodging or retail uses in the West of Boren Sectors, a Land Use Code text amendment and legislative rezone will be necessary. On a preliminary basis, DPD staff have identified the option of creating a new zone to govern development in the West of Boren Sectors. The Land Use Code text amendment would establish the new zone. Then, the new zone designation would need to be applied to the West of Boren Sectors through a legislative rezone approved by the City Council. The elements of the new zone would, in part, be informed by the analysis in this EIS. The City may decide, for uniformity purposes, to rezone the entire site to a new zone designation, even though the East of Boren Sector and the East of 12th Sector are proposed to be developed under existing zoning.

General Rezone Criteria C (Zoning History and Precedential Effect)

Discussion: The West of Boren Sectors of the Yesler Terrace site are presently zoned LR-3. Changes to the Lowrise multifamily zoning code were adopted in December 2010 under Ordinance 123495.² The zoning changes included an increase to allowable building heights and FAR limitations in LR-3 zones.

The zoning of the Little Saigon neighborhood to the south of the site is currently under review by the City Council and is likely to be revised to Downtown Mixed use Residential/Commercial (DMR/C 65/65-85 (150) from the current C1-65 and NC3-65 zoning. The heights adjacent to the Yesler Terrace site (between S Main Street and S King Street) would be limited to 85 feet. These zoning changes are proposed as part of the *Livable South Downtown Plan*, and are intended to encourage residential and job growth development while allowing existing small businesses to adapt, retaining the existing neighborhood character and improving livability. The *Livable South Downtown Plan* states that one objective of the proposed zoning changes is to retain the small and medium size character of the area between S Main Street and Weller Street, which is adjacent to the southern portion of the site.

A change in zoning of the Yesler Terrace site would not necessarily create a precedential effect, as the Yesler Terrace site is unique in many respects. It is very large in size, under single ownership, and with a history of master planning of the site. It is because of these unique characteristics that DPD is considering creation of a new zone.

General Rezone Criteria D (Neighborhood Plans)

Discussion: As noted in the DEIS, the First Hill Neighborhood Plan contained within the City's Comprehensive Plan is the Council-adopted neighborhood plan which applies to the West of Boren Sectors, and the Central Area Neighborhood Plan applies to the East of Boren and East of 12th Sectors. These plans do not establish policies to guide future rezones, nor do they provide for rezones of particular sites or areas.

² A "clean up" ordinance to 123495 was passed on March 21st, 2011 to clarify and correct several errors and omissions. The ordinance goes into effect on April 19, 2011.

General Rezone Criteria E (Zoning Principles)

Discussion: The discussion regarding zoning principles contained on pages 3.9-42 and 3.9-43 in the DEIS is generally applicable to the Preferred Alternative. The Preferred Alternative would feature building heights in the West of Boren Sectors that are similar to DEIS Alternatives 2, with the exception being that portion of the SE Sector south of Washington Street, would be limited to 160 feet.

General Rezone Criteria F. 1. (Impact Evaluation)

Discussion: The purpose of the Yesler Terrace Redevelopment proposal is to redevelop this community into a mixed income, mixed use community that is intended to better serve existing and future residents. No net loss of housing would occur under the Preferred Alternative, and the existing low income housing units would be replaced onsite, including within the East of 12th Sector. New low income housing would also be added to the site under the Preferred Alternative, over and above the one-for-one replacement of the existing extremely low income housing units. Additionally, market rate housing would be developed onsite. See **FEIS Section 3.16, Socioeconomics**, for additional information about housing.

As noted in the DEIS for Alternatives 1-3, no significant adverse impacts to public services including schools, parks, fire, police, solid waste or community services would be expected under the Preferred Alternative. See **FEIS Section 3.15, Public Services**, for further information. As well, no significant earth, water resources, plants and animals, energy, or environmental health impacts would be anticipated.

With respect to noise conditions on the site, no significant impacts are expected as a result of redevelopment under the Preferred Alternative (i.e. due to increased traffic on area roadways or due to heating, venting and air-conditioning and mechanical equipment associated with new buildings). However, noise modeling indicates that certain residential buildings under the Preferred Alternative would be located in locations with sound levels classified as “unacceptable,” according to HUD noise criteria (i.e. areas with sound levels above 75 decibels). Accordingly, appropriate noise control mitigation measures would be implemented to provide interior sound levels that are both consistent with HUD criteria and appropriate for a livable environment. See **FEIS Section 3.7, Noise**, for additional information. Similarly, regarding air quality conditions on the site, no significant air quality impacts are expected as a result of redevelopment under the Preferred Alternative (i.e. due to increased traffic on area roadways). However, the site suitability analysis indicates that certain toxic air pollutants associated with roadways in the vicinity of the Yesler Terrace site would exceed health-based standards. See **FEIS Section 3.2, Air Quality**, for additional information.

The proposal would improve pedestrian circulation throughout the site generally as described in the DEIS for Alternatives 2 and 3.

General Rezone Criteria F. 2 (Impact Evaluation Related to Access)

Discussion: The redevelopment assumed under the Preferred Alternative would not be expected to exceed street access to the area or street capacity in the area, similar to DEIS Alternatives 1-3. Under the Preferred Alternative, certain street vacations and new street dedications are assumed in order to evaluate the potential for a more connected street grid

network internally and to/from the surrounding community. See **FEIS Section 2.4.3**, and **FEIS Section 3.13, Transportation**, for additional information.

The Preferred Alternative would increase demands on transit service, however, the new First Hill Streetcar would traverse the Yesler Terrace site and would help to accommodate some of the assumed increases in transit demands.

The Preferred Alternative assumes that parking for residential uses would be provided at an overall ratio of 0.7 parking stalls per residential unit (as compared to a ratio of 0.85 stalls per unit under DEIS Alternatives 1-3). Under the Preferred Alternative, parking would primarily be in below grade garages under buildings and plazas.

From October 2010 through January 6, 2011, additional combined sewer monitoring was performed in support of this FEIS analysis to supplement the preliminary analysis performed by Seattle Public Utilities in July 2009 that evaluated the capacity of the City of Seattle combined sewer system downstream of Yesler Terrace Development. The updated pipe capacity analysis utilized a simple flow routing model. Using the recent flow monitoring data, the existing 8-inch combined sewer pipe south of 9th Avenue and Spruce Street, and the 12-inch combined sewer pipe in E Yesler Way east of Broadway Avenue, are at their capacity with the existing flows. A hydraulic model will still be developed after six months of flow monitoring data is completed to account for backwater effects or the possibility of additional capacity due to surcharging. See **FEIS Section 3.14, Utilities**, and **FEIS Chapter 4**, for additional information.

General Rezone Criteria G (Changed Circumstances)

Discussion: The Preferred Alternative would generally be consistent with the discussion provided in the DEIS with respect to the ‘changed circumstances’ criteria and the original intent of the LR-3 zoning designation, the condition of the site’s existing buildings, and the evolution of nearby neighborhoods in recent years. Refer to page 3.9-45 to 3.9-46 of the DEIS for further information.

General Rezone Criteria H (Overlay Districts)

Discussion: The Yesler Terrace site is not located within an overlay district.

General Rezone Criteria I (Critical Areas)

Discussion: Several critical areas have been mapped on the Yesler Terrace site, within the West of Boren Sectors, including geologic hazards (landslide prone areas, steep slopes, seismic areas). Two potential wetland features have also been identified on the site. Redevelopment of Yesler Terrace would be designed to comply with all applicable Environmental Critical Areas requirements. See the discussion below for details.

Environmentally Critical Areas

Refer to page 3.9-46 of the DEIS for a summary of Environmentally Critical Areas codes contained in Seattle Municipal Code (SMC) 25.09 related to wetlands and geologic hazard areas. The Preferred Alternative would generally comply with the environmentally critical areas regulations, as described in the DEIS for Alternatives 1-4. Following are updates to certain of the discussions.

Wetlands

Refer to page 3.9-47 of the DEIS for a summary of SMC.09.020 as it relates to the identification of wetlands and wetland development.

Discussion: Section 3.4 of the DEIS noted that two wetlands were potentially present in the southwestern portion of the site. Additional site investigation was conducted subsequent to issuance of the DEIS and it was determined that these areas have wetland hydrology and soil conditions. Information on these potential wetlands was submitted to the U.S. Corps of Engineers in December 2010 for a determination as to their status. Similar to DEIS Alternatives 2 and 3, these wetlands would be impacted by site redevelopment under the Preferred Alternative. Appropriate mitigation measures would be implemented, including mitigation in accordance with SMC 25.09.020, to address these impacts. See **FEIS Section 3.4, Plants and Animals** and **FEIS Appendix D**, for additional information. No wetlands or streams were identified on the East of 12th Sector.

Steep Slopes

Refer to page 3.9-48 of the DEIS for a summary of SMC 25.09.020(A)(5) as it relates to the definition and regulation of steep slopes.

Discussion: Steep slopes are located in the West of Boren Sectors of the DEIS site. Proposed redevelopment under the Preferred Alternative would occur in these steep slope areas, similar to under DEIS Alternatives 2 and 3. As part of the environmental review process for the Yesler Terrace project, Seattle Housing Authority (SHA) submitted documentation to the Seattle Department of Planning and Development (DPD) to support a request for relief from the prohibition of development on the steep slopes in the West of Boren Sectors. This request was based on the fact that the identified Environmental Critical Area steep slopes were created through previous legal grading activities. Seattle DPD subsequently granted SHA's request on October 19, 2010, and a copy of the DPD decision is included in **FEIS Appendix B**. See **FEIS Section 3.1, Earth**, for additional information.

City of Seattle Urban Forest Management Plan

Summary: *Refer to page 3.9-50 of the DEIS for the summary of the City's Urban Forest Management Plan as related to the steps the City of Seattle must take to preserve Seattle's trees.*

Discussion: As was noted in the DEIS, presently, approximately 22 percent of the total site is covered in tree canopy. More than half of the onsite trees have been identified as being unhealthy or having a low preservation value. Of the 410 onsite trees, 22 have been identified as exceptional. Under the Preferred Alternative more total tree canopy would be preserved as compared to DEIS Alternatives 1-4. The buildings and open space areas assumed under the Preferred Alternative have been configured such that more existing exceptional and valuable trees (and existing tree canopy) would be preserved than under DEIS Alternatives 1-4. As a result, at least 2 percent more tree canopy coverage would be provided under the Preferred Alternative in 2025 than under DEIS Alternatives 1-4. The addition of the new landscaping and trees provided as mitigation for tree removal would increase tree canopy coverage to 27 percent under the Preferred Alternative, which is above Seattle's 30-year goal of 20 percent coverage

for all sites zoned as multi-family residential or 15 percent coverage for all sites zoned commercial/mixed use (see **FEIS Section 3.4, Plant and Animals**, for additional details).

City of Seattle Street Vacation Policies

Summary: Refer to page 3.9-51 of the DEIS for a summary of the City's street vacation policies. As was noted in the DEIS for Alternatives 2 and 3, the Preferred Alternative could potentially include street vacations of on-site streets. Please see **FEIS Section 2.4.3** for details regarding locations of proposed street vacations under the Preferred Alternative. The following is a summary analysis of the Preferred Alternative's consistency with the City's adopted street and alley vacation policies.

Summary: Policy 1 – Circulation and Access. Refer to pages 3.9-51 to 3.9-52 for a summary of circulation and access policies.

Discussion: The proposed street vacations associated with the Preferred Alternative would result in improved vehicular, bicycle and pedestrian circulation, and improved access in the neighborhood, generally as described in the DEIS for the proposed street vacations associated with Alternatives 2 and 3. As noted in the DEIS, the existing street network is characterized by a lack of connection between the Yesler Terrace community and the surrounding neighborhood. Project planning determined that a more connected street concept was preferred over the existing street layout, as it would afford greater ease in navigation (wayfinding) while providing a more pedestrian-oriented community and streetscape.

The street grid in the Preferred Alternative is essentially the same as the street grid assumed for DEIS Alternatives 2 and 3 (see DEIS Figures 2-6 and 2-7); however, it is designed to retain the Steam Plant building, to minimize utility relocation, and to work better with the existing topography. The street vacations associated with the Preferred Alternative would establish an internal loop of secondary streets, which would connect the West of Boren Sectors without the need to travel on primary streets, such as E Yesler Way and Broadway. This internally connected loop of streets would eliminate dead-end and unimproved rights-of-way, and would be developed with shared bike/auto lanes and sidewalks that encourage pedestrian and bicycle activity and increased use of public transit. Proposed land uses and densities under the Preferred Alternative further support non-automobile transportation choices. Vacation of the existing streets onsite would improve circulation and access in this part of Seattle, and would substitute an alternative, improved circulation route as a long-term public benefit.

The Preferred Alternative proposes to vacate several Access Streets. For most of these, a new street in a parallel alignment would be dedicated to replace the function of the street, but in a location that improves the street grid by aligning at intersections or providing better connectivity to adjacent parcels. Three street segments would not be replaced with nearby dedications: S Main Street, the stub of 9th Avenue south of Main Street, and Terry Avenue. S Main Street currently dead-ends into I-5. It and the stub of 9th Avenue provide no access purpose in the proposed redevelopment plan. Because of steep slopes, buildings in this area would be accessed from S Washington Street or 10th Avenue S. Terry Avenue between Alder Street and Broadway is also proposed for vacation. The street grid shifts at Broadway – to the west, avenues are oriented at an angle to true north and to the east, the avenues are oriented due north. Therefore, Terry Avenue currently intersects Broadway at an acute angle in close proximity to other intersections. Vacating this segment of Terry Avenue would improve the grid. A newly dedicated E Fir Street would provide a good alternative route to access Broadway.

Parking along the streets to be vacated and not replaced would be accommodated by on-site parking within the redeveloped site.

Summary: Policy 2 – Utilities. Refer to page 3.9-53 of the DEIS for a summary of utilities policies.

Discussion: As noted above, under the Preferred Alternative, the realigned street grid has been designed to minimize utility relocation.

Summary: Policy 3 – Light, Air, Open Space and View. Refer to page 3.9-53 of the DEIS for a summary of light, air, open space and view policies.

Discussion: Similar to DEIS Alternatives 2 and 3, under the Preferred Alternative, more overall right-of-way would be expanded or dedicated than would be vacated (see **FEIS Figure 2-5** and **FEIS Figure 2-6**).

Summary: Policy 4 – Land Use. Refer to page 3.9-53 of the DEIS for a summary of Land Use policies.

Discussion: The increase in development potential for housing, office and neighborhood commercial uses would not be attributable to the proposed street vacations, but instead would be due to the Land Use Code text amendment and rezone that would allow mixed use redevelopment at the site.

Summary: Policy 5 – Public Benefit. Refer to page 3.9-54 of the DEIS for a summary of public benefit policies.

Discussion: As noted for DEIS Alternatives 2 and 3, if the Preferred Alternative is implemented, a street vacation petition would be required for City Council consideration. Specific public benefits that could be provided would be determined at that time. However, the existing street system within Yesler Terrace generally lacks internal and external connectivity due to the presence of several dead-end streets and unimproved rights-of-way. Vacation of existing streets under the Preferred Alternative would allow the existing street system to be reconfigured. The reconfiguration would result in long-term public benefit in that it would provide better connections to surrounding neighborhoods and would enhance way-finding and safety by eliminating dead end streets (such as S Main Street and 8th Avenue S) and improving access and circulation for emergency vehicles. Internal connectivity of the roads would make navigation within the site easier and more intuitive. An internal circulation loop of secondary access streets would connect the West of Boren Sectors without the need to travel on arterials (E Yesler Way and Broadway). These secondary streets would be developed as complete streets with shared bike/auto lanes and sidewalks, which would enhance pedestrian and bike circulation. Although right-of-way would be vacated to accomplish the street reconfiguration concept, more total area onsite would be expanded or dedicated as public streets (see **FEIS Figure 2-5** and **FEIS Figure 2-6** for total SF of vacated versus new or expanded right-of-way).

3.10 AESTHETICS, LIGHT, GLARE AND SHADOWS

This section of the FEIS contains three separate subsections: visual character, light and glare, and shadows. These sections compare the aesthetic-related impacts of the Preferred Alternative on and in the vicinity of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) to those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.10 of the DEIS). The impacts of the Preferred Alternative on the East of 12th Sector are also analyzed. Any changes in impacts and mitigation measures are identified.

3.10.1 VISUAL CHARACTER

The following section analyzes the probable significant impacts from the Preferred Alternative on the visual character at the Yesler Terrace site and in surrounding area. The impacts of the Preferred Alternative on site character, public viewsheds, and height, bulk and scale along the boundaries of the site are evaluated.

3.10.1.1 Affected Environment

DEIS Site

The general visual character of the existing Yesler Terrace DEIS Site, including the West and East of Boren Sectors, would be generally as described in the DEIS. The site is developed with linearly arranged low-rise wood-frame residential buildings and yards surrounded by chain link fences. The existing residential buildings onsite are primarily 2-stories in height and are mostly set in long rows oriented north and south or east and west, with 40 to 50 feet of private open space in between buildings. Small surface parking lots are interspersed throughout the site, and vegetation consists of mature trees, shrubs and other landscaping.

East of 12th Sector

The visual character in the East of 12th Sector consists of a 3-story multi-family residential building (Baldwin Apartments), a 3-story office building (Urban League building), and the King County Archives facility that consists of two 1-story warehouses with surface parking surrounded by a chain link fence.

Area Context

In DEIS Section 3.10.1, the visual character of the area surrounding the DEIS Site is described, including the types of buildings and uses which are present. The existing conditions in the site vicinity have generally remained the same as presented in the DEIS; therefore, no additional descriptions of the existing conditions are warranted.

The visual character surrounding the East of 12th Sector is made up of a mixture of commercial and residential buildings, ranging from 1- to 3-stories in height. To the immediate west of the King County Archives building in this sector are three 1-story commercial buildings (containing auto repair, retail and light manufacturing). Further to the west of the commercial buildings is the East of Boren Sector, on the west side of 12th Avenue. To the east of the King County Archive building, and west of the Urban League building, the visual character is mostly

comprised of residential buildings with a 3-story apartment building (Ritz Apartments), two single-family homes, a vacant lot and a 2-story townhouse building. Further to the east, the visual character consists of 2- and 3-story multifamily residential buildings. To the north of the sector are mixed use buildings, including a 1-story office building, a 3-story multifamily residential building, a 1-story church, the 3-story historic Washington Hall building, as well as surface parking lots. To the south is the 1-story Bailey-Gatzert Elementary School.

3.10.2 Impacts

This section describes changes to the visual character of the built environment that could occur as a result of the Preferred Alternative, and is organized into three separate sections including site character, viewshed and height bulk and scale.

Construction activities associated with redevelopment of the site under the Preferred Alternative would generally be similar to those described in the DEIS for Alternatives 1-4, and would consist of three primary activities: demolition of existing buildings, utilities and paved areas; and, construction of new site infrastructure, including roadways, utilities and parks; and, construction of new buildings. Within the East of 12th Sector, two existing buildings would be retained.

Construction activities, as described above, would be ongoing on portions of the site for extended periods of time and could temporarily affect the aesthetic character of the site and surrounding area. Measures to control air, noise, light intrusion and other construction related disturbances could lessen aesthetic impacts. See **FEIS Sections 3.10.2, Light and Glare, Section 3.2, Air Quality, and Section 3.7, Noise**, for further details.

Site Character

As noted in the DEIS, Alternatives 1 through 3 were developed to demonstrate a range of densities and building heights that could occur on the site over the long-term. Based on proposed land use concepts developed for Yesler Terrace, character sketch renderings were developed for these alternatives to represent the visual character of potential redevelopment on the site through streetscape illustrations. The density and building heights under the Preferred Alternative would be within the range identified for Alternatives 1-3. Therefore, the character sketch renderings prepared for the DEIS would be applicable to the Preferred Alternative, and new character sketch renderings are not warranted for this FEIS. Refer to page 3.10-3 and Figures 3.10.1-1 through 3.10-1-4 in the DEIS for the character sketch descriptions and figures.

In general, the Preferred Alternative would, at full buildout change the visual character of the DEIS Site from its existing low-rise, primarily residential uses to a high density, mixed use development with high-rise and mid-rise buildings, similar to DEIS Alternatives 2 and 3. As with DEIS Alternatives 1-3, the overall quality of building design would likely be higher compared to existing site conditions. It is assumed that building design, construction and materials would be coordinated through adoption and implementation of consistent design standards over the long-term buildout period. This would result in positive impacts relative to the visual character of the site. Within the East of 12th Sector, the visual character would reflect the transition of the King County Archives property from the low-rise industrial/warehouse buildings to a denser, mid-rise multifamily residential development. The Urban League building footprint would remain intact but the uses would transition from an office building to a mixed-use building (residential and

neighborhood commercial). The Baldwin Apartments building footprint would remain intact and the building would be reactivated with residential uses.

Viewshed

To show how certain existing views would change under the Preferred Alternative, visual simulations of potential site redevelopment were prepared for the same 18 viewpoint locations that were selected and analyzed for DEIS Alternatives 1-4.¹ These viewpoint locations were selected as the protected views to or from the site based on the City's view protection policies, which are described further below.

For purposes of the EIS analysis (including the evaluation of potential visual impacts from redevelopment to the maximum proposed heights and density), a potential capacity model was formulated to reflect the number of residential units and square footage of non-residential uses described for the Preferred Alternative. As in some ways high-rise buildings have the potential for greater environmental impacts, the capacity model for the Preferred Alternative included an assessment of where high-rise buildings could potentially be sited within the West of Boren Sectors. No high-rise buildings are proposed in the East of Boren or East of 12th Sectors. See **FEIS Chapter 2** for further information and **FEIS Figure 2-8** for the potential high-rise locations under the Preferred Alternative. In the visual simulations, the capacity model building heights are represented by the gray building simulations (and are referred to below as the capacity model development scenario). The capacity model concepts were developed with buildings at lower heights than the maximum heights, in order to assess any differences in environmental impacts. This is because not all the buildings at these locations would necessarily be built to the maximum height limit. However, the maximum height limit is also evaluated at each of the potential high-rise locations in order to allow for the possibility of a maximum height building at any one of the identified high-rise locations. The maximum building height that could be developed under proposed new zoning for Yesler Terrace (referred to below as the maximum zoning height) is shown in yellow extensions above the buildings. In some cases, depending on the viewpoint, there is no visible difference between the capacity model development scenario and the maximum zoning building heights, and no yellow extensions appear in the simulations.

Under the Preferred Alternative, residential high-rise buildings are proportionally placed in each of the NW, NE, SE, and SW Sectors (see **FEIS Figure 2-8**). In the NW Sector, two high-rise office buildings would be located adjacent to Alder Street to minimize view and shadow impacts to the site and approximately match the adjacent height and density of the adjacent zoning at Harborview Medical Center. Ten residential high-rise buildings would be distributed in the remaining sectors. Mid-rise buildings would be distributed throughout the site. Refer to **FEIS Chapter 2** for further information. These assumptions are not necessarily intended to indicate a definitive development plan for the site, but are used instead as a basis for assessing the potential visual impacts of redevelopment in this EIS. The specific number, height, location and design parameters of future onsite buildings would be determined as part of the Proposed Actions and future redevelopment proposals. What is depicted in the visual analysis are building envelopes, without design features that would typically add visual interest and reduce the perception of building bulk.

¹ 17 Viewpoints were analyzed in the DEIS, and an additional viewpoint was added and analyzed for DEIS Alternatives 1-4 in **FEIS Chapter 4**.

The following viewshed analysis groups the 18 viewshed simulations and discussions by four categories of City protected views; other representative views are discussed separately at the end of this section. Each viewshed simulation describes the existing view depicted in the photograph and evaluates the changes to the view under the Preferred Alternative. This methodology is consistent with the viewshed analysis prepared for DEIS Alternatives 1-4.

City Protected Views

The City of Seattle has adopted regulations (SMC 25.05.675) that protect views from specific viewpoints and scenic routes, and views of various landmarks, public places, the Space Needle, and skyline views. The City's public view protection policies are intended to:

protect public views of significant natural and human-made features: Mount Rainier, the Olympic and Cascade Mountains, the downtown skyline, and major bodies of water including Puget Sound, Lake Washington, Lake Union and the Ship Canal, from public places consisting of specified viewpoints, parks, scenic routes, and view corridors identified in Attachment 1" to the SEPA code.²

There are four components to a viewshed analysis for projects in Seattle:

- Impacts from City-designated viewpoints
- Impacts to designated views of the Space Needle;
- Impacts of public views on other City-designated historic Landmarks; and,
- Impacts relative to designated scenic routes

Views associated with each of these protected view categories are described further below, and potential impacts are evaluated under the Preferred Alternative

Designated Public Viewpoints

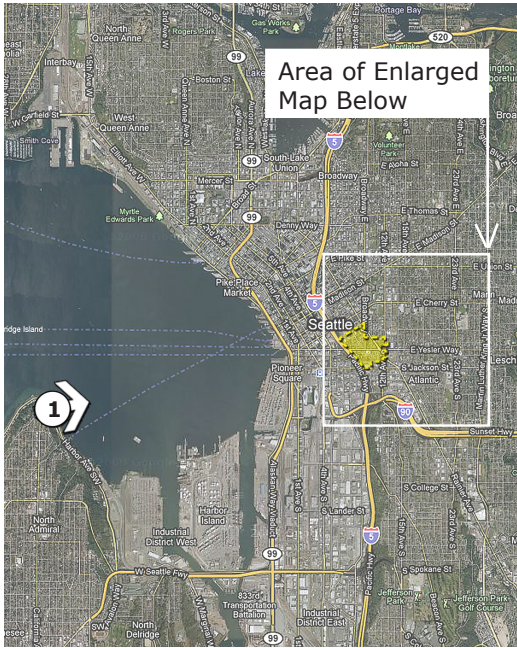
As noted in Section 3.10.1.2 of the DEIS, the City has 88 officially-designated public viewpoints, and of these, five have views that could be affected by the Yesler Terrace Redevelopment Proposal: Belvedere Viewpoint, Harborview Hospital Viewpoint, Kobe Terrace Park, Dr. Jose Rizal Park, and Pacific Medical Center. See **FEIS Figure 3.10-1** for a map showing the location of these viewpoints in relation to the site. The site would not affect the remaining 83 officially-designated public viewpoints.

Belvedere Viewpoint (FEIS Figure 3.10-2, Viewpoint 1)

Belvedere Viewpoint is located in West Seattle along Admiral Way SW approximately 3 miles to the southwest of the site. The current view from Belvedere Viewpoint is of Elliott Bay and the Downtown skyline; on very clear days, the Cascade Mountains and Mt. Rainier are visible behind the City.

Under the Preferred Alternative, the view of the site under the capacity model development scenario is visible in the mid-field view, directly to the southeast of the Downtown skyline. The height and scale of the proposed redevelopment appears slightly greater than Harborview

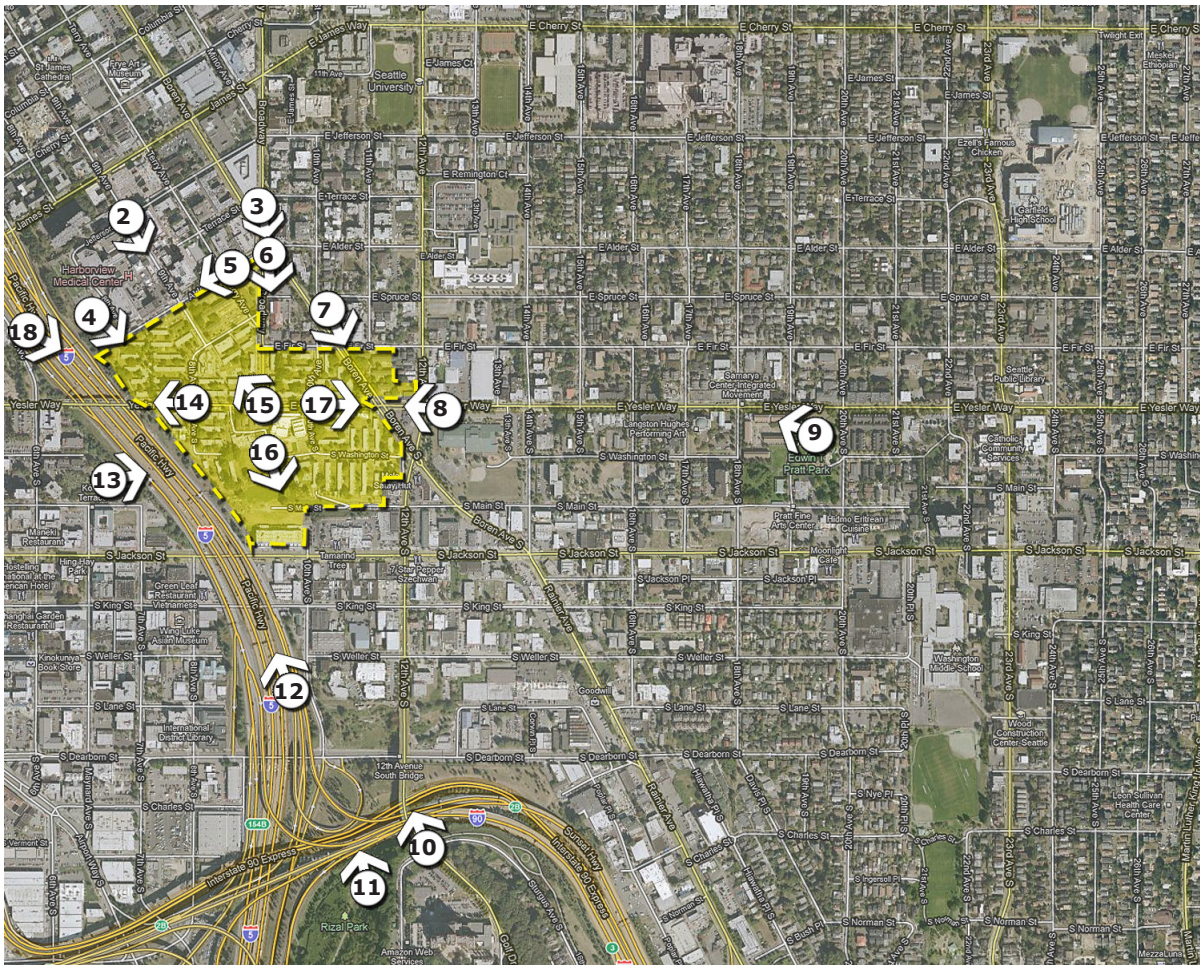
² Seattle Municipal Code Chap. 25.05.675 P.2.a.i.



Location Map - Overview

Viewpoint Location Legend

- Figure 3.10-2** Belvedere Viewpoint (Viewpoint 1)
- Figure 3.10-3** Harborview Viewpoint (Viewpoint 4)
- Figure 3.10-4** Kobe Terrace Park (Viewpoint 13)
- Figure 3.10-5** Dr. Jose Rizal Park (Viewpoint 11)
- Figure 3.10-6** Pacific Medical Center/U.S. Public Health Service Hospital (Viewpoint 10)
- Figure 3.10-7** Alder Street/Terry Avenue – Harborview Fire Station (Viewpoint 5)
- Figure 3.10-8** Yesler Community Center Gymnasium (Viewpoint 16)
- Figure 3.10-9** I-5 Northbound (Viewpoint 12)
- Figure 3.10-10** I-5 Southbound (Viewpoint 18)
- Figure 3.10-11** E Yesler Way/west of 8th Avenue, Looking West (Viewpoint 14)
- Figure 3.10-12** E Yesler Way/12th Avenue, Looking West (Viewpoint 8)
- Figure 3.10-13** 10th Avenue/Yesler Way Looking East (Viewpoint 17)
- Figure 3.10-14** Boren Place (Viewpoint 3)
- Figure 3.10-15** Horiuchi Park (Viewpoint 7)
- Figure 3.10-16** Edwin T Pratt Park (Viewpoint 9)
- Figure 3.10-17** 9th Avenue and Jefferson Street, Looking Southeast (Viewpoint 2)
- Figure 3.10-18** Broadway and Alder Street (Viewpoint 6)
- Figure 3.10-19** Broadway/E Yesler Way (Viewpoint 15)



Location Map - Enlarged

All simulations by **THE PORTICO GROUP**



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-2 Visual Simulations Belvedere Viewpoint (Viewpoint 1)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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Medical Center's to the north. Portions of the Cascade Mountains to the east of the Downtown skyline would be partially obscured. This would represent a continuation of the level of visual blockage that occurs with the existing Downtown skyline to the east. Overall, the character of this viewpoint would not change from the existing view and views of the Downtown skyline and Mt. Rainier would not be affected. Under the maximum zoning height, the view of the site would be generally as described under the capacity model, except that several high-rise buildings would appear slightly taller, although the height differential from the site would be difficult to discern at this distance. The overall visual character of the viewpoint would change as described for the capacity model. In general, the view of the site under the Preferred Alternative is similar to DEIS Alternative 2 (capacity model and maximum zoning height).

Harborview Viewpoint (FEIS Figure 3.10-3, Viewpoint 4)

Harborview Viewpoint is located in the City's First Hill Neighborhood, adjacent to the north end of the site, atop a parking garage. The view from Harborview Viewpoint includes panoramic views of the Downtown skyline and the Olympic Mountains to the west, and this is the predominant view from this viewpoint. Views to the southeast across the Hospital helipad are also possible. This is the only view that has the potential to be impacted by redevelopment of the site. The current view from this location is of the helipad in the foreground, which is typically slightly obscured by a decorative steel security fence. Tree tops, a portion of a mid-rise Harborview Medical Center building and the Yesler Terrace Steam Plant smokestack are visible in the mid-field. A portion of the Pacific Medical Center building, which is a designated City Landmark can be seen to the east. The Cascade Mountains are visible on clear days.

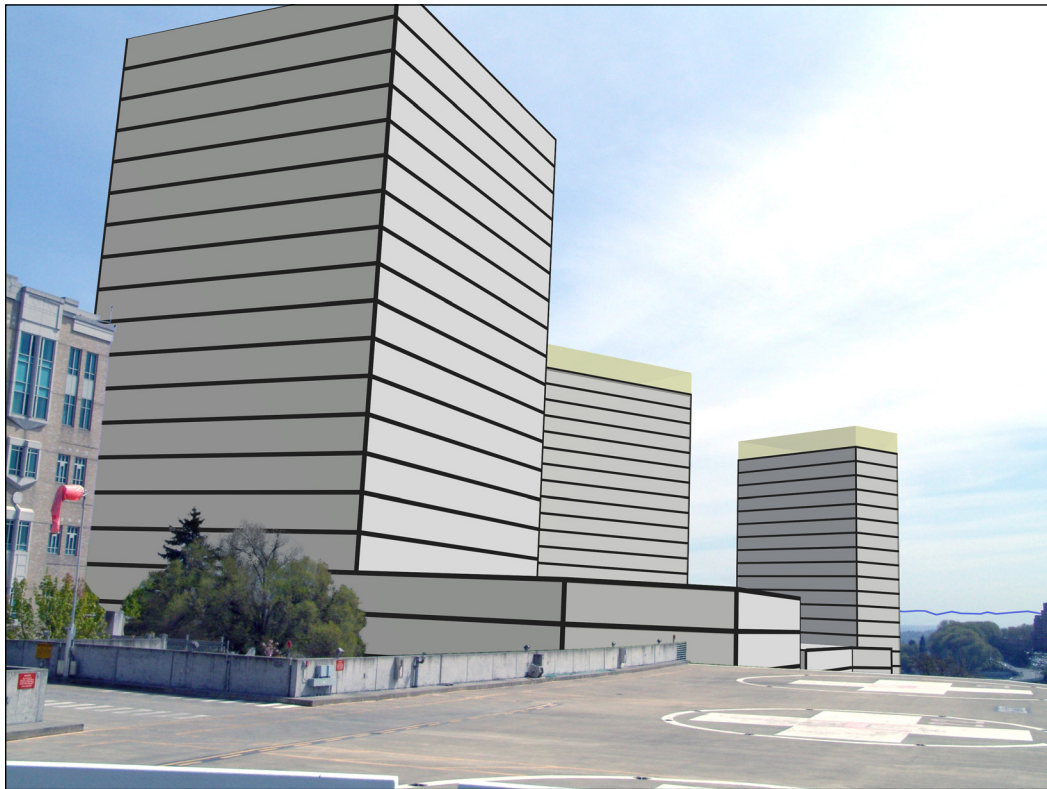
Under the Preferred Alternative, the view of the site under the capacity model development scenario would include portions of several new high-rise and mid-rise buildings. Views of the Yesler Terrace Steam Plant smokestack would be eliminated. These new buildings would obscure most of the southeast skyline and the view of the Cascade Mountains, while views of the Pacific Medical Center would not be affected. The height and scale of the new buildings would be similar to but ultimately taller than the adjacent Harborview Medical Center building. The overall character of this viewpoint would change from that of a lower density view of the distant southeast skyline, mountains and trees, to a more densely developed urban environment. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that the two high-rise buildings in the background would be one-story taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative is similar to DEIS Alternatives 1 and 2 (capacity model and maximum zoning).

Kobe Terrace Park (FEIS Figure 3.10-4, Viewpoint 13)

Kobe Terrace Park is located directly to the west of the site, on the west side of I-5. Views to the west from Kobe Terrace Park include the Downtown skyline. Views to the south include Mount Rainier. Only views to the east, across I-5, could potentially be affected by the proposed Yesler Terrace redevelopment. The current view to the east includes a rock retaining wall, plantings, trees and vegetation in the foreground. A fence is visible in the mid-field view, and in the background, part of the Yesler Terrace Steam Plant smokestack can be seen to the east, and the top of a Harborview Medical Center building can be seen to the north.



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**



Figure 3.10-4
Visual Simulations
Kobe Terrace Park (Viewpoint 13)

Yesler Terrace
Redevelopment EIS

Under the Preferred Alternative, the view of the site under the capacity model development scenario would include portions of new high-rise buildings, which would be partially obscured by existing trees and vegetation. Although the new buildings would be visible in the background, obscuring portions of the skyline and eliminating the view of the Yesler Terrace Steam Plant smokestack, the overall visual character from this viewpoint would be minimally affected. Protected views to the Downtown skyline and Mount Rainier to the south would not be affected. The view of the site under the maximum zoning height would be similar to the capacity model, except one of the high-rise buildings in the background would be one story taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative (for both the capacity model and maximum zoning) would be similar to DEIS Alternative 2, with the exception that slightly more views of the skyline would be preserved in the center of the viewpoint under the Preferred Alternative.

Dr. Jose Rizal Park (FEIS Figure 3.10-5, Viewpoint 11)

Dr. Jose Rizal Park is located in the Beacon Hill Neighborhood at the intersection of S Judkins Street and 12th Avenue S, approximately 0.5 miles southeast of the project site. The view from Dr. Jose Rizal Park to the west and north includes a panoramic view of south Downtown, the Downtown skyline, Elliott Bay, and views of the Olympic Mountains. The First Hill neighborhood and the Yesler Terrace site are visible in the distance to the north.

Under the Preferred Alternative, the view of the site under the capacity model development scenario would prominently feature a number of new high-rise and mid-rise buildings. These new buildings would block the view of existing buildings located in First Hill, such as those located on the Harborview Medical Center campus. The new buildings would be taller than existing, but somewhat less than those located Downtown to the northwest of the site. Views of the Downtown skyline would continue to be possible. The overall visual character from this viewpoint looking to the northwest would remain that of a densely developed urban area, while the density and height of visible buildings would increase on First Hill. The view of the site under the maximum zoning height would be similar to the capacity model, although most of the high-rise buildings would be slightly taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 2 (for both the capacity model and maximum zoning).

Pacific Medical Center/U.S. Public Health Service Hospital (FEIS Figure 3.10-6, Viewpoint 10)

Located on Beacon Hill, the Pacific Medical Center is a City Landmark that is, adjacent to Dr. Jose Rizal Park. This viewpoint is similar to that described for Dr. Jose Rizal Park, except that the 12th Avenue S corridor and bridge is visible in the foreground. The view to the west and north consists of a panoramic view of south Downtown, the Downtown skyline, Elliott Bay, and views of the Olympic Mountains. The view of the Yesler Terrace site is visible in the mid-field view. Behind Yesler Terrace to the north, taller buildings located on First Hill are visible; many of which are Harborview Medical Center buildings.

Under the Preferred Alternative, the view of the site under both the capacity model development scenario and maximum zoning height would be generally as described above for Viewpoint 11.




Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-5 Visual Simulations Dr. Jose Rizal Park (Viewpoint 11)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-6 Visual Simulations Pacific Medical Center/U.S. Public Health Service Hospital (Viewpoint 10)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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The overall visual character from this viewpoint looking to the northwest would remain that of a densely developed urban area, while the density and height of visible buildings would increase on First Hill. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 2 (for both the capacity model and maximum zoning).

Historic Landmark Views and Space Needle Viewpoints

In addition to view protection policies associated with officially-designated viewpoints, it is also City policy to:

*protect public views of historic landmarks designated by the City's Landmarks Preservation Board which, because of their prominence of location or contrasts of siting, age, or scale are easily identifiable visual features of their neighborhood or the City and contribute to the distinctive quality or identity of their neighborhood or the City.*³

The most visible landmark from many parts of the City is the Space Needle, which is located approximately 2 miles northwest of the site. The City has identified ten viewpoints from which views of the Space Needle are to be protected.⁴ As noted in the DEIS, the majority of these viewpoints are located to the north of the site, therefore, eliminating the potential for the proposed redevelopment to affect views of the Space Needle from these locations under any of the alternatives (including the Preferred Alternative). The remaining viewpoints, all located in West Seattle, do not include the Yesler Terrace site within any of the Space Needle's sightlines or viewpoints.⁵

Other historic landmarks that are adjacent to or visible from the site include the Harborview Fire Station building to the north of the site and the Pacific Medical Center building on Beacon Hill to the southeast. Potential impacts to views of these Landmark buildings are discussed further below. The Harborview Medical Center Central Wing is another Landmark building in close proximity to the site (see **FEIS Section 3.11, Historic Resources**, and **FEIS Figure 3.11-3** for more information and for the location of this building). However, the Central Wing building is located internal to the Harborview Medical Center campus, and does not directly border the Yesler Terrace site. While portions of this Landmark building are visible from the south, the building is largely obscured by another Harborview Medical Center building (the East Wing).

Alder Street/Terry Avenue – Harborview Fire Station (FEIS Figure 3.10-7, Viewpoint 5)

The current view from this location is of the Alder Street/Terry Avenue intersection in the foreground. On the north side of the Alder Street corridor, the 3-story Harborview Fire Station building is visible in the mid-field, and the taller, larger Harborview Research and Training building can be seen behind the Fire Station to the north. The Fire Station is a designated City Landmark building, is listed in the National Register of Historic Places, and the Washington

³ Seattle Municipal Code Chap. 25.05.675 P.2.b.i.

⁴ Seattle Municipal Code Chap. 25.05.675 P. and Seattle DCLU, 2001,

⁵ City of Seattle, Viewpoints Locater Map.



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

State Heritage Register (see **FEIS Section 3.11, Historic Resources**, for further information). On the south side of the Alder Street corridor, existing low-rise Yesler Terrace residential buildings are visible in the foreground and mid-field view. Views to the Olympic Mountains are available on clear days.

From this viewpoint, there would be no visible difference between the capacity model development scenario and the maximum zoning height. Under the Preferred Alternative, the view of the site would feature portions of a high-rise building in the foreground, and two mid-rise buildings and a high-rise building in the mid-field view on the south side of Alder Street. The mountain views would continue to be visible in the distance down the Alder Street corridor. The height and scale of the new buildings would be greater than the Fire Station building, but would generally be similar to the Harborview Research and Training building that is visible to the north of the Fire Station. The overall visual character of this viewpoint would change to a more urban development with larger, taller buildings on the Yesler Terrace site, and the overall visual effect would be to further vertically define the Alder Street corridor. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 2.

Yesler Community Center Gymnasium (FEIS Figure 3.10-8, Viewpoint 16)

The current view from this location is of a portion of a storage building to the east and the Headstart building to the west and in the foreground. The Yesler playfield is visible in the mid-field view. In the background, Beacon Hill and the Pacific Medical Center building, which is a designated City Landmark, can be seen.

From this viewpoint, there would be no visible difference between the capacity model development scenario and the maximum zoning height. Under the Preferred Alternative, the site would feature open space in the foreground. In the mid-field view, portions of mid-rise buildings would be visible to the west and east. The new buildings would eliminate the existing view of the Pacific Medical Center building and Beacon Hill. The overall character of this viewpoint would change to feature open space in the foreground and new mid-rise buildings of a greater height and scale when compared to the existing view. In general, the view under the Preferred Alternative would be similar to DEIS Alternative 2.

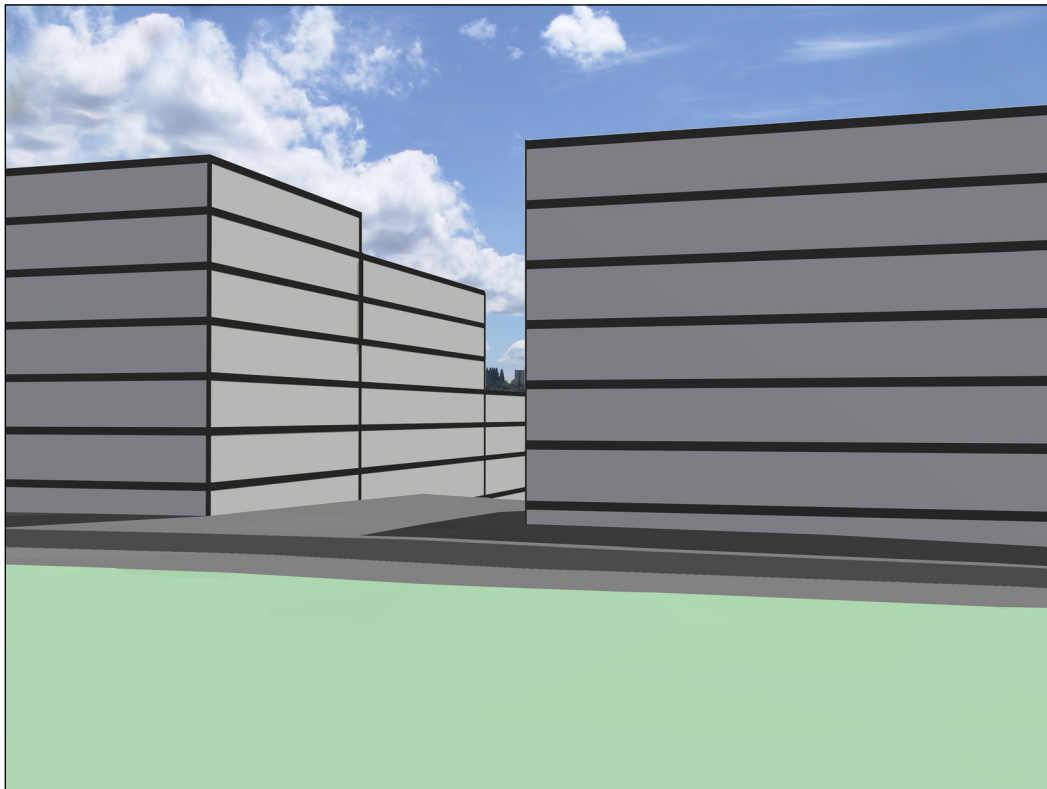
Scenic Routes

City ordinances⁶ also identify specific scenic routes throughout the City in which view protection is to be encouraged. Several streets and major transportation corridors on or within proximity to the site have been designated as scenic routes; they include: Fifth Avenue, E Yesler Way, Jackson Street and I-5. Due to the location of the project site, only I-5 and Yesler Way could have views of the redevelopment under the Preferred Alternative; E Yesler Way bisects the site, and I-5 is located directly to the west. Viewshed simulations are provided from these two roadways to illustrate potential visual impacts (see **FEIS Figure 3.10-1** for the viewpoint location map).

⁶ Ord. #97025 (Scenic Routes Identified by the Seattle Engineering Department Traffic Division) and Ord. #114057 (Recommended Open Space Policies).



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-8 Visual Simulations Yesler Community Center Gymnasium (Viewpoint 16)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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I-5 Northbound (FEIS Figure 3.10-9, Viewpoint 12)

The current view traveling northbound on I-5 is of the highway corridor in the foreground and the Yesler Bridge in the mid-field. Downtown high-rise buildings are visible to the west, and the Yesler Terrace site is visible to the east. The view of the site from this location on I-5 is primarily of trees and a vegetated slope, with several partially obscured residential buildings visible behind the trees; some Harborview Medical Center buildings and the First Hill neighborhood are partially visible in the background, behind the site.

Under the Preferred Alternative, the view under the capacity model development scenario would feature new mid and high-rise buildings. These new buildings would block views of the First Hill neighborhood, including Harborview Medical Center buildings. The new high-rise buildings would appear similar in height and scale to Downtown buildings on the west side of I-5. The overall visual character and views of First Hill from this viewpoint would remain that of a densely developed urban area, although the visual massing, height, and scale of buildings on the east side of the I-5 corridor would be greater. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that the majority of the visible high-rise buildings would be taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 2 (for both the capacity model and maximum zoning).

I-5 Southbound (FEIS Figure 3.10-10, Viewpoint 18)

The current view traveling southbound on I-5 is of the highway corridor in the foreground with the I-5 retaining wall and trees to the east. In the background to the west, the Pacific Medical Center building is visible, which is a City of Seattle Landmark building. The view of the site from this location on I-5 is primarily of trees on the site's western slope; no existing buildings are visible.

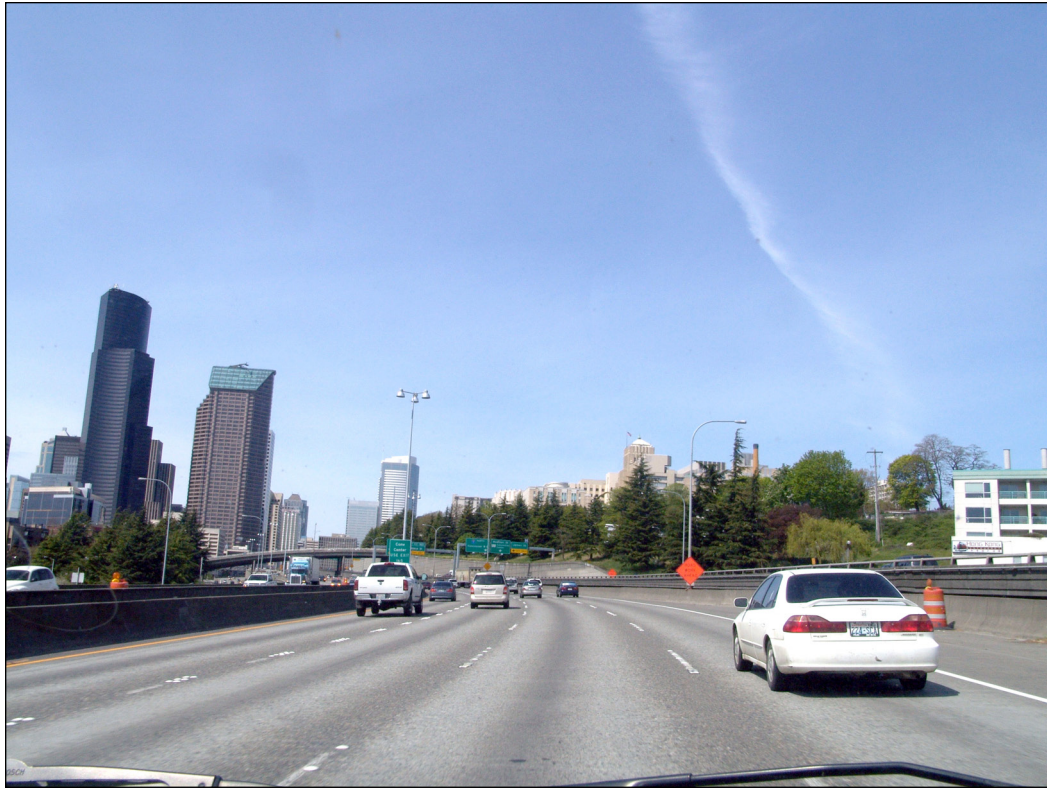
Under the Preferred Alternative, the view of the site under the capacity model development scenario would feature portions of four new high-rise buildings. The overall visual character from this viewpoint would change to a more urban development with larger, taller buildings on the east side of I-5. The buildings would further vertically define the I-5 corridor at this location. Views to the west of I-5, which include the Pacific Medical Center building, would remain as described under the existing condition. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that most of the visible high-rise buildings would be one story taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 3 (for both the capacity model and maximum zoning).

Yesler Way and E Yesler Way

Since Yesler Way/E Yesler Way is a scenic corridor that bisects the site, three viewpoints were selected for analysis to depict potential view impacts resulting from the proposed redevelopment alternatives. These viewpoints are described below.

Yesler Way/West of 8th Avenue, Looking West (FEIS Figure 3.10-11, Viewpoint 14)

The current view looks west down the Yesler Way corridor and consists of roadways, sidewalks and street trees. Existing Yesler Terrace residential buildings are visible in the mid-field on the



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

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Figure 3.10-9
 Visual Simulations
 I-5 Northbound (Viewpoint 12)

Yesler Terrace
 Redevelopment EIS



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-10 Visual Simulations I-5 Southbound (Viewpoint 18)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-11 Visual Simulations E. Yesler Way/west of 8th Avenue, Looking West (Viewpoint 14)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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north side of Yesler Way. The south side of Yesler Way features sidewalk and landscaping. Smith Tower, which is a City of Seattle Landmark building, the Fifth and Yesler office building and Elliott Bay are visible in the background to the west, as well as views to the Olympic Mountains in the distant background on clear days.

From this viewpoint, there would be no visible difference between the capacity model development scenario and the maximum zoning height. Under the Preferred Alternative, the view of the site would continue to feature the Yesler Way corridor looking to the west. Portions of a new mid-rise building would be visible on the north side of the street. Smith Tower and Elliott Bay would continue to be visible in the background. The overall visual character of this viewpoint would change to a more urban development with a larger, taller building in the foreground, which would further vertically define the Yesler Way/E Yesler Way corridor. Views of Smith Tower, Elliot Bay, and the Olympic Mountains would remain as described for the existing view. Views to the north of Yesler Way towards the downtown skyline would be partially obscured would be eliminated. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternatives 1 and 1A, although no new buildings would be visible on the south side of the street.

E Yesler Way/12th Avenue, Looking West (FEIS Figure 3.10-12, Viewpoint 8)

The current view from this location, the northwest corner of the Bailey-Gatzert Elementary School property, looks west down the E Yesler Way corridor and consists of roadways, including the 12th Avenue/E Yesler Way intersection in the foreground. The East of Boren Sector is visible in the mid-field, including a vacant 2-story retail/office building and a 1-story residential/community building that is partially obscured by fencing. The office/retail building was demolished in August 2010: this visual simulation was taken before the building was removed. Trees, skyline and a high-rise building are visible in the background.

Under the Preferred Alternative, the view of the site under the capacity model would feature new mid-rise buildings, as well as portions of new high-rise buildings on the north and south sides of E Yesler Way. Most of the skyline and the existing view of the high-rise building in the background would be obscured. The overall visual effect of the new buildings would be to further vertically define the E Yesler Way corridor. The height and scale of the proposed buildings would be taller and larger than the existing streetscape, thereby increasing the visual density. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that two of the visible high-rise buildings in the background would be slightly taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 3 (capacity model and maximum zoning).

10th Avenue/E Yesler Way Looking East (FEIS Figure 3.10-13, Viewpoint 17)

The current view from this location looks east down the E Yesler Way corridor and consists of street, sidewalk and existing Yesler Terrace low-rise residential buildings on both sides of the street. The E Yesler Way corridor can be seen extending uphill into the distance, including the Cascade Mountains on a clear day. No views of water or the Downtown skyline are available in this direction.



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-12 Visual Simulations E. Yesler Way/12th Avenue, Looking West (Viewpoint 8)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-13 Visual Simulations 10th Avenue/Yesler Way, Looking East (Viewpoint 17)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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From this viewpoint, there would be no visible difference between the capacity model development scenario and the maximum zoning height. Under the Preferred Alternative, the view of the site would feature new mid-rise buildings on the north side of E Yesler Way and mid-rise buildings and a portion of a high-rise building on the south side of E Yesler Way. Views to the east would remain generally as described under existing conditions. The overall visual effect of the new buildings would be to further vertically define this portion of the E Yesler Way corridor. The height and scale of the new buildings would be greater than the existing streetscape and the visual density would increase. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 2.

Representative Views to and from the Site

The remaining viewpoints were selected as generally representative views of the site from public places on or in proximity to the site (i.e. parks, surrounding or internal roadways) in order to characterize the view conditions that could result under the EIS Alternatives (see **FEIS Figure 3.10-1** for the viewpoint location map).

Boren Place (FEIS Figure 3.10-14, Viewpoint 3)

Boren Place is a City park located to the north of the Yesler Terrace site on a triangle of land bound by Boren Avenue, Broadway and E Terrace Street. The current view looking to the south includes a portion of grassy open space, sidewalk and a tree in the foreground. The 3-level Boren Avenue Parking Garage is visible to the west, and portions of two low-rise buildings are visible on the east side of the street, including the Childhaven daycare building and the King County Medical Society building. The Broadway corridor extends downhill to the south.

Under the Preferred Alternative, the view of the site under the capacity model development scenario would feature new high-rise and mid-rise buildings in the mid-field view on the east side of the street behind the King County Medical Society building, with other new buildings stepping down the hill further in the distance. Portions of a high-rise building would be visible on the west side of the street, behind the parking garage, and a mid-rise building would be visible in the background, on the west side of the street. The overall visual effect of the new buildings would be to further vertically define the Broadway corridor. The height and scale of the proposed buildings would be greater than existing adjacent development. Views to the skyline in the distant background would be partially obscured. Overall, the visual character of this viewpoint would change to a more densely developed, urban environment with taller buildings. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that several of the visible high-rise buildings to the east would be one story taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternatives 2 and 3 (capacity model and maximum zoning).

Horiuchi Park (FEIS Figure 3.10-15, Viewpoint 7)

Horiuchi Park is located on the east side of Boren Avenue north of E Fir Street, to the north of the West of Boren Sectors, and to the northwest of the East of Boren Sector. The current view from this park to the southeast includes the Boren Avenue corridor, street trees and sidewalk.



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

Figure 3.10-14
 Visual Simulations
 Boren Place (Viewpoint 3)

Yesler Terrace
 Redevelopment EIS



Existing



All simulations by THE PORTICO GROUP

The top of the low-rise Abbotsford Apartment building can be seen on the east side of Boren Avenue. The edge of the Yesler Terrace site, trees and an existing residential building are visible in the mid-field view on the west side of Boren Avenue. Part of the skyline and the Beacon Hill neighborhood can be seen down the street corridor in the far distance.

From this viewpoint, there would be no visible difference between the capacity model development scenario and the maximum zoning height. Under the Preferred Alternative, the view of the site would feature a portion of a high-rise building in the foreground, and portions of several new mid-rise buildings in the mid-field view. Portions of a new building would be barely visible on the east side of the street below the existing treeline. Views of the skyline and the Beacon Hill neighborhood would continue to be visible in the distance. The overall visual character of this viewpoint would change from the existing low-rise residential development to a more dense urban environment. The visual density, height and scale of new buildings would increase as compared to the existing streetscape. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 3 (capacity model and maximum zoning).

Edwin T Pratt Park (FEIS Figure 3.10-16, Viewpoint 9)

Edwin T Pratt Park is located approximately 0.4 miles to the east of the site. The current view looking to the west towards Yesler Terrace includes grassy open space in the foreground, a low-rise multi-family residential building in the mid-field, and the tops of several high-rise Downtown buildings.

Under the Preferred Alternative the view of the site based upon the capacity model development scenario would include portions of two high-rise buildings in the distant background. These new buildings would partially obscure one of the high-rise buildings in the background. New buildings resulting from the Preferred Alternative would generally appear as a continuation of the Downtown Seattle skyline. The overall visual character of this viewpoint would not change from the existing view, and views of existing open space and residential buildings in the foreground and mid-field view would remain. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that the high-rise buildings would be slightly taller. The character of this viewpoint would not change from the existing view, as described for the capacity model and in general, under the Preferred Alternative, would be similar to DEIS Alternative 3 (both for the capacity model and maximum zoning).

9th Avenue and Jefferson Street, Looking Southeast (FEIS Figure 3.10-17, Viewpoint 2)

The existing view from 9th Avenue and Jefferson Street is of the Jefferson Street corridor, framed by the Harborview Medical Center Norm Maleng building in the foreground (which is a 6-story building with a sky-bridge that adjoins the East Hospital wing) and portions of mid-rise and high-rise Harborview Medical Center buildings (including part of the Harborview Medical Center Central Wing Landmark building on the west side of the street) in the mid-field view. The southeast skyline and portions of Mount Rainier are visible in the background.

Under the Preferred Alternative, the view of the site under the capacity model development scenario would include portions of new mid-rise and high-rise buildings on the east side of 9th Avenue and a portion of a new mid-rise building on the west side of 9th Avenue. The top of a mid-rise building would also be visible in the center of the street corridor in the distance. Views



Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-16 Visual Simulations Edwin T. Pratt Park (Viewpoint 9)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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Existing



Preferred Alternative

All simulations by THE PORTICO GROUP

	<p>Figure 3.10-17 Visual Simulations 9th Avenue and Jefferson Street, Looking Southeast (Viewpoint 2)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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of the skyline, Mount Rainier and Cascade Mountains would be partially obscured by the new buildings. The character of this viewpoint would remain as a densely developed urban environment, however, the urban development would extend further into the background as compared to existing conditions. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that the high-rise buildings to the east of 9th Avenue would be slightly taller and would obscure more of the skyline. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternative 2, although the building heights under the Preferred Alternative would be lower on both sides of the street.

Broadway and Alder Street (FEIS Figure 3.10-18, Viewpoint 6)

The existing view from this viewpoint features the Broadway/Alder Street intersection in the foreground. In the mid-field view, an existing Yesler Terrace residential building is visible on the west side of Broadway with the low-rise, King County Medical Society building on the east side. To the south of the King County Medical Society Building, a portion of the Washington Baptist Convention/Japanese Baptist Church is visible. These buildings have been evaluated as potentially eligible for listing in the National Register of Historic Places and for designation as a City of Seattle Landmark. See **FEIS Section 3.11, Historic Resources** for additional information. The remainder of the viewpoint is dominated by trees, vegetation and sky. Overall, the view from this viewpoint is very similar to Viewpoint 3; Viewpoint 6 is located just slightly further south on Broadway, to the south of Boren Place.

Under the Preferred Alternative the view of the site under the capacity model development scenario would feature new high-rise buildings in the foreground and mid-field view on both sides of the Broadway street corridor, as well as new mid-rise buildings extending into the background. A portion of a high-rise building would also be visible behind the King County Medical Society building on the west side of Broadway. The height and scale of the new buildings would be greater than the King County Medical Society building and the Japanese Baptist Church on the east side of Broadway. However, the street would act as a partial buffer between Yesler Terrace and the offsite buildings. Views of the skyline would be partially obscured. The overall visual effect of the new buildings would be to further vertically define the Broadway corridor. The overall character of this viewpoint would change into a more densely developed urban environment and the height and scale of new buildings would be taller and greater than the existing streetscape. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that the visible high-rise buildings would be slightly taller. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternatives 2 and 3 (for both the capacity model and maximum zoning height).

Broadway/Yesler Way (FEIS Figure 3.10-19, Viewpoint 15)

The current view from this location (looking northwest from the Broadway/Yesler intersection) is of a portion of a plaza and the Yesler Way/E Yesler Way corridor in the foreground. Existing Yesler Terrace residential buildings are visible in the mid-field on the north side of E Yesler Way, and the Steam Plant smokestack is visible behind the residences. Portions of high-rise Harborview Medical Center buildings (including a small portion of the top of the Central Wing Landmark building) can be seen in the distance in the center of the view, including the Research and Training building to the east and the East Clinic building to the west.



Existing



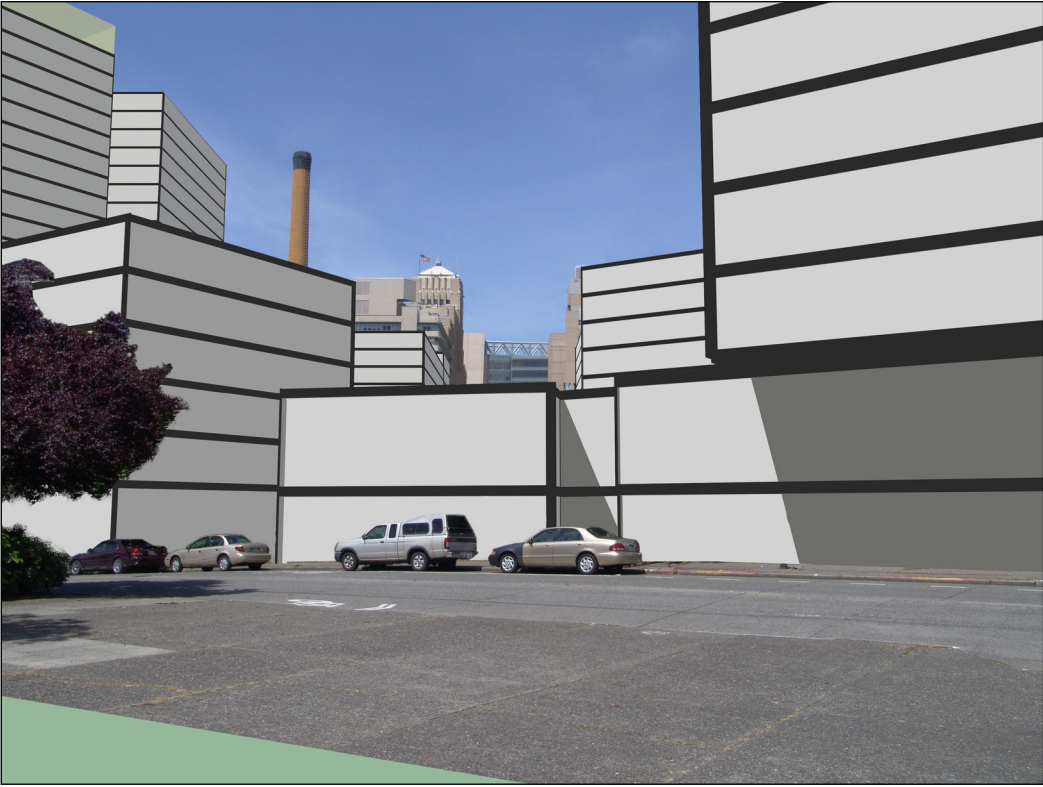
Preferred Alternative

All simulations by **THE PORTICO GROUP**

	<p>Figure 3.10-18 Visual Simulations Broadway and Alder Street (Viewpoint 6)</p>	<p>Yesler Terrace Redevelopment EIS</p>
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Existing



Preferred Alternative

All simulations by **THE PORTICO GROUP**

Under the Preferred Alternative the view of the site under the capacity model development scenario would feature the Yesler Way/E Yesler Way corridor in the foreground, with some open space to the south of the street. New mid-rise and high-rise buildings would be prominently visible in the mid-field view and background. Existing views of Harborview Medical Center buildings and the Yesler Terrace Steam Plant smokestack would be partially obscured. The overall visual character from this viewpoint would change to a more densely urban environment and the visual density, height and scale of new buildings would increase as compared to the existing streetscape. Under the maximum zoning height, the view of the site would be similar to the capacity model, except that one high-rise building to the west would be one story taller and would obscure more of the skyline. The character of this viewpoint would generally change as described for the capacity model. In general, the view of the site under the Preferred Alternative would be similar to DEIS Alternatives 1 and 1A, although slightly more of the Harborview Medical Center would remain visible under the Preferred Alternative (capacity model and maximum zoning heights).

Height, Bulk and Scale

FEIS Figure 3.10-20 shows eight cross-sections along the boundaries of the West of Boren Sectors of the Yesler Terrace site. These are the same cross-sections that were analyzed in the DEIS for Alternatives 1-4. No cross-sections were prepared for the East of Boren or East of 12th Sectors because no high-rise buildings are proposed to be built in these areas of the site. The purpose of the cross-sections is to show the maximum allowable envelope (maximum zoning building heights) that could be built under the proposed new zoning under the Preferred Alternative, together with the capacity model development scenario heights.

The capacity model development scenario building heights depicted on the Yesler Terrace site in the cross-sections are sometimes less than the maximum zoning building heights that would be allowed under the proposed zoning. This is because there would be a limited number of high-rise buildings that would be built to the maximum allowable zoning height in order to achieve the proposed mix of uses and densities necessary to meet the redevelopment objectives.

As noted in the DEIS, significant height, bulk and scale impacts could result from the Yesler Terrace redevelopment under the Preferred Alternative if new buildings are developed along the boundary of the site that are considerably taller than existing offsite buildings. For example, if a new high-rise building is developed on Yesler Terrace next to an existing, offsite low-rise building, this could be perceived as a significant impact. However, impacts would also be dependent on the context of other surrounding offsite development, the orientation of on and offsite buildings and the potential presence of buffers (i.e. streets, landscaping, etc.) that may provide separation between the on and offsite buildings. Another factor to consider is that in many cases, existing offsite buildings are not built out to the maximum zoning height under the existing zoning. In such cases, the maximum zoning height of offsite locations under the existing zoning should also be considered when determining whether a significant impact is likely to result.

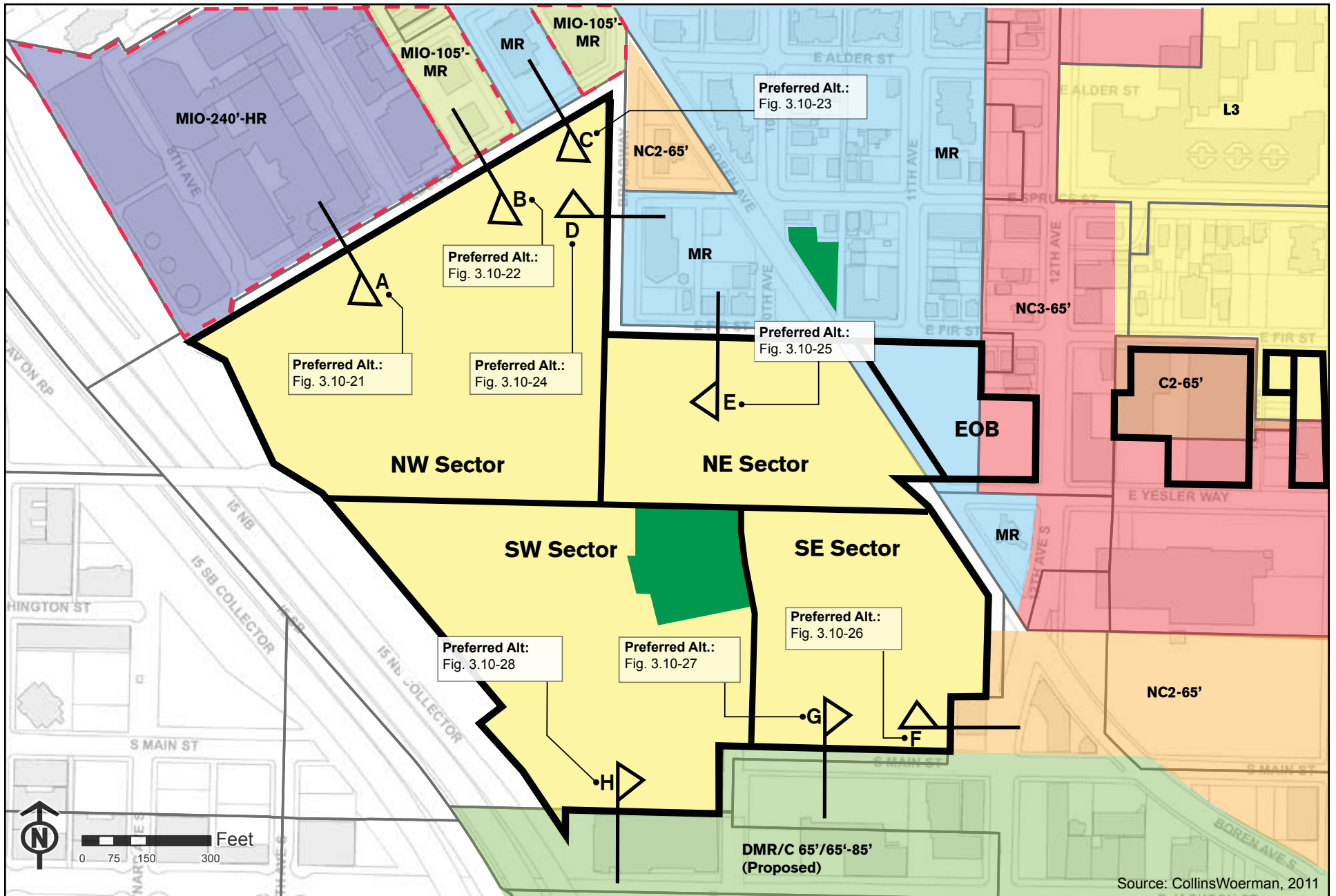


Figure 3.10-20
Cross Sections

Cross-Section A

Cross-Section A (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to Alder Street between 8th Avenue and 9th Avenue. As shown in the figure below, and described in the DEIS, a Harborview Medical Center building with an existing building height of approximately 125 feet is located on the north side of Alder Street. The maximum allowable building height under the current Major Institution Overlay (MIO) zoning is 240 feet.

Under the Preferred Alternative (**FEIS Figure 3.10-21**) the maximum zoning building height on the Yesler Terrace site would be 240 feet, which is the same as described in the DEIS for Alternatives 1, 1A and 2. As noted in the DEIS, the maximum zoning building height depicted for Yesler Terrace would be 115 feet greater than the existing Harborview building to the north. While greater than the existing offsite building, no significant height, bulk or scale impacts would be anticipated because the Harborview building is a high-rise building. Also, the Yesler Terrace building height would be consistent with the maximum allowable building height under the current MIO zoning (240 feet) for the Harborview campus. The capacity modeled building height would also be 240 feet, which is similar to DEIS Alternative 2 (237 feet). Impacts would be as described for the maximum zoning.

Cross-Section B

Cross-Section B (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to Alder Street between 9th Avenue and Terry Avenue. As shown in the figure noted below, and described in the DEIS, the Harborview Medical Center Fire Station with a building height of approximately 40 feet is located on the north side of Alder Street. The maximum allowable building height at this location under the current MIO zoning is 105 feet. However, because the Fire Station is a designated Seattle Landmark, and it is also listed in the National Register of Historic Places, as well as the Washington Heritage Register (see Section 3.11, Historic Resources, and DEIS Appendix L for further information), it is unlikely that this building would be demolished in the future in order to build to the maximum development potential available at this location under the current zoning. Therefore, the following analysis is based solely on the height of the existing Fire Station building, and does not consider the maximum building height allowed under the current zoning.

Under the Preferred Alternative (**FEIS Figure 3.10-22**) the maximum zoning building height on the Yesler Terrace site would be 240 feet, which is the same maximum zoning height described in the DEIS for Alternatives 1, 1A and 2. As noted in the DEIS, a building of this height would be much greater (200 feet) than the existing low-rise Fire Station building to the north. However, the Fire Station building is surrounded by taller buildings offsite (although not shown in the figure), including the 10-story Harborview Research and Training Building to the west and the 11-story Hilltop House building to the east. The 66 foot Alder Street right-of-way would act as a partial buffer between the Yesler Terrace site and adjacent development. Therefore, although the maximum zoning building height would be considerably greater than the existing offsite building, no significant height, bulk or scale-related impacts would be anticipated. A mid-rise building is depicted on the Yesler Terrace site with a capacity modeled building height of 75 feet, which is the same capacity model building height described in the DEIS for Alternative 1A. As noted in the DEIS, although the Yesler Terrace building would be 35 feet taller than the existing 40 foot high Fire Station building to the north, this would not be considered a significant

Yesler Terrace - NW Sector

MIO - 240-HR Zoning

240'
Max residential &
office/hotel height

240'
High-rise building height
assumed in Preferred Alt.
capacity model

Potential building
setback

Property lines

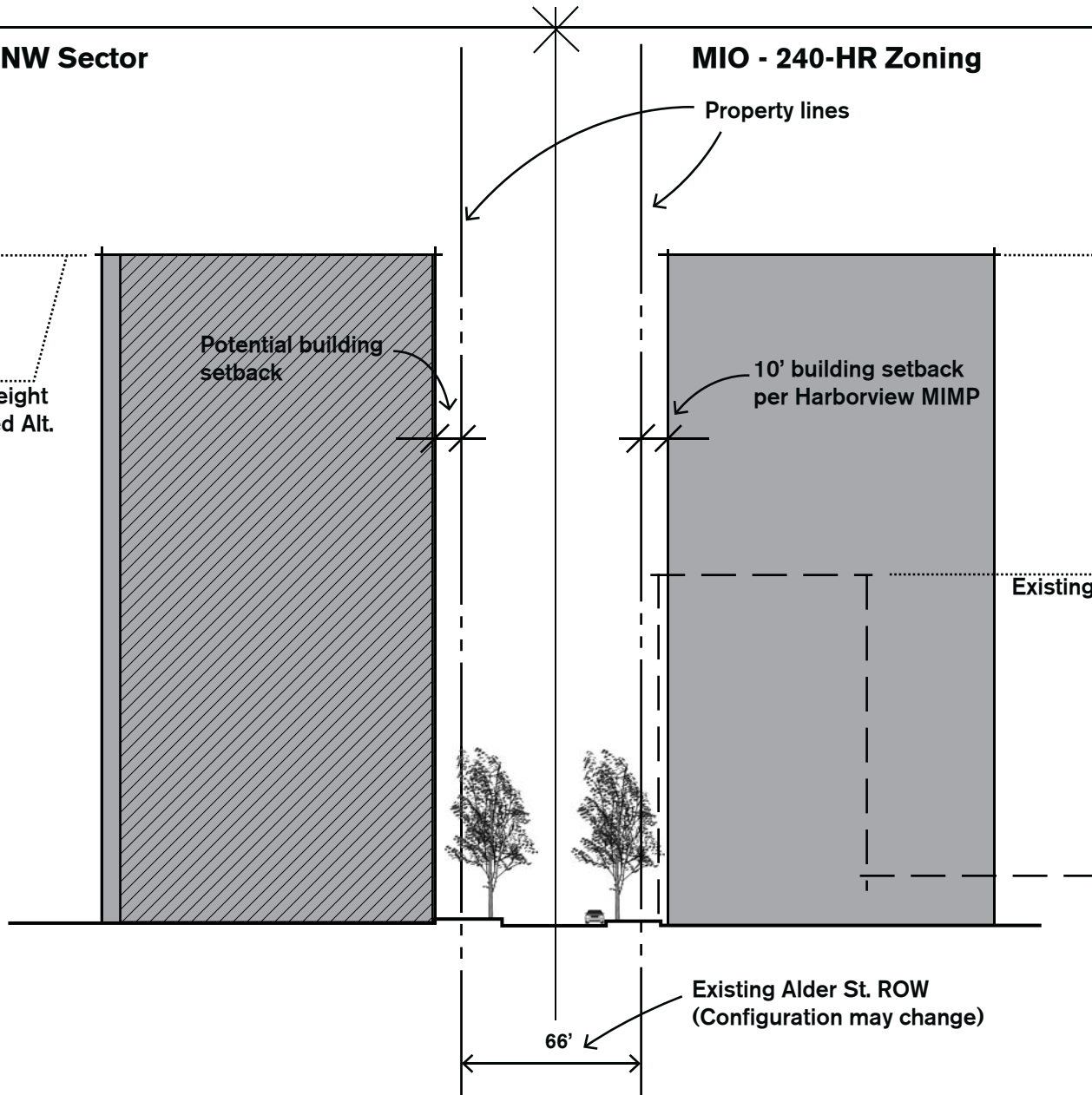
240'
Max building height

10' building setback
per Harborview MIMP

125' (approx.)
Existing hospital building height

Existing Alder St. ROW
(Configuration may change)

66'



Source: CollinsWoerman, 2011

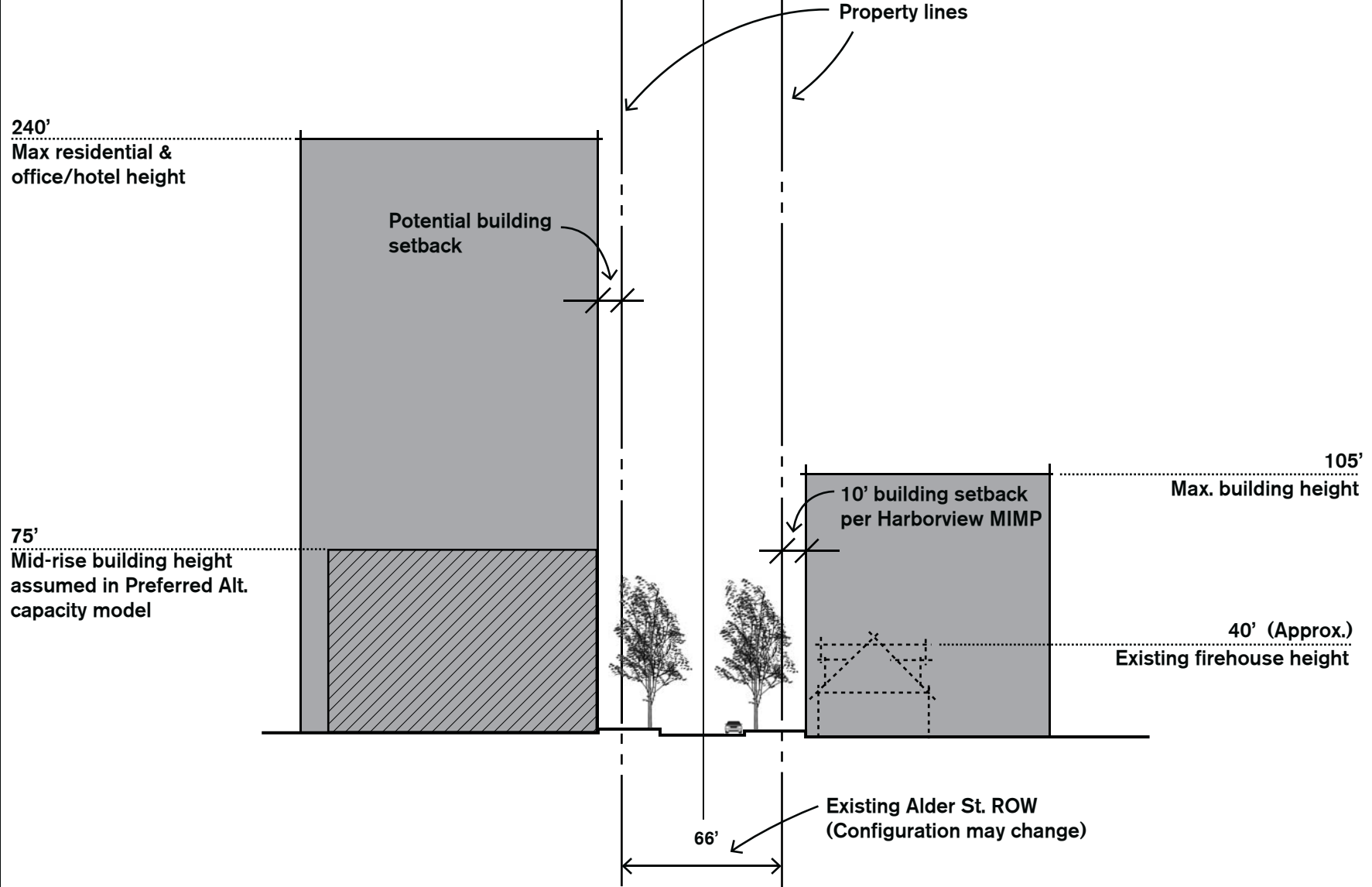


Figure 3.10-21
Cross-Section A - Preferred Alternative
Perimeter Zoning Relationships

Yesler Terrace
Redevelopment EIS

Yesler Terrace - NW Sector

MIO - 105-MR Zoning



Source: CollinsWoerman, 2011



Figure 3.10-22
Cross-Section B - Preferred Alternative
Perimeter Zoning Relationships

Yesler Terrace
Redevelopment EIS

difference in heights, particularly given the Alder Street right-of-way, which acts as a partial buffer, and given the scale of surrounding off-site development. Overall, no significant height, bulk or scale-related impacts would be anticipated.

Cross Section C

Cross section C (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to Alder Street between Terry Avenue and Broadway. As shown in the figure noted below, and described in the DEIS, the Hilltop House building, with an existing height of approximately 105 feet is located on the north side of the street. This building is set back from Alder Street, and a parking lot is located between the street and the Hilltop House building. The existing Hilltop House building is 30 feet taller than the maximum building height allowed under the current zoning, which is 75 feet. A 75 foot tall building is depicted in front of Hilltop House to show what could be developed on the parking lot site under the current Multifamily Residential (MR) zoning.

Under the Preferred Alternative (**FEIS Figure 3.10-23**), a high-rise building on the Yesler Terrace site with a height of 240 feet would be allowed under the maximum zoning, which is the same maximum zoning height described in the DEIS for Alternatives 1, 1A and 2. A building of this height would be 135 feet taller than the offsite Hilltop House building and 165 feet taller than the maximum building height allowed under the current multifamily zoning. Such would represent a considerable height difference as compared to the existing offsite building and maximum building height allowed at this location. However, the 66 foot Alder Street right-of-way would act as a partial buffer between the adjacent buildings, and other taller Harborview Medical Center high-rise buildings surrounding Hilltop House. Therefore, no significant adverse impacts are anticipated. The capacity modeled building height would also be 240 feet, which is similar to but less than DEIS Alternative 3 (280 feet). Impacts would be as described for the maximum zoning.

Cross Section D

Cross-Section D (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to Broadway between E Spruce Street and E Fir Street. As shown in the figure noted below, and described in the DEIS, a church with an existing height of approximately 40 feet is located on the east side of the street. However, the maximum allowable height for a building at this location under the current MR zoning is 75 feet.

Under the Preferred Alternative (**FEIS Figure 3.10-24**), a high-rise building on the Yesler Terrace site with a building height of 240 feet would be allowed under the maximum zoning. The maximum zoning building height is the same as that depicted in the DEIS for Alternatives 1, 1A and 2, and could be perceived as a significant adverse impact without appropriate mitigation measures. A capacity model building height of 225 feet is also depicted on the Yesler Terrace site for comparison purposes, which is similar to the maximum zoning height. Impacts would be generally as described for the maximum zoning height.

Cross Section E

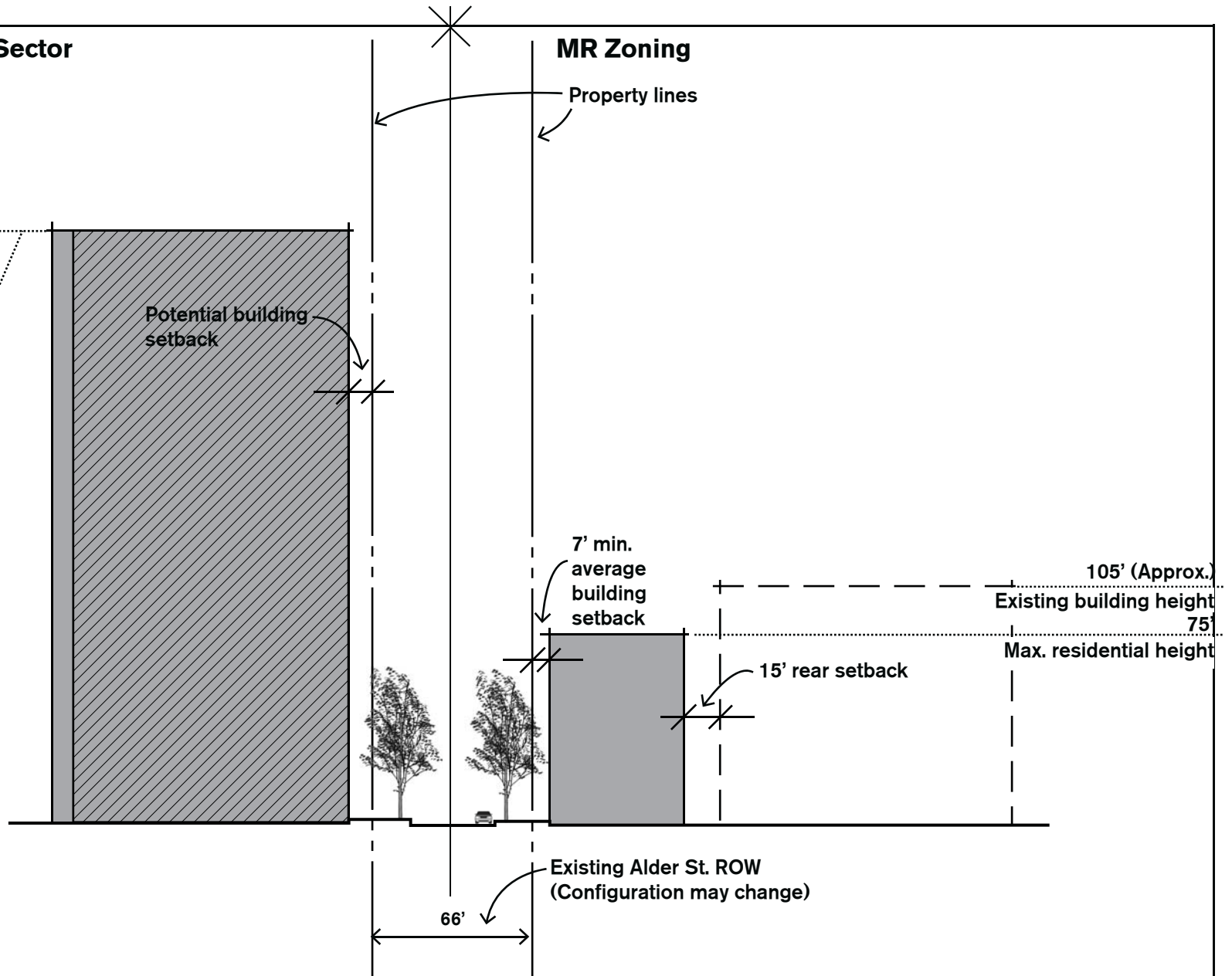
Cross-Section E (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to E Fir Street between Broadway and 10th Avenue. As shown in the figure noted below, and described in the DEIS, an existing residential building with a height of approximately

Yesler Terrace - NW Sector

MR Zoning

240'
Max residential & office/
hotel height*

240'
High-rise building height
assumed in Preferred Alt.
capacity model



Source: CollinsWoerman, 2011



Figure 3.10-23
Cross-Section C - Preferred Alternative
Perimeter Zoning Relationships

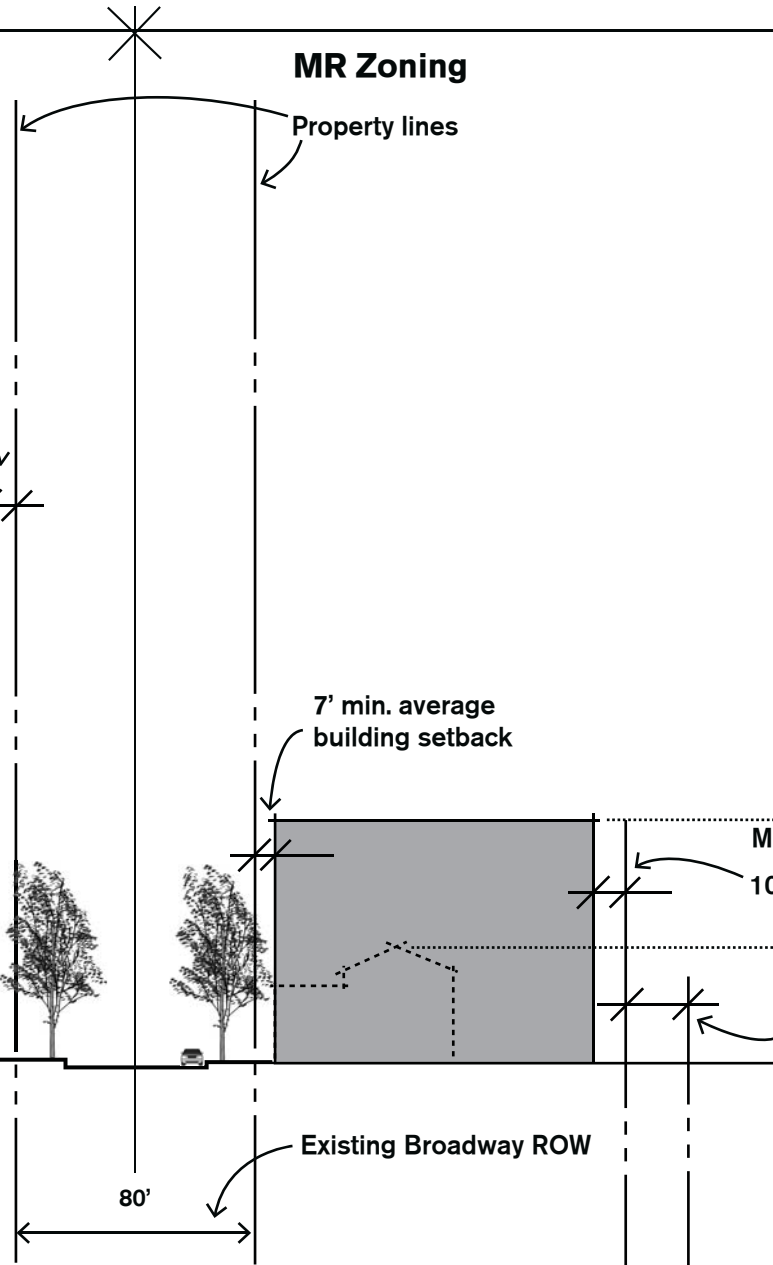
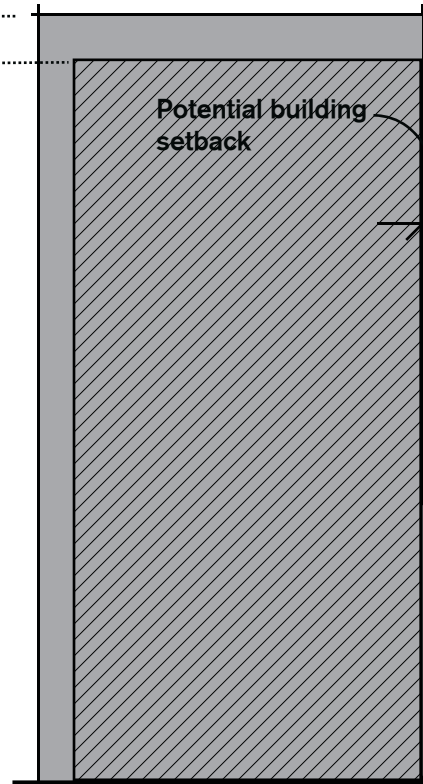
Yesler Terrace
Redevelopment EIS

Yesler Terrace - NW Sector

MR Zoning

240'
Max residential &
office/hotel height

225'
High-rise building height
assumed in Preferred Alt.
capacity model



Source: CollinsWoerman, 2011



Figure 3.10-24
Cross-Section D - Preferred Alternative
Perimeter Zoning Relationships

Yesler Terrace
Redevelopment EIS

30 feet is located on the north side of E Fir Street. However, the maximum allowable height for a building at this location under the current MR zoning is 75 feet.

Under the Preferred Alternative (**FEIS Figure 3.10-25**), a high-rise residential building on the Yesler Terrace site with a height of 240 feet would be allowed under the maximum zoning, but a capacity modeled building height of 225 feet is also depicted. The maximum zoning height is the same as depicted in the DEIS for Alternatives 1, 1A and 2, and the capacity model building height is similar (5 feet shorter) to DEIS Alternatives 1, 1A and 2, which depicted a capacity model building height of 230 feet. Both the maximum zoning and capacity model building heights would be much greater than the existing offsite residential building to the north of E Fir Street (210 to 195 feet greater) and the maximum building height allowed under the current MR residential zoning (165 to 170 feet greater). The 56 foot width of the E Fir Street right-of-way, as well as street setbacks on the Yesler Terrace site, and the offsite residential building would provide partial buffers between the adjacent sites. Never-the-less, both the maximum zoning and capacity modeled building heights would represent a considerable height difference as compared to the existing offsite building and the maximum building height allowed under the current MR residential zoning, and could be perceived as a significant adverse impact without appropriate mitigation measures.

Cross Section F

Cross-Section F (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to the southeast boundary of the site, to the north of S Main Street and to the west of 12th Avenue S. As shown in the figure noted below, and described in the DEIS, a low-rise building (Seattle Deli) with an existing height of approximately 25 feet is located to the east of the Yesler Terrace site boundary. The maximum allowable height for a residential building at this location under the current Neighborhood Commercial 2-65 (NC2-65) zoning is 65 feet.

Under the Preferred Alternative (**FEIS Figure 3.10-26**), a high-rise building on the Yesler Terrace site with a height of 160 feet would be allowed under the maximum zoning, which is similar to the maximum zoning height depicted in the DEIS for Alternatives 1 and 1A (180 feet) and is less than the maximum zoning height depicted in the DEIS for Alternatives 2 and 3 (240 feet). The maximum zoning building height would be 135 feet greater than the existing retail building to the east and 95 feet greater than the maximum allowable residential height under the current NC2-65 zoning. Such would represent considerable height differences, and could be perceived as a significant adverse impact without appropriate mitigation measures. The capacity modeled building height would also be 160 feet, which is greater than the capacity model building height depicted in the DEIS for Alternatives 1-3, which assumed a capacity modeled building height of 75 feet. Impacts would be as described for the maximum zoning.

Cross Section G

Cross-Section G (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to S Main Street in between 10th Avenue S and 12 Avenue S. As shown in the figure noted below, and described in the DEIS, there is no existing building on the adjacent land to the south of the site, but the maximum allowable heights which could be developed under the proposed Downtown Mixed Residential/Commercial (DMR/C) zoning are depicted. The adjacent development is assumed to be built at grade to S Main Street, even though there is an existing steep slope. The maximum development heights possible at this location would be 85 feet, based on pending Council action on the Livable South Downtown zoning legislation.

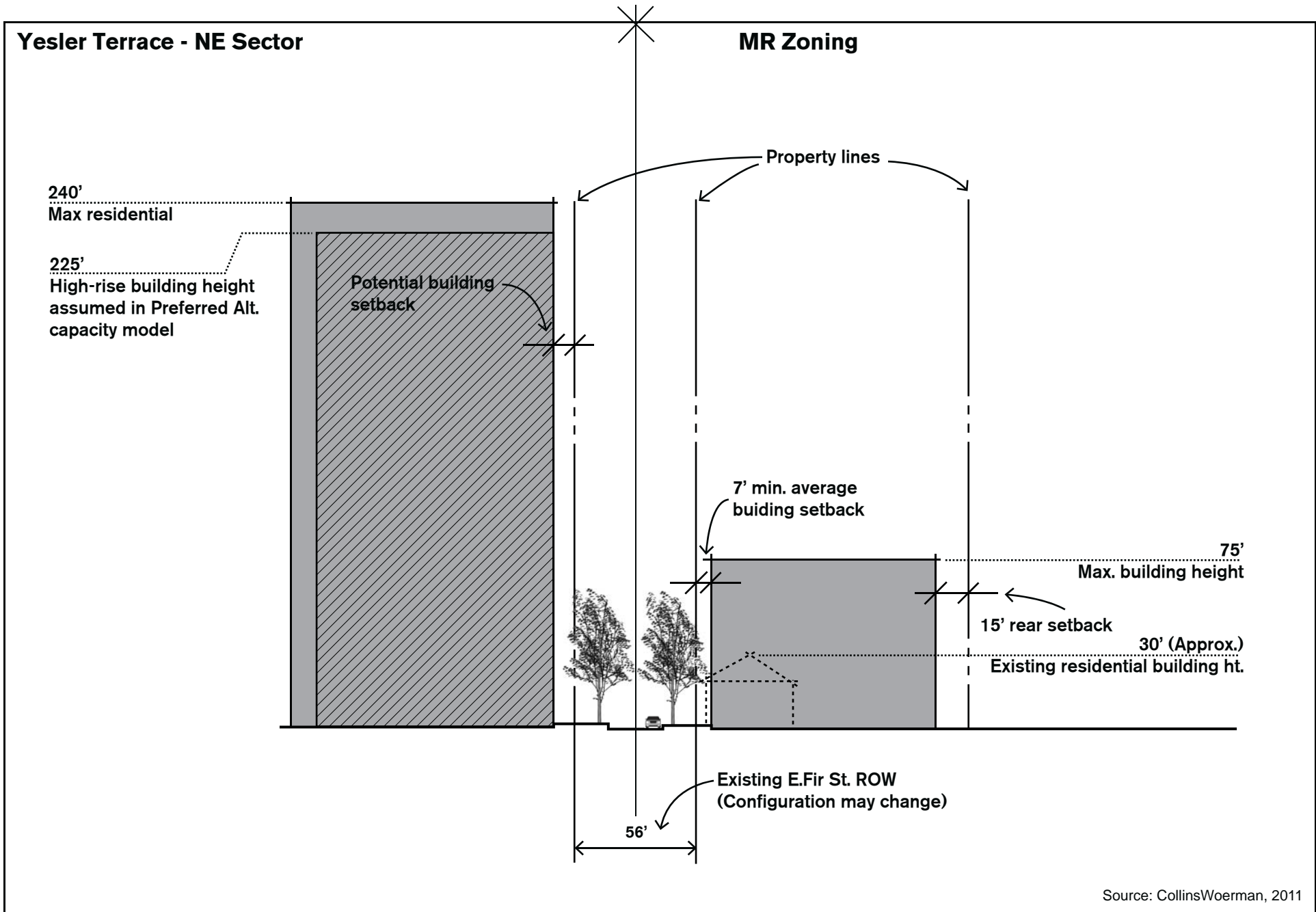


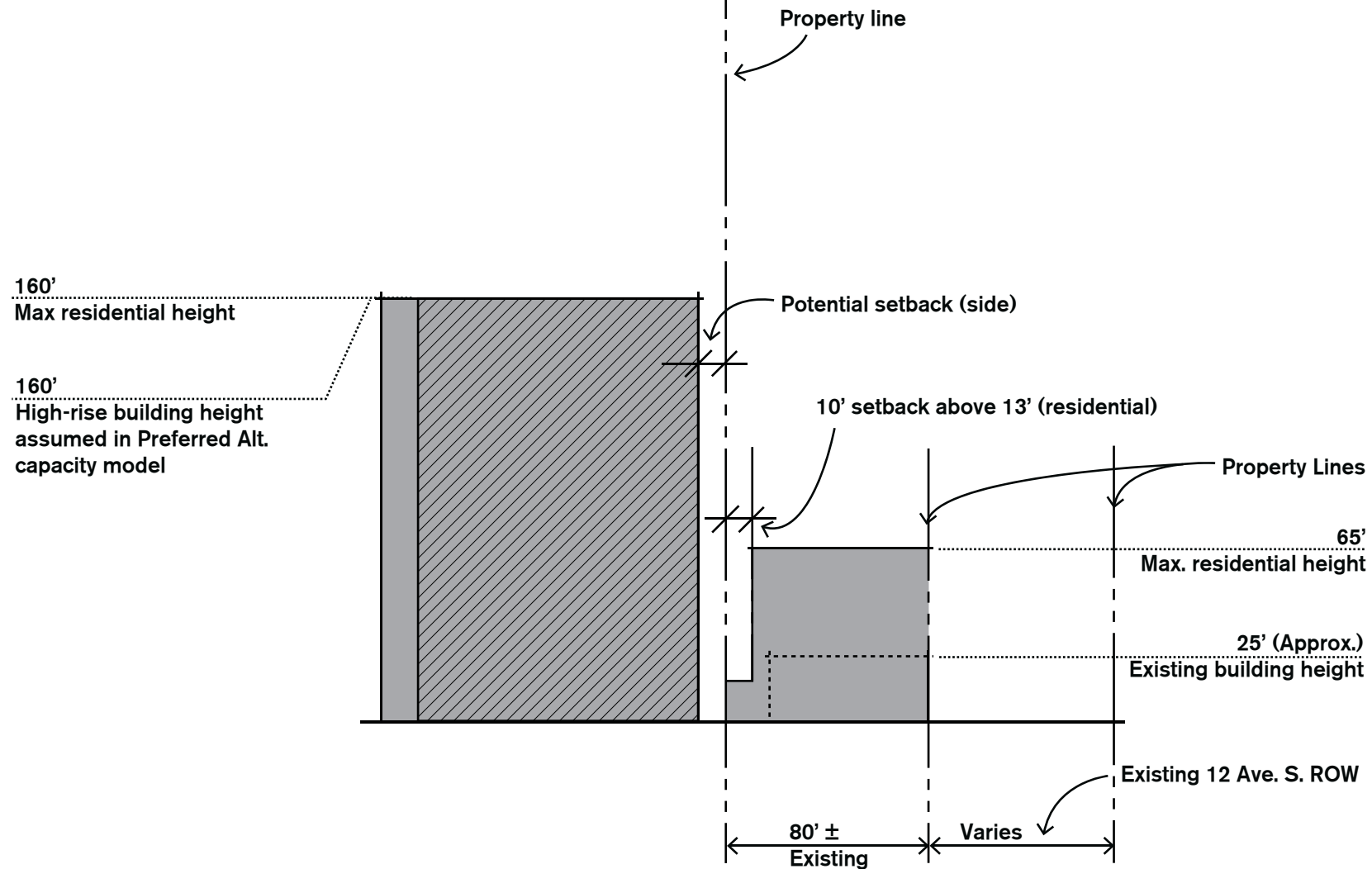
Figure 3.10-25
Cross-Section E - Preferred Alternative
Perimeter Zoning Relationships

Yesler Terrace
Redevelopment EIS



Yesler Terrace - SE Sector

NC2 - 65' Zoning



Source: CollinsWoerman, 2011



Figure 3.10-26
Cross-Section F - Preferred Alternative
Perimeter Zoning Relationships

Yesler Terrace
Redevelopment EIS

Under the Preferred Alternative (**FEIS Figure 3.10-27**), a high-rise building on the Yesler Terrace site with a height of 160 feet would be allowed under the maximum zoning, which is similar to the maximum zoning height assumed in the DEIS for Alternatives 1 and 1A (180 feet) and is less than the maximum zoning height depicted in the DEIS for Alternatives 2 and 3 (240 feet). A building of this height would be greater than the maximum allowable building height of 85 feet which could be developed under the proposed DMR/C zoning. Such would represent a considerable height difference, and could be perceived as a significant adverse impact without appropriate mitigation measures. A mid-rise building with a capacity modeled building height of 75 feet is also depicted on the Yesler Terrace site, which is similar to the capacity model building height depicted in the DEIS for Alternatives 1 and 1A (55 feet), and Alternative 2 (75 feet). A building of this height would be similar to or less than potential building heights which could be developed under the proposed DMR/C zoning (85 feet), and therefore no significant height, bulk or scale impacts would be anticipated. The 66-foot width of the S Main Street right-of-way, as well as street setbacks on the Yesler Terrace site, would provide a buffer between the on and offsite buildings (no street setbacks would be required for the offsite building).

Cross-Section H

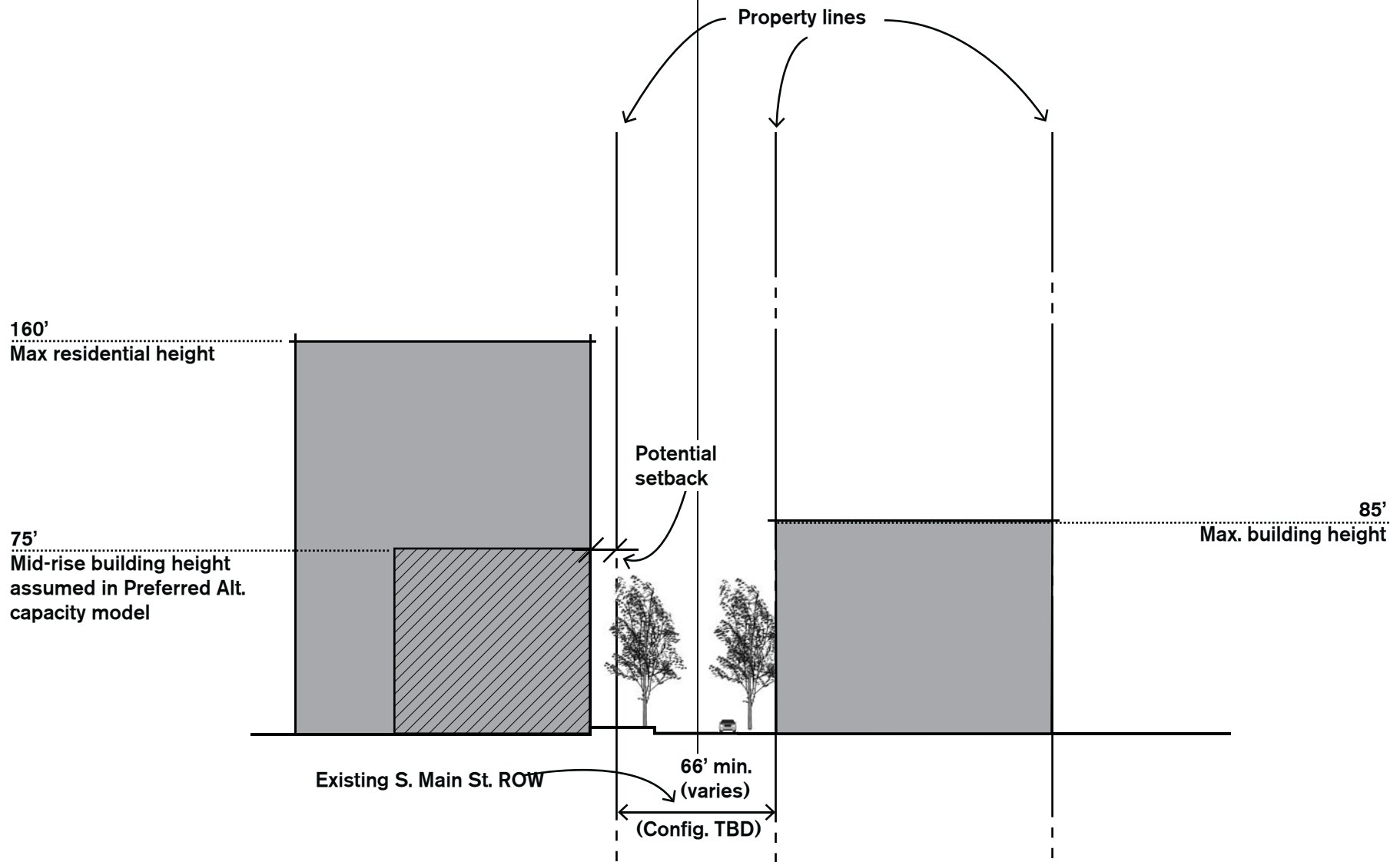
Cross-Section H (see **FEIS Figure 3.10-20** for location) addresses height, bulk and scale relative to the southwest boundary of the site, to the east of I-5 and west of 10th Avenue S. As shown in the figure noted below, and described in the DEIS, the land slopes down to the south at this location and the adjacent development is situated at a lower elevation than the Yesler Terrace site. An existing building with a height of approximately 50 feet is located to the south of the site. This is the Pacific Rim Center, which is a mixed use condominium and retail building. It is important to note that this existing development is generally oriented away from the Yesler Terrace site towards S Jackson Street with only two levels of housing facing the Yesler Terrace site. A maximum allowable height of 85 feet under the proposed DMR/C zoning is also depicted.

Under the Preferred Alternative (**FEIS Figure 3.10-28**), a high-rise building on the Yesler Terrace site with a maximum height of 240 feet would be allowed under the maximum zoning, which is the same maximum zoning building height depicted in the DEIS for Alternative 2. A building of this height would be 190 feet greater than the existing Pacific Rim Center building, and 155 feet greater than the maximum building height which could be allowed under the proposed new DMR/C zoning. A building on the Yesler Terrace site would appear taller in comparison to buildings located to the south, due to the sloping topography. These building heights would represent a considerable height difference as compared to the offsite building, and could be perceived as a significant adverse impact without appropriate mitigation measures.

A mid-rise building with a capacity modeled height of 75 feet is also depicted on the Yesler Terrace site, which is the same capacity model building height depicted in the DEIS for Alternative 2. Although the capacity model building height would be greater than the existing Pacific Rim Center building to the south, it would be generally consistent with this building, as well as the maximum height which could be developed under the proposed DMR/C zoning. As noted above for the maximum zoning height, a building on the Yesler Terrace site would appear taller in comparison to buildings located to the south, due to the sloping topography. Overall, no significant height, bulk or scale-related impacts would be anticipated from the capacity model building height.

Yesler Terrace - SE Sector

DMR/C 65/65-85' Zoning (Proposed)****



**** DMR/C 65/65-85' - based on zoning in DPD South Downtown Zoning Proposal

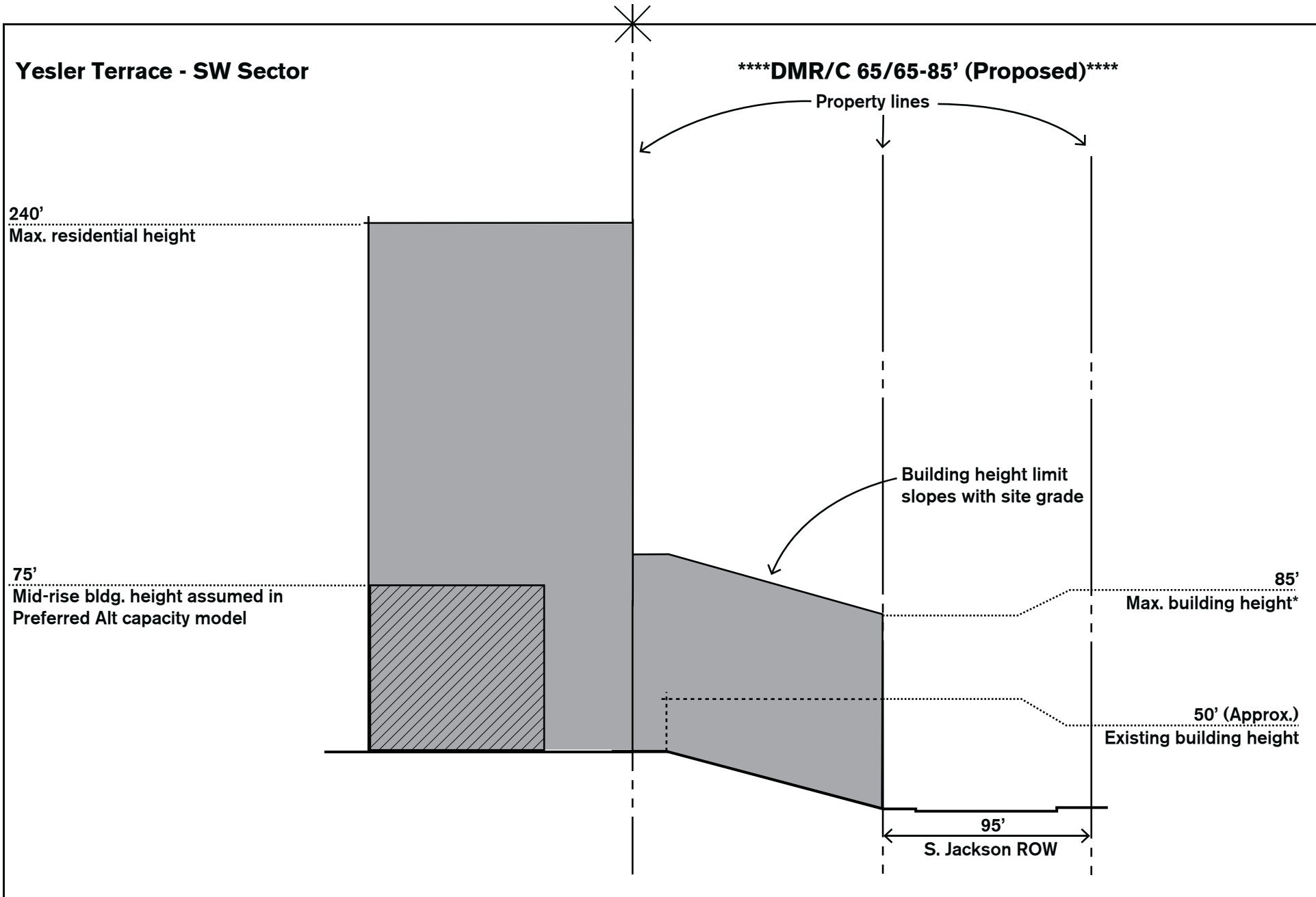
There is no existing building currently on this parcel

Source: CollinsWoerman, 2011



Figure 3.10-27
Cross-Section G - Preferred Alternative
Perimeter Zoning Relationships

Yesler Terrace
Redevelopment EIS



**** DMR/C 65/65-85' based on zoning in DPD South Downtown Zoning Proposal

Source: CollinsWoerman, 2011



Figure 3.10-28
Cross-Section H - Preferred Alternative
Perimeter Zoning Relationships

Yesler Terrace
Redevelopment EIS

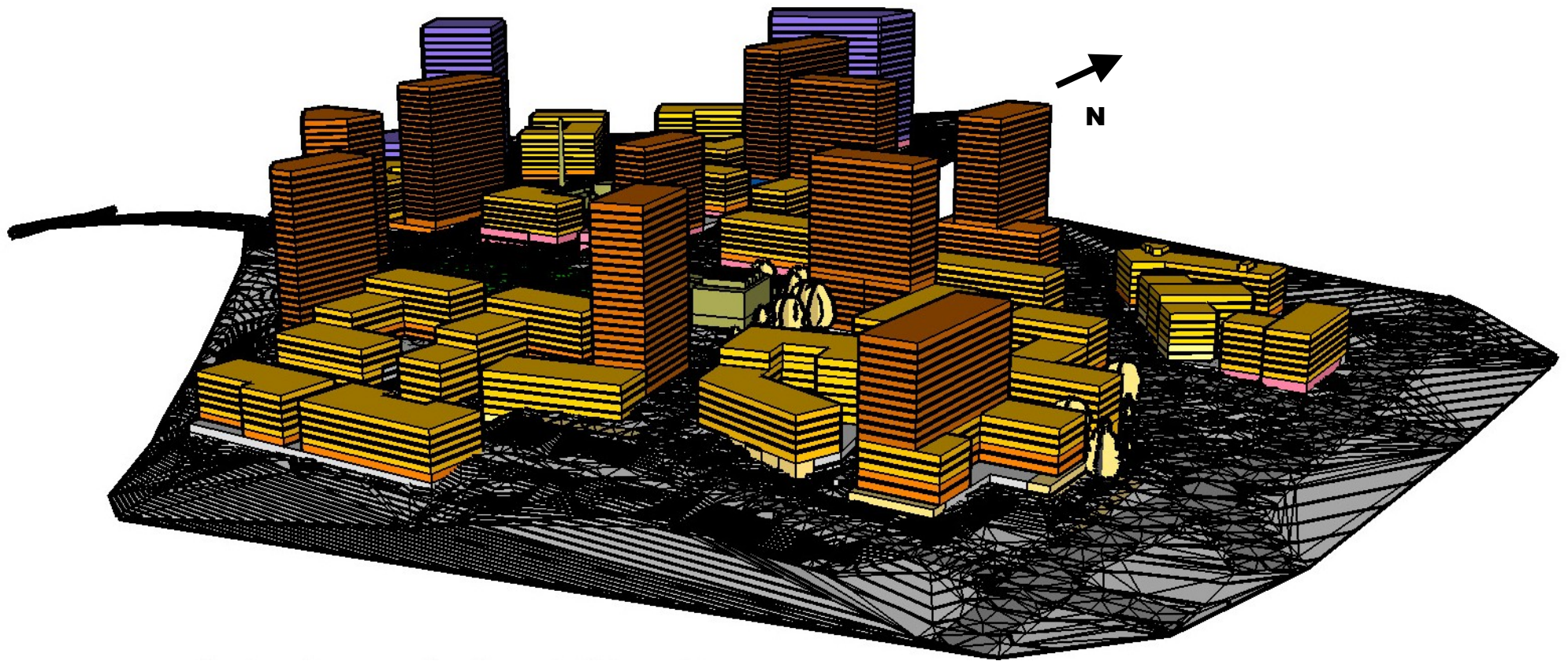
Three Dimensional View Simulation

FEIS Figure 3.10-29 is a three dimensional (3D) simulation of the Yesler Terrace site (DEIS Site) under the Preferred Alternative capacity model development scenario. This simulation is provided to demonstrate the density, bulk and scale of the proposed redevelopment. As shown, high-rise buildings would be distributed throughout the four West of Boren Sectors, with the greatest density and building heights in the NW Sector. Refer to **FEIS Chapter 4, Updates to the DEIS Analysis**, for 3D simulations of DEIS Alternatives 1-4.

Conclusion

As described in the cross-section analysis above, maximum zoning and capacity modeled building heights with redevelopment of Yesler Terrace under the Preferred Alternative could result in new buildings in certain locations that would be of a considerably greater height and scale than existing offsite buildings bordering the site, and/or the maximum allowable building heights under the existing zoning. **FEIS Table 3.10-1** is a summary of the height differences between potential Yesler Terrace buildings (under the maximum zoning and capacity model) and existing offsite buildings and the offsite maximum zoning development capacity. The Preferred Alternative is summarized together with the DEIS Alternatives for comparison purposes.

The highlighted cells in the table indicate the alternatives and Yesler Terrace building heights which could be perceived as a significant adverse impact when compared to either the existing offsite building or the offsite zoning. As is shown, the building heights described for the Preferred Alternative generally fall within the range of those analyzed in the DEIS for Alternatives 1-3, and are specifically similar to Alternatives 2 and 3. The cross-sections resulting in significant impacts identified in **FEIS Table 3.10-1** (including Cross-section F) could be mitigated through a variety of measures including limiting building heights at certain locations, providing upper level and/or ground level setbacks, limiting façade lengths or floor sizes, and establishing minimum spacing between high-rise buildings. See **FEIS Section 3.10.1.3**, Mitigation Measures, below, for further details.



Source: CollinsWoerman, 2011



Figure 3.10-29
Preferred Alternative - 3D Model

Yesler Terrace
Redevelopment EIS

**Table 3.10-1
ALTERNATIVES 1-3 – SUMMARY OF BUILDING HEIGHT DIFFERENCES AND POTENTIAL
SIGNIFICANT IMPACTS**

	Yesler Terrace (YT) Maximum Zoning Building Height	Height Difference Between YT Max. Zoning and Existing Offsite Building	Height Difference Between YT Max Zoning & Offsite Max. Zoning	YT Capacity Modeled Building Height	Height Difference Between YT Capacity Modeled Ht. & Existing Offsite Building	Height difference Between YT Capacity Modeled Ht. & Offsite Max. Zoning
CROSS-SECTION A						
Alt. 1	240'	115' taller	None	225'	100' taller	15' shorter
Alt. 1A	240'	115' taller	None	125'	None	115' shorter
Alt. 2	240'	115' taller	None	237.5	112.5' taller	2.5' shorter
Alt. 3	300' residential 240' office/hotel	175' taller 115' taller	None	225'	100' taller	15' shorter
Preferred Alternative	240'	115' taller	None	240'	115' taller	None
CROSS-SECTION B						
Alt. 1	240'	200' taller	N/A*	156'	116' taller	N/A
Alt. 1A	240'	200' taller	N/A	75'	35' taller	N/A
Alt. 2	240'	200' taller	N/A	188'	148' taller	N/A
Alt. 3	300' residential 240' office/hotel	260' taller 200' taller	N/A	225'	185' taller	N/A
Preferred Alternative	240'	200' taller	N/A	75'	35' taller	N/A
CROSS-SECTION C						
Alts. 1, 1A & 2	240'	165' taller	135' taller	75'	None	30' shorter
Alt. 3	300' residential 240' office/hotel	225' taller 165' taller	195' taller 135' taller	280'	205' taller	175' taller
Preferred Alternative	240'	165' taller	135' taller	240'	165' taller	135' taller
CROSS-SECTION D						
Alts. 1 & 1A	240'	200' taller	165' taller	75'	35' taller	None
Alt. 2	240'	200' taller	165' taller	190'	150' taller	115' taller
Alt. 3	300' residential 240' office/hotel	260' taller 200' taller	225' taller 165' taller	75'	35' taller	None
Preferred Alternative	240'	200' taller	165' taller	225'	185' taller	150' taller
CROSS-SECTION E						
Alts. 1, 1A & 2	240'	210' taller	165' taller	230'	200' taller	125' taller
Alt. 3	300' residential	270' taller	225' taller	280'	250' taller	205' taller
Preferred Alternative	240'	210' taller	165' taller	225'	195' taller	150' taller
CROSS-SECTION F						
Alts. 1 & 1A	180'	155' taller	115' taller	75'	50' taller	10' taller

	Yesler Terrace (YT) Maximum Zoning Building Height	Height Difference Between YT Max. Zoning and Existing Offsite Building	Height Difference Between YT Max Zoning & Offsite Max. Zoning	YT Capacity Modeled Building Height	Height Difference Between YT Capacity Modeled Ht. & Existing Offsite Building	Height difference Between YT Capacity Modeled Ht. & Offsite Max. Zoning
Alts. 2 & 3	240'	215' taller	175' taller	75'	50' taller	10' taller
Preferred Alternative	160'	135' taller	95' taller	160'	135' taller	95' taller
CROSS-SECTION G						
Alts. 1 & 1A	180'	N/A – no existing building at this location	-30' to 95' taller than residential bldg. -115' taller than commercial building	75'	N/A – no existing building at this location	-75' to 30' shorter than residential building -10' higher than commercial building
Alternative 2	240'	N/A – no existing building at this location	-90' to 155' taller than residential building -175' taller than commercial building	75'	N/A – no existing building at this location	-75' to 10' shorter than residential building -10' taller than commercial building
Alt. 3	240'	N/A – no existing building at this location	-90' to 155' taller than residential building -175' taller than commercial building	220'	N/A – no existing building at this location	-70' to 135' taller than residential building -155' taller than commercial building
Preferred Alternative	160'	N/A – no existing building at this location	75' taller	75'	N/A – no existing building at this location	10' shorter
CROSS-SECTION H						
Alts.1 & 1A	180'	130' taller	-95' taller than residential bldg. -115' taller than commercial bldg.	No building would be built at this location under these alternatives	N/A	N/A
Alt. 2	240'	190' taller	-155' taller than residential building -175' taller than commercial building	75'	25' taller	-10' shorter than residential building -10' taller than commercial building
Alternative	240'	190' taller	-155' taller than residential	220'	200' taller due to	-135' taller than residential

	Yesler Terrace (YT) Maximum Zoning Building Height	Height Difference Between YT Max. Zoning and Existing Offsite Building	Height Difference Between YT Max Zoning & Offsite Max. Zoning	YT Capacity Modeled Building Height	Height Difference Between YT Capacity Modeled Ht. & Existing Offsite Building	Height difference Between YT Capacity Modeled Ht. & Offsite Max. Zoning
3			building -175' taller than commercial building		topography	building -155' taller than commercial building
Preferred Alternative	240'	220' taller	155' taller	75'	55' taller	10' shorter

Source: Blumen Consulting Group. 2010; EA|Blumen, 2011.

Cumulative and Indirect Impacts

Cumulative impacts resulting from the Preferred Alternative as related to the views of the site, the visual density and height, bulk and scale of new buildings, and the potential for requested zoning changes in areas adjacent to the site, would be within the range identified DEIS for Alternatives 1-3.

3.10.1.3 Mitigation Measures

The following required/proposed mitigation measures would address potential aesthetic and height, bulk and scale impacts resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Required/Proposed Mitigation Measures

Aesthetics

The following measures would be implemented to lessen potential aesthetic impacts.

- (MODIFIED) The Land Use Code text amendment, and/or Planned Action Ordinance, is expected to include zoning standards that specify heights throughout the site and setbacks at the perimeter of the site, and also include design guidelines. As permit applications are submitted, the City will review the proposed development for conformance with those standards and guidelines.
- Street landscaping would be provided that meets or exceeds City of Seattle regulations, and would serve as a partial buffer to offsite development.

- (NEW) As part of the potential approval of the Proposed Actions, design guidelines would be prepared by SHA and adopted by the City, thereby regulating all future development accordingly.

Other Possible Mitigation Measures

Height, Bulk and Scale

The following measures could be implemented to lessen potential height, bulk and scale impacts to offsite development surrounding the site.

- ~~Yesler Terrace building heights could be limited where Yesler Terrace development would be across the street from offsite areas where zoning regulations limit offsite building heights to 75 feet or less. For example, Yesler Terrace building heights could be limited to 150 feet within 80 to 120 feet of such offsite locations. The actual setback distance and heights could be determined on a case by case basis since some site locations may not pose unreasonable impacts to lower height buildings. This approach would create a stepping of building heights adjacent to the lower height and density zoning and subsequently limit shadow impacts and increase the availability of light to the adjacent sites.~~
- Upper level building setbacks could be required for buildings above 65 to 85 feet in order to open the sky view from the street and create a less imposing physical building scale near the lower, offsite height and density zoning.
- (MODIFIED) Building façade lengths could be limited and minimum building spacing required above building heights of 65 feet to 85 feet to reduce the wall effect from tall buildings.
- (MODIFIED) Maximum floor plate sizes could be established for high-rise buildings, similar to limits currently in place for residential towers in Downtown zones.
- Ground level building setbacks could be used for high-rise buildings to create a wider separation between lower and higher density zoning.
- (MODIFIED) Minimum ground and upper level building setbacks could be required for buildings adjacent to the property lines of offsite parcels with considerably lower maximum building heights in order to provide separation between areas with lower density development.

3.10.1.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse height, bulk or scale related impacts would be anticipated with implementation of appropriate mitigation measures, including those listed above.

3.10.2 LIGHT AND GLARE

3.10.2.1 Existing Conditions

DEIS Site

Under the Preferred Alternative, the Affected Environment at the DEIS site (including the site lighting and surrounding area lighting) would be generally as described in the DEIS in Section 3.10.2.1.

Current lighting conditions on the site are indicative of an urban residential environment, and light is emitted from stationary sources (including pole-mounted street lights, interior and exterior building lighting) and mobile sources (including vehicles travelling on the site roadways and navigating surface parking lots).

The neighborhoods to the east and south of the site have nighttime lighting conditions that are generally similar in character to Yesler Terrace. Lighting conditions to the north of the site, where Harborview Medical Center is located, are brighter and more constant. The I-5 roadway directly to the west of the site has nighttime lighting sources that include overhead poles and the headlights of passing vehicles. Because the I-5 roadway is at a lower elevation than the Yesler Terrace site, these lighting sources do not have a significant impact on the site, except at the southwest edge of the SW Sector, where the site slopes down to the west and is nearly at the same grade as the I-5 roadway.

East of 12th Sector

Site Lighting

Current lighting conditions in the East of 12th Sector are indicative of an urban, mixed use environment, and light is emitted from both stationary and mobile sources. Stationary sources of light include pole mounted street lights along 13th Avenue, as well as interior and exterior building lighting from the existing buildings within this sector. Mobile sources of light primarily include vehicle headlights from cars accessing surface parking or traveling on adjacent roadways.

Surrounding Area Lighting

Within the vicinity of this sector, lighting conditions are consistent with the mixed use nature of the area and include street lighting and lights from vehicle headlights accessing surrounding properties. To the west of the King County Archives property, light sources include interior and exterior building lighting from the adjacent commercial/retail businesses. To the east of the King County Archives property (east of 13th Avenue), light sources primarily include interior and exterior building lighting associated with the existing residential buildings. Light sources to the north and east are primarily associated with surface parking lots and interior and exterior building lighting. To the south, lighting at the Bailey-Gatzert Elementary School includes interior and exterior building lighting.

3.10.2.2 Impacts

Light and Glare

DEIS Site

Construction

Light and glare impacts resulting from construction activities under the Preferred Alternative would be generally as described in the DEIS for Alternatives 1-3. That is, new temporary sources of light would be introduced to the site during construction activities over the long-term buildout of the site. The lighting sources would be associated with infrastructure and building construction, lighting of the job site (to meet safety requirements), trucks and other equipment. Construction lighting could potentially be noticeable in certain areas proximate to the site; while noticeable, such lighting would not be expected to cause significant impacts. Construction lighting could be shielded from on and off-site residential buildings, and lighting associated with construction would be limited by City of Seattle regulations which limit activities during nighttime hours.

Operation

Redevelopment of the site under the Preferred Alternative would add a variety of sources of light and glare to the site, similar to what was described in the DEIS for Alternatives 1-3. Following redevelopment, new office, lodging, residential, neighborhood commercial and neighborhood services uses would result in new light sources on the DEIS Site. Stationary sources of light would include interior and exterior building lighting, commercial sign lighting, pedestrian level lighting along pathways, park and open space lighting and street lighting. Mobile sources would include light and glare from vehicle headlights associated with vehicles entering and existing structured below-ground parking lots from area roadways, and to a lesser degree, vehicles accessing surface parking. Light levels would be generally higher in the evenings and during the winter months, when there are more hours of darkness. Redevelopment under the Preferred Alternative would result in the elimination of many of the existing sources of light on the site; however, because the overall level of redevelopment on the site and the number of vehicles traveling through the site would be greater than under existing conditions, the overall level of light on the site would increase.

Lighting sources associated with redevelopment on the site would be generally similar to or somewhat less than those found in areas to the north on the Harborview Hospital campus and to the west in Downtown Seattle, as described in the DEIS for Alternatives 1-3. General lighting levels on the site would be somewhat higher than those in the areas to the east and south due to the overall building density assumed for the site, including street lighting and vehicular lighting levels on the site. From areas farther to the north and west, lighting on the site would appear as a continuation of the urban lighting pattern associated with the Harborview Medical campus and the South Downtown Neighborhood. Significant light impacts would not be anticipated.

As noted for DEIS Alternatives 1-3, new sources of glare on the site under the Preferred Alternative could include reflection from building facades and windows and reflections from vehicle traffic. Specific glare impacts would depend upon the degree of reflective surfaces

(glass windows) selected for building facades. Buildings containing office, neighborhood commercial and neighborhood service uses would likely include some degree of glass exteriors and could produce more glare than other uses. The amount of glare generated would be typical of urban development. Potential glare impacts to I-5 and Boren Avenue are discussed separately below.

East of 12th Sector

Construction

Light and glare impacts resulting from construction activities within this sector would be generally as described for the DEIS Site. That is, new temporary sources of light would be introduced to the sector during construction activities (which would include the renovation of two existing buildings). The lighting sources would be associated with infrastructure and building construction/renovation, lighting of the job site (to meet safety requirements), trucks and other equipment. Construction lighting could potentially be noticeable in certain areas proximate to the site; while noticeable, such lighting would not be expected to cause significant impacts. Construction lighting could be shielded from on and off-site residential buildings, and lighting associated with construction would be limited by City of Seattle regulations which limit activities during nighttime hours.

Operation

Under the Preferred Alternative, residential uses and some neighborhood commercial uses would be introduced to the sector. These new uses would result in new light sources at the King County Archives property and possibly new/additional light sources at the two retained buildings (Baldwin Apartments and Urban League). Additional vehicles accessing parking areas would also introduce more mobile light sources to the site. The overall character of light and glare within the redeveloped sector could be greater than existing uses, but would likely be similar to surrounding residential uses to the east and north.

Potential Glare Impacts to I-5 and Boren Avenue

A Solar Glare Analysis has been prepared to evaluate glare-related impacts under the capacity modeled building orientation for the Preferred Alternative. This analysis evaluates the potential environmental impacts resulting from glazing and specular (mirror-like) surfaces on buildings on the redeveloped Yesler Terrace site.

This glare analysis has been prepared is consistent with provisions of Seattle's Land Use Code and acceptable methodology for projects within the City, as well as with the methodology used to evaluate glare impacts for DEIS Alternative 3. Because of the proximity of the proposed redevelopment to I-5 and the fact that I-5 is the primary north-south freeway through Downtown Seattle, this analysis focuses on potential glare impacts on the freeway. Due to the proximity of the proposed redevelopment to Boren Avenue, a principal arterial, the glare analysis also accounts for potential impacts on this street.

As detailed in DEIS Section 3.10.2.2, a key consideration for motorists is the effect of potential solar glare on a driver's cone of influence, which is defined as the driver's viewing area and is within 20 degrees of the horizontal access that points in the direction of vehicle travel. This typically represents the most sensitive viewing area for motorists. Glare impacts that occur

outside the 20-degree cone-of-influence are considered less critical considering the driver's requirement and responsibility to look forward and the vertical limitation imposed by the height of a windshield, and would not result in significant impacts. In the glare diagrams, glare pathways that would appear within the driver's cone-of-influence are noted. In the diagrams, the term 'general glare impacts' is used to indicate the estimated location and extent of glare impacts.

Refer to page 3.10-94 of the DEIS for the discussion of glare sources and factors influencing the amount of reflective solar glare that may occur as related to weather, building height, width, orientation and glazing.

Similar to DEIS Alternatives 1-3, the Preferred Alternative would replace the existing primarily 2-story wood-frame buildings on-site with a series of high-rise and mid-rise buildings. The following glare analysis evaluates the impacts of the building configurations assumed for the Preferred Alternative based on the capacity model development scenario (see **FEIS Figure 3.10-30**).

Similar to the glare analysis completed for DEIS Alternative 3, this glare analysis is based on the assumption that all buildings on the Yesler Terrace site would have curtain walls and would be entirely covered in windows with no recessed windows. These assumptions allow for a worst case assessment of potential impacts.

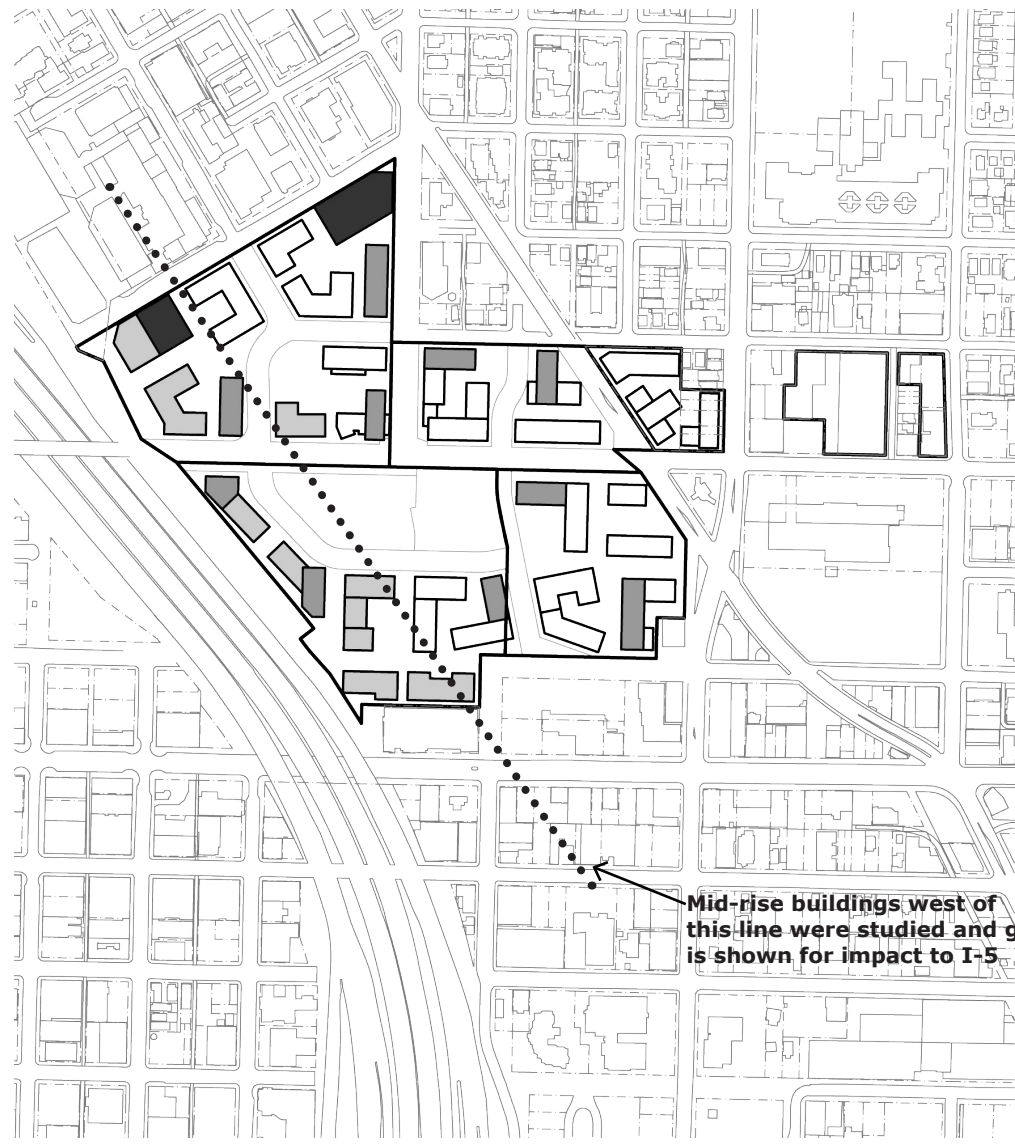
Figures H.1 to H.8 in **FEIS Appendix H** depict potential reflected solar glare from the Yesler Terrace redevelopment under the Preferred Alternative capacity model building orientations and locations, at two times of the day during each of the four key days of the solar year.

Vernal Equinox – Approximately March 21st

Climatic data indicate that March typically has 4 clear days, 8 partly cloudy days and 19 cloudy days.⁷

- At 8 AM (Figure H.1), reflected solar glare from the Preferred Alternative building orientations would extend from the south and east facades of Yesler Terrace buildings southwest and west towards I-5 and east/northeast towards Boren Avenue. Glare impacts to I-5 would occur to the south and west of the dotted lines. Due to the orientation of the buildings, narrow glare pathways would reflect onto the northbound and southbound lanes of I-5. The retaining wall adjacent to the north side of I-5 would shadow most of the roadway where glare would occur (as shown in the diagram). While some glare would be visible in the north and southbound lanes, it would be outside the cone-of-influence and is not expected to impair the vision of drivers. On Boren Avenue, glare would be visible in the north and southbound lanes. This glare would be outside the cone-of-influence and is not expected to impair the vision of drivers.
- At 5 PM (Figure H.2), reflected solar glare from the Preferred Alternative building orientations would extend from the south and west facades of Yesler Terrace buildings to the southwest and northwest towards I-5 and southeast and northeast towards Boren Avenue. For I-5, almost all of the actual glare on the ground would occur as shown on the diagram, except for a small portion in the northbound lanes of I-5, where a glare

⁷ NOAA, 2005. NOAA defines a clear day as one with zero to 3/10 tenths average sky cover, a partly cloudy day is one with 4/10 to 7/10 tenths average sky cover and a cloudy day is one with 8/10 to 10/10 tenths average sky cover.



- High-rise Office, 240' max
- High-rise Residential
240' max in NW, NE, SE and SW Sectors
except 160' max south of
S Washington St in SE sector
- Mid-rise, 85' max



Mid-rise buildings west of this line were studied and glare is shown for impact to I-5

Source: CollinsWoerman, 2011



Figure 3.10-30
Buildings Included In Glare Analysis - Preferred Alternative

Yesler Terrace
Redevelopment EIS

shadow would be created along the I-5 retaining wall. Glare would be intermittently visible to motorists in the northbound and southbound lanes of Boren Avenue. This intermittent glare, while noticeable, would not be within the cone-of-influence, and would not be expected to impair the vision of drivers.

Summer Solstice – Approximately June 21st

Climatic data indicate that June typically has 7 clear days, 8 partly cloudy days and 15 cloudy days.⁸

- At 8 AM (Figure H.3), reflected solar glare from the Preferred Alternative building orientations would extend from the south and east facades of Yesler Terrace buildings to the southwest and northwest towards I-5, and southeast towards Boren Avenue. On I-5 glare would occur west of the dashed line shown in the diagrams, and would be intermittently visible to motorists in the northbound and southbound lanes, except for a small portion in the northbound lanes of I-5 where a glare shadow would be created along the I-5 retaining wall. This glare, while noticeable, would be outside the cone-of-influence and would not be expected to impair the vision of drivers. On Boren Avenue, glare from Yesler Terrace buildings would be intermittently visible in the north and southbound lanes. This glare, while noticeable, would be outside the cone-of-influence, and would not be expected to impair the vision of drivers.
- At 5 PM (Figure H.4), reflected solar glare from the Preferred Alternative building orientations would extend from the south and west facades of Yesler Terrace buildings to the southwest and west towards I-5, and to the northeast towards Boren Avenue. On I-5, glare would occur west of the dashed line shown in the diagrams, and would be intermittently visible to motorists in the northbound lanes at several locations, except for a small portion in the northbound lanes where a glare shadow would be created along the I-5 retaining wall. This glare, while noticeable, would be outside the cone-of-influence and would not be expected to impair the vision of drivers. On Boren Avenue, glare from Yesler Terrace buildings would be visible at one location in the north and southbound lanes. This glare, while noticeable, would be outside the cone-of-influence, and would not be expected to impair the vision of drivers.

Autumnal Equinox – Approximately September 21st

Climatic data indicate that September typically has 3 clear days, 6 partly cloudy days and 22 cloudy days.⁹

- At 8 AM (Figure H.5), reflected solar glare from the Preferred Alternative building orientations would extend from the south and east facades of Yesler Terrace buildings to the west and southwest towards I-5 and to the east towards Boren Avenue. For the west and southwest oriented glare, a glare shadow would be created along the I-5 retaining wall that would protect much of the travel lanes from glare impacts. Some glare would be intermittently visible to drivers in the northbound and southbound lanes of travel. While noticeable, this glare would be outside the cone-of-influence, and would not be expected to impair the vision of drivers. On Boren Avenue, glare would be

⁸ NOAA, 2005.

⁹ NOAA, 2005.

intermittently visible in both lanes of travel on the roadway located roughly parallel to the site. This glare, while noticeable, would be outside the cone-of-influence, and would not be expected to impair the vision of drivers.

- At 5 PM (Figure H.6), reflected solar glare from the Preferred Alternative building orientations would extend from the south and west facades of Yesler Terrace buildings to the southwest and northwest towards I-5 and to the southeast and northeast towards Boren Avenue. Almost all of the actual glare on the ground would occur as shown in the diagram, except for a small portion of the northbound lanes of I-5, where a glare shadow would be created by the I-5 retaining wall. Glare would be intermittently visible to motorists in both lanes of travel. While noticeable, this glare would be outside the cone-of-influence, and would not be expected to impair the vision of drivers. On Boren Avenue, glare would be intermittently visible to motorists in both lanes of travel at several locations. This glare, while noticeable, would be outside the cone-of-influence, and would not be expected to impair the vision of drivers.

Winter Solstice – Approximately December 21st

Climatic data indicate that December typically has 3 clear days, 4 partly cloudy days and 23 cloudy days.¹⁰ On this day of the year at 8:30 AM and 4 PM, the altitude of the sun above the horizon is approximately 2 degrees, therefore, reflected solar glare distances are great. Anticipated glare impacts that are identified would occur infrequently due to the few number of sunny days on this date.

- At 8 AM (Figure H.7), reflected solar glare from the Preferred Alternative building orientations would extend from the south and west facades of Yesler Terrace buildings to the southwest and south towards I-5 and to the northeast towards Boren Avenue. Due to the topography of the site and the surrounding area, and the low elevation of the sun at this time of year, any glare from buildings on Yesler Terrace would fall 1 to 3 miles from the site and would not affect northbound or southbound lanes of travel on I-5 (the glare shown in the diagram represents only glare pathways). On Boren Avenue, glare would be intermittently visible to motorists in both lanes of travel. This glare, while noticeable, would be outside the cone-of-influence and would not be expected to impair the vision of drivers.
- At 4 PM (Figure H.8), reflected solar glare from the Preferred Alternative building orientations would extend from the west and south facades of Yesler Terrace building to the southwest and northwest towards I-5, and to the northeast and southeast towards Boren Avenue. Glare shown in the diagram oriented to the southwest of the buildings (towards I-5) represents only glare pathways as any actual glare would be above the ground plane in these locations because of the surrounding site topography. Glare shown to the northwest is actual glare hitting the ground plane, except for a glare shadow falling on the northbound lane of I-5. The glare to the northwest would be visible to motorists in both lanes of travel. While noticeable, however, it would be outside the cone-of-influence and would not be expected to impair the vision of drivers. Glare shown to the southeast of the buildings (towards Boren Avenue) starts at approximately a line east of 12th Avenue and continues well beyond the area shown. This glare would

¹⁰ NOAA, 2005.

be intermittently visible in both lanes of travel and would be within the cone-of-influence and could impair the vision of drivers.

Conclusion

Overall, no glare impacts to I-5 would be expected under the Preferred Alternative; in comparison, glare impacts to I-5 were identified in the DEIS glare analysis under the worst-case building orientations for December 21st at 4 PM. However, the Preferred Alternative glare analysis does identify glare impacts to Boren Avenue on December 21st at 4 PM. In comparison, no glare impacts to Boren Avenue were identified in the DEIS for Alternative 3 or the worst-case building orientations. The difference in impacts identified for the DEIS Alternatives as compared to the Preferred Alternative is attributable to the difference in assumed building configurations and locations. For comparison, refer to **FEIS Figure 3.10-30** and DEIS Figures 3.10-55 and 3.10-56.

Cumulative Impacts

Under the Preferred Alternative, cumulative impacts would be within the range identified for DEIS Alternatives 1-4.

3.10.2.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential light and glare impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Required/Proposed Mitigation Measures

Light and Glare

The following measures would help to reduce overall light and glare impacts for the project in the immediate vicinity of the Yesler Terrace site.

- Street trees and the use of building materials with relatively low-reflectivity at street level would minimize reflective glare-related impacts to pedestrians and nearby residents immediately adjacent to the site.
- Pedestrian-scale lighting would be provided consistent with code, function and safety requirements.
- Exterior lighting would include fixtures to direct the light downward and/or upward and away from on and off-site land uses.

Other Possible Mitigation Measures

Light and Glare

- Construction-related lighting could be shielded and directed away from adjacent land uses.

Reflected Solar Glare

(MODIFIED) The Preferred Alternative building orientations would not result in significant glare impacts (i.e. glare within the driver's cone-of-influence) to I-5 at any times of day or year. Glare impacts to Boren Avenue would occur on December 21st, at 4 PM. In order to avoid this glare impact, the building orientation could be altered or excessively-reflective building facade materials could be avoided for the building causing the glare. Changing the building orientation, alone or in combination with other measures, would be expected to mitigate this impact.

The following measures could help to reduce overall light and glare from the redevelopment proposal.

- While building façade materials have not yet been determined, reflectivity of glazing would likely be dictated by the nature of glass that is employed and the requirements set forth by the City's Energy Code and LEED energy requirements, if LEED certification is sought. Excessively-reflective surfaces (i.e. mirrored glass, or polished metals) that go beyond what is required to meet energy-related code provisions could be avoided for buildings with the potential to result in glare impacts.
- Additional measures to mitigate glare could include recessing glazing to produce areas of glare shadow which would reduce the amount of glare being reflected from the building, angling glazing in the building façade with an orientation that will eliminate glare in a driver's cone-of-influence and will cast glare in directions with less of an impact to traffic, and limiting the percentage of glazing on certain building facades to reduce glare impacts to surrounding buildings and roadways. Additional glare studies could be required for individual permit application to verify glare impacts and mitigation

3.10.2.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated in this FEIS, no significant unavoidable adverse light and glare-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.10.3 SHADOWS

This section describes existing sources of shadows on the site and evaluates potential shadow impacts under the Preferred Alternative on nearby protected park and open space areas, as well as on two of the main onsite open space areas: the Commons Park and the Yesler Community Center playground.

3.10.3.1 Affected Environment

DEIS Site

The primary sources of shadows on the Yesler Terrace DEIS site are described in Section 3.10.3.1 of the DEIS. The existing shadow conditions on the site and in the site vicinity have generally remained the same as presented in the DEIS; therefore, no changes to the discussion of existing conditions within the DEIS Site are warranted in this FEIS.

East of 12th Sector

The primary sources of shadows within the East of 12th Sector are the existing buildings including the two 1-story King County Archives warehouses, the 3-story Baldwin Apartments and the 3-story Urban League building. Mature street trees along Yesler Way, E Fir Street, 13th Avenue and 14th Avenue also contribute to shading.

3.10.3.2 Impacts

As noted in Section 3.10.3.2 of the DEIS, Seattle's SEPA policies aim to 'minimize or prevent light blockage and the creation of shadows on open spaces most used by the public.' Policy background, however, indicates that "(t)he City's Land Use Code (Title 23) attempts to protect private property from undue shadow impacts through height, bulk and setback controls, but it is impractical to protect private properties from shadows through project-specific review." Areas located outside of Downtown that are identified in the City's SEPA policies and that are to be protected include: publicly-owned parks; public schoolyards; private schools that allow public use of schoolyards during non-school hours; and publicly-owned street ends in shoreline areas. As described in Section 3.10.3.2 of the DEIS for Alternatives 1-4, the following parks and open spaces are in proximity to the site, and have the potential to be impacted by the proposed redevelopment alternatives (see **FEIS Figure 3.10-31** for the location of these parks and open spaces and see Section 3.10.3.2 of the DEIS for further description of these park and open space areas).

- Horiuchi Park
- Boren Place
- Harborview Park/Viewpoint
- Bailey-Gatzert Elementary School playground and ballfield

In addition to the above identified offsite areas, the following onsite park/recreation areas are considered in the Preferred Alternative shadow analysis.

- Yesler Community Center playground
- The Commons Park

It should also be noted that in addition to the above identified onsite open space areas, smaller pocket parks, and additional semi-private open space would be distributed throughout the site sectors (see **FEIS Section 3.15.1, Parks**, for additional information). While the shadow analysis does not specifically consider impacts to these other onsite areas, the application of high-rise siting criteria could help to reduce shadow impacts to these areas. Potential siting criteria measures are detailed below in **FEIS Section 3.10.3.3, Mitigation Measures**.

As noted in the DEIS, Seattle's SEPA policies also identified specific Downtown parks where mitigation of shadow impacts may be considered. Kobe Terrace Park is one of these Downtown parks, which is located in proximity to the site (see **FEIS Figure 3.10-31** for location).

Due to the addition of the East of 12th Sector, one additional open space area has been added to the shadow evaluation; the Squire Park P-Patch, which is located at 14th Avenue and E Fir Street. This is a 5,000 SF, 30-plot community garden that is owned by the City of Seattle's Department of Neighborhoods. This P-Patch is included in the shadow diagrams in order to evaluate potential shading impacts. However, as demonstrated by the figures in **FEIS Appendix H**, no shading of this area would occur under the Preferred Alternative on the key days of the solar year and times of day depicted in the shadow diagrams, except for at 3:30 PM on the Winter Solstice (December 21st).

Shadow diagrams are available in **FEIS Appendix H** that depict shading from the proposed Yesler Terrace redevelopment under the Preferred Alternative for the vernal equinox (approx., March 21st), summer solstice (approx. June 21st), autumnal equinox (approx Sept 21st), and winter solstice (approx. December 21st). This subsection describes possible shadow impacts on the eight park and open space areas identified above that could result from the Preferred Alternative. The City's SEPA policies address shadow impacts with consideration given to the effect "at times when the public most frequently uses that space."

The following analysis identifies shadow impacts for various times of the day on each of the key days of the solar year described above. These key days of the solar year and times of the day depict worst-case impacts. Shadow-related impacts, however, can also occur at other times of the day throughout the year. Because of the earth's rotation, the duration of shadow-related impacts varies for a stationary observer based on season, depending on the width of the shadow. The shadow graphics have been adjusted to compensate for topography and, in the case of vernal equinox, summer solstice, and autumnal equinox, daylight savings time.

Shadows cast by the Yesler Community Center, which is an existing building, are not included in the following discussion of impacts. Shadows from this building would periodically shade portions of the Commons Park, as is shown in the shadow diagrams.

Vernal (Spring) Equinox

Sunrise on vernal equinox (approximately March 21st) occurs at about 6:11 AM and sunset at 6:21 PM.

The extent of possible shading from existing buildings and proposed development must also be considered within the context of climatic data for the month (e.g., on average the number of clear, partly cloudy and cloudy days). Data indicate that on average, March has 4 clear days, 8 partly cloudy and 19 cloudy days.¹¹

Figures H.9 to H.12 in **FEIS Appendix H** address shadow impacts for vernal equinox at 9 AM, 12 PM and 5 PM, respectively. Potential shadows from the proposed redevelopment together with shadows from other nearby buildings are depicted in these figures. Potential impacts to the six park and open space areas identified above are described below. Pacific Daylight Savings time is in effect on this day.

¹¹ NOAA defines a clear day as one with zero to 3/10 tenths average sky cover, a partly cloudy day is one with 4/10 to 7/10 tenths average sky cover and a cloudy day is one with 8/10 to 10/10 tenths average sky cover.

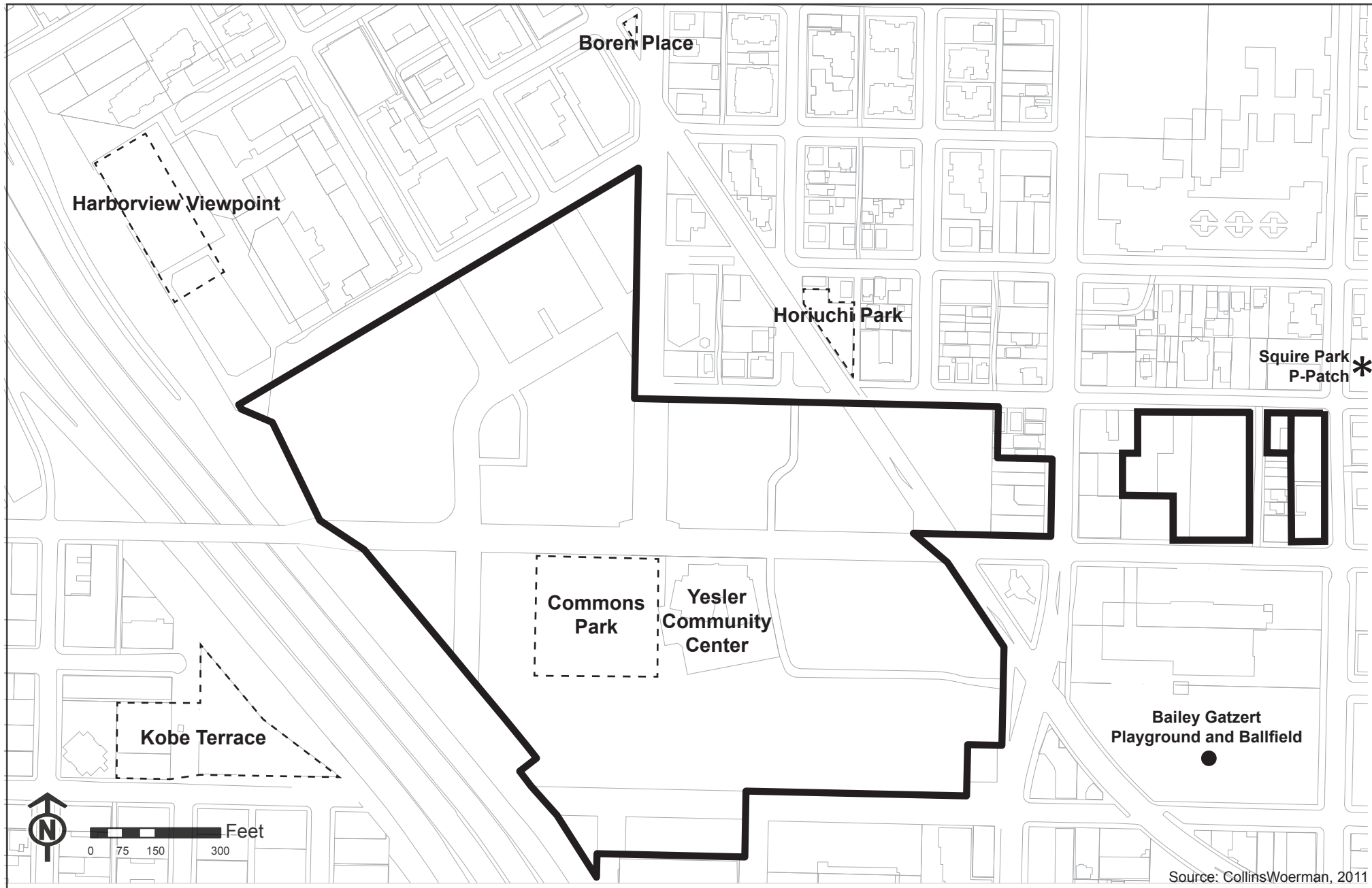


Figure 3.10-31
Public Parks / Open Spaces Noted in Shadow Analysis

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At **9 AM**, shadows from the Yesler Terrace redevelopment would extend in a northwesterly direction. Under the Preferred Alternative, portions of the Commons Park and Harborview Park would be shaded. Shadows from adjacent Harborview Medical Center buildings would already contribute to some shading of the Harborview Park. Also, a small portion of Kobe Terrace would also be shaded.

At **12 PM**, shadows from the Yesler Terrace redevelopment would extend in a northerly/northwesterly direction. Under the Preferred Alternative, small portions of the Commons Park and Yesler Community Center playground would be shaded.

At **5 PM**, shadows from the Yesler Terrace redevelopment would extend in a northeasterly direction. Under the Preferred Alternative, portions of the Commons Park, all of the Yesler Community Center playground and Horiuchi Park, and a small portion of the Bailey-Gatzert playground would be shaded.

Periodic shading could occur to onsite parks including the Commons Park and Yesler Community Center playground at this time of year during certain times of the day. Portions of offsite parks including the Bailey-Gatzert playground, Horiuchi Park, Kobe Terrace and Harborview Park, could experience periodic shading, however, the majority of these offsite park areas would remain un-shaded. Due to the time of year and the extent of cloudy days in March, the shading identified under the Preferred Alternative would not be considered significant.

Summer Solstice

Sunrise on summer solstice (approx. June 21st) occur at about 5:11 AM and sunset at 9:10 PM. Pacific Daylight Savings Time remains in-effect on this day.

The extent of possible shading from the proposed redevelopment must be considered within the context of climatic data for the month (e.g. on average the number of clear, partly cloudy and cloudy days). Data indicate that on average June has 7 clear days, 8 partly cloudy days and 10 cloudy days.

Figures H.12 to H.14 in **FEIS Appendix H** address shadow impacts for summer equinox at 9 AM, 12 PM and 5 PM, respectively. Potential shadows from the proposed redevelopment together with shadows from other nearby buildings, are depicted in these figures. Potential impacts to the six park and open space areas identified above are described.

At **9 AM**, shadows from the Yesler Terrace redevelopment would extend in a westerly direction. Under the Preferred Alternative, no shading would occur to any of the park or open space areas identified for analysis.

At **12 PM**, shadows from the Yesler Terrace redevelopment would extend in a northwesterly direction. Under the Preferred Alternative, no shading would occur to any of the park or open space areas identified for analysis.

At **5 PM**, shadows from the Yesler Terrace redevelopment would extend in an easterly direction. Under the Preferred Alternative, small portions of the Commons Park would be shaded.

Although under the Preferred Alternative periodic shading could occur on small portions of the Commons Park in the afternoon and evening, the majority of these areas would remain un-shaded, and shadows impacts would not be considered significant.

Autumnal Equinox

Sunrise on autumnal equinox (approx. September 21st) occurs at about 6:13 AM and sunset at 8:11 PM.

With regard to climatic data for the month of September, data indicate that on average, September typically has 3 clear days, 6 partly cloudy days and 22 cloudy days.

Figures H.15 to H.17 in **FEIS Appendix H** address shadow impacts for autumnal equinox at 9 AM, 12 PM and 5 PM, respectively. Potential shadows from the proposed redevelopment together with shadows from other nearby buildings, are depicted in these figures. Potential impacts to the six park and open space areas identified above are described. Pacific Daylight Savings Time remains in-effect on this day.

At **9 AM**, shadows from the Yesler Terrace redevelopment would extend in a northwesterly direction. Under the Preferred Alternative, portions of the Commons Park, Yesler Community Center playground and Harborview Park would be shaded.

At **12 PM**, shadows from the Yesler Terrace redevelopment would extend in a northwesterly direction. Under the Preferred Alternative, small portions of the Yesler Community Center playground the Commons Park would be shaded.

At **5 PM**, shadows from the Yesler Terrace redevelopment would extend in a northeasterly direction. Under the Preferred Alternative all of the Yesler Community Center playground, and portions of the Commons Park, Horiuchi Park, and the Bailey-Gatzert playground would be shaded.

Although periodic shading could occur to portions of the Yesler Community Center playground, the Commons Park, Bailey-Gatzert playground, Harborview Park and Horiuchi Park at certain times of the day, the majority of these areas would remain un-shaded and shadow impacts would not be considered significant.

Winter Solstice

Sunrise on winter solstice (approx. December 21st) occurs at about 7:54 AM and sunset at 5:19 PM.

With regard to climatic data for the month of December, data indicate that on average, December has 3 clear days, 4 partly cloudy days and 23 cloudy days.

Figures H.18 to H.20 in **FEIS Appendix H** address shadow impacts for winter solstice at 9 AM, 12 PM and 3:30 PM, respectively. Winter shadow studies are depicted at an earlier afternoon time due to the lack of sun at 5 PM. Potential shadows from the proposed redevelopment together with shadows from other nearby buildings, are depicted in those figures. Potential impacts to the six park and open space areas identified above are described. Pacific Standard Time remains in-effect on this day.

At **9 AM**, shadows from the Yesler Terrace redevelopment would extend in a northwesterly direction. Under the Preferred Alternative, all of the Commons Park, Yesler Community Center playground and Harborview Park would be shaded. Shadows from adjacent Harborview Medical Center buildings would also contribute to shading to the Harborview Park, however, and shading from Yesler Terrace buildings would be minimal.

At **12 PM**, shadows from the Yesler Terrace redevelopment would extend in a northerly direction. Under the Preferred Alternative, the majority of the Yesler Community Center playground, and portions of the Commons Park and Horiuchi Park would be shaded.

At **3:30 PM**, shadows from the Yesler Terrace redevelopment would extend in a northeasterly direction. Under the Preferred Alternative, all of the Yesler Community Center playground, the Squire Park P-Patch and nearly all of the Commons Park and Horiuchi Park would be shaded. However, as demonstrated by Figure H-28, shadows cast by surrounding development would also contribute to significant shading of the area at this time of the day on this date.

The most extensive shading impacts under the Preferred Alternative for the winter solstice would occur to onsite areas (i.e. Yesler Community Center playground and the Commons Park), and to Horiuchi Park and the Squire Park P-Patch. A small amount of shading could also occur to Harborview Park. Public use of outdoor park and open space areas would be expected to be minimal in December, due to the typical extent of cloudy days and inclement weather. Overall, the shading impacts described for the winter solstice would not be expected to be significant.

FEIS Site/Conclusion

The probable significant impacts from the Preferred Alternative on the FEIS Site (the DEIS Site and the East of 12th Sector) related to shadows would be similar to those analyzed under the DEIS Alternatives 1-4 on the DEIS Site.

Cumulative Impacts

Under the Preferred Alternative, additional sources of shadows would be added to the area as a result of redevelopment of the site. As noted in DEIS Section 3.10.3.2, shadows would add to and combine with shadows from existing development in the site vicinity. Due to the site's location within developed urban area adjacent to Downtown Seattle and other intense land uses such as Harborview Medical Center, no significant cumulative impacts would be expected.

3.10.3.3 Mitigation Measures

The following other possible mitigation measures could address potential shadow impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative to smaller onsite open space areas. All mitigation measures listed below are identified as (NEW), since no mitigation was identified in the DEIS, as no significant shadow impacts were identified under Alternatives 1-4.

Possible Mitigation Measures

To reduce shadow impacts from the development of high-rise buildings to smaller onsite open space areas such as pocket parks, the following measures could be implemented:

- (NEW) Small open space areas could be located adjacent to streets in order to gain solar access from the street. Locations on the north side of east/west streets would be preferable. Secondary preferred locations would be on north/south streets on either side of the street, however locations on the east side of these streets would benefit the most during daylight saving time periods.

- (NEW) Small open space areas adjacent to buildings could be located to the south, east or west sides of the buildings, with a southern location preferred.
- (NEW) Small open space areas could be located in areas which have the least amount of building shadow falling on them from future high-rise building locations from March through September during the hours of 10:00 AM to 4:00 PM.

3.10.3.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.11 HISTORIC RESOURCES

The following section compares the probable significant impacts from the Preferred Alternative on historic resources to those analyzed under the DEIS Alternatives 1-4 and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the impacts assumed in this sector under the Preferred Alternative. This section is based on the April 11, 2011, *Yesler Terrace Redevelopment Historic Resources Addendum* prepared by BOLA Architecture + Planning and is provided in **Appendix I** to this FEIS.

3.11.1 Affected Environment

Regulatory Context

In DEIS Section 3.11.1, the regulatory context of the historic resources analysis is described. The existing regulatory context for historic resources on the DEIS Site (NW, NE, SW, SE and East of Boren Sectors) and in the site vicinity have generally remained the same as presented in the DEIS, with the exception of the project's Area of Potential Effects (APE) definition, the status of the site's National Register of Historic Places Section 106 Process and the Seattle Landmark's Designation process for the Steam Plant, as described below. No other changes to the discussion of existing conditions within the DEIS Site are warranted in this FEIS.

Area of Potential Effects (APE)

As discussed in the DEIS, Section 106 of the National Historic Preservation Act (NHPA) requires that a federal agency consider the effects of undertakings upon historic properties within the project's APE. The DEIS APE was based only on the DEIS Site (NW, NE, SE, SW and East of Boren Sectors). For purposes of this FEIS historic resources analysis, the FEIS APE has been expanded to include the East of 12th Sector and area around it, as shown in **FEIS Figure 3.11-1**.

NHPA Section 106 Process

As described in DEIS Section 3.11.1, the National Register of Historic Places (NRHP) is administered by the National Park Service and is the official federal list of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology, engineering and culture.

The National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800) establish a program for the preservation of historic properties throughout the United States. Section 106 of the NHPA requires that federal projects or projects under federal jurisdiction take into account the effect of an undertaking on properties eligible for or included in the NRHP. The proposed project is considered a federal undertaking subject to compliance with Section 106 because its funding would include federal funds. The City Human Services Department (HSD) has accepted delegated responsibility as NEPA Responsible Entity from the U.S. Department of Housing and Urban Development (HUD), which includes certifying the project complies with the NHPA.

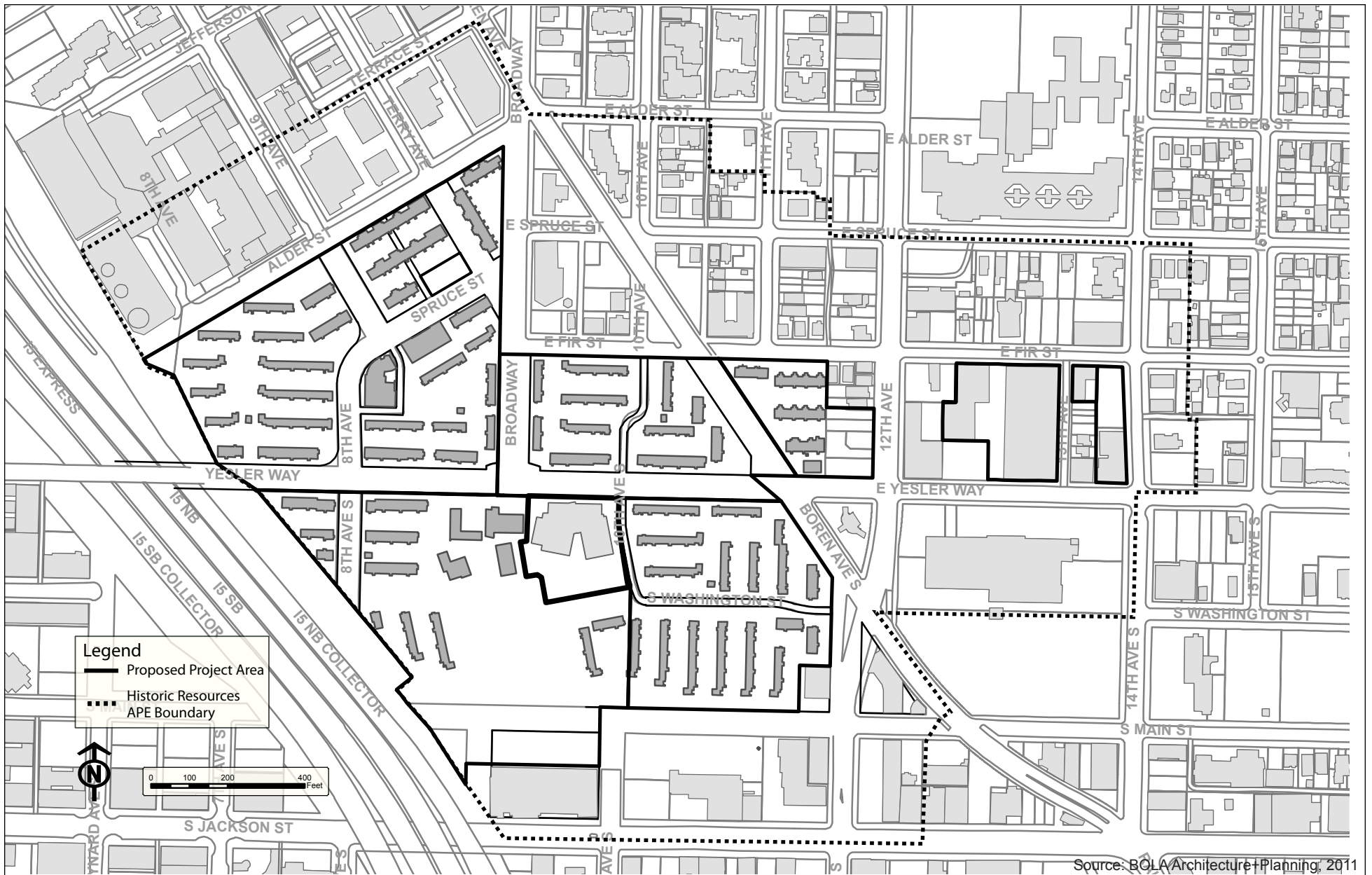


Figure 3.11-1
Historic Resources: Area of Potential Effects (APE)

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NHPA Section 106 Consultation between the lead agency and State Historic Preservation Officer (SHPO), includes defining an APE, notifying Native American tribes and other interested parties, describing the undertaking, identifying properties listed on or eligible for listing on the NRHP, and identifying impacts and adverse effects on listed properties and properties eligible for listing on the NRHP. If adverse effects are found, consultation is continued to resolve adverse effects by avoiding, minimizing, or mitigating the adverse effects. A Memorandum of Agreement (MOA) containing the mitigation measures is executed by the consulting parties if they agree on how the adverse effects will be resolved.

NHPA implementing regulations include a provision for early and effective communication with interested parties, such as Native American tribes and local preservation agencies including notifying interested parties of the project's intent and nature and providing them a reasonable opportunity to identify concerns about historic properties, provide advice and comment, and participate in the resolution of adverse effects.

Under Section 106 of NHPA, any effects of the proposed undertaking on properties listed in or determined eligible for inclusion in the NRHP must be analyzed by applying the Criteria of Adverse Effect (36 CFR Part 800.5(a)) – An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Some examples of Adverse Effects include the physical destruction of or damage to all or part of the property; its alteration (including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access) inconsistent with the *Secretary's Standards and Guidelines for the Treatment of Historic Properties*; removal of the property from its historic location; or demolition.

When the DEIS was issued in October 2010, the SHPO was in the process of determining whether the Yesler Terrace site as a whole was eligible for listing in the NRHP. In November 2010, the SHPO determined that the Yesler Terrace site as a whole was not eligible for the NRHP due to the low level of architectural integrity of the buildings. The SHPO determined that the Yesler Terrace Steam Plant building was eligible for individual listing in the NRHP as an intact example of its building type and for its direct connection to the Yesler Terrace Housing project (letter provided in **FEIS Appendix I**). In March 2011, the SHPO determined that the Urban League building/St. George Hotel was eligible for listing in the NRHP (letter provided in **FEIS Appendix I**). The lead agency, SHPO, and consulting parties are currently engaged in the Section 106 consultation process to determine whether the proposed development would have any adverse effects on listed or eligible properties under the NHPA. If the proposed development is determined to have an adverse effect under the NHPA, the lead agency, SHPO and consulting parties would continue consultation to resolve the adverse effect through mitigation.

Seattle Landmarks Designation Process

As described in DEIS Section 3.11.1, local recognition of a property's historical significance in Seattle is provided through the process of its nomination and designation as a Seattle Landmark.

The Seattle Housing Authority (SHA) submitted a landmark nomination to the City of Seattle Landmarks Preservation Board (Landmarks Board) for Yesler Terrace in March 2010, to determine its landmark status. The Landmarks Preservation Board nominated and considered the entire property. However, it designated only the Yesler Terrace Steam Plant as a landmark in October 2010.

At the time of issuance of this FEIS in April 2011, the City Historic Preservation Officer and SHA have not yet initiated negotiations for a Controls and Incentives Agreement for the Yesler Terrace Steam Plant building. These negotiations are part of the local landmark process. The agreement would identify the “controlled” features of the building, which when proposed for changes, would require review and approval by the Landmarks Board through the Board’s Certificate of Approval process. It would also identify the potential financial and non-financial incentives available to the property owner for preservation of the landmark, including its rehabilitation or adaptive reuse. A final step in Seattle’s Landmarks process is City Council approval of the Landmark designation by City ordinance.

Existing Site Conditions

DEIS Site

As documented in DEIS Section 3.11.1, the DEIS describes the general site history of the DEIS Site and vicinity, onsite structures and historic resources within the DEIS APE.

Onsite Buildings

The existing condition of historic resources on the DEIS Site have generally remained the same as presented in the DEIS. The Yesler Terrace site is listed as a historic resource on the Washington Register of Historic Places. As indicated above, the Yesler Terrace Steam Plant building has been designated as a Seattle Landmark and determined to be eligible for listing in the National Register of Historic Places (see Building 48 on **FEIS Figure 3.11-2**). The Steam Plant building is the only building on the DEIS Site to be designated a Seattle Landmark, and the only building determined to be eligible for listing in the NRHP.

No additional description of the existing historic resources on the DEIS Site is warranted.

Historic Resources within the DEIS APE

The existing condition of historic resources within the DEIS APE have generally remained the same as presented in the DEIS. In the DEIS, 48 properties were identified that contain buildings constructed in 1964 or earlier¹, including Yesler Terrace. Of these 48 properties, only the Steam Plant building is located on the DEIS Site. These 48 buildings are illustrated in **FEIS Figure 3.11-2** and a description and photograph of each building is provided in DEIS Appendix L. **FEIS Table 3.11-1** identifies the 9 structures within the DEIS APE that are either designated

¹ Per the NRHP and Section 106 regulations, a 50-year age requirement was used for this analysis. The City of Seattle Landmark designation guidelines have a 25-year age requirement for historic properties. Buildings that were less than 50 years old were reviewed during this analysis, but none appeared to meet the other criteria to be considered a Seattle Landmark in the City’s regulations.

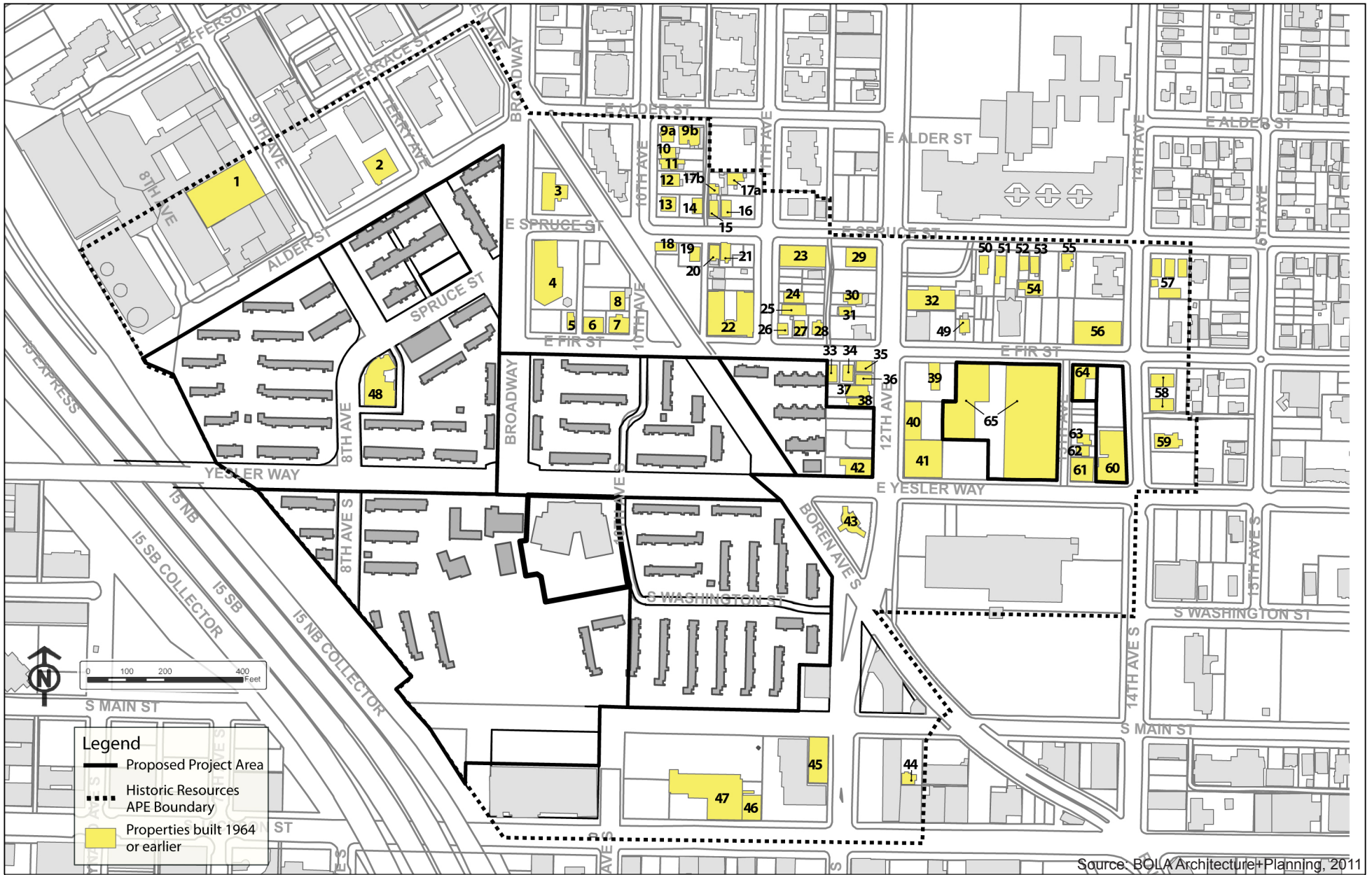


Figure 3.11-2
APE Map with Properties Built 1964 or Earlier

Yesler Terrace
Redevelopment EIS



historic structures or potentially eligible for listing as a historic resource in the NRHP, Washington Historic Register (WHR) or as a Seattle Landmark. All of these structures were identified in the DEIS.

**Table 3.11-1
DESIGNATED OR ELIGIBLE NRHP, WHR & SEATTLE LANDMARK RESOURCES
WITHIN THE DEIS APE**

Bldg Number	Name	Address	Year Built	Listing Status	NRHP Determination & Seattle Landmark Eligibility Recommendation
1	Harborview Medical Center - Central Wing	325 9 th Avenue (offsite)	1929-Current	Seattle Landmark	Determined Not Eligible NRHP
2	Fire Station No. 3	301 Terry Avenue (offsite)	1903	NRHP, WHR, Seattle Landmark	N/A
3	King County Medical Society/Michael Reese Building	200 Broadway (offsite)	1915		Determined Eligible NRHP and rec Seattle Landmark
4	Washington Baptist Convention/Japanese Baptist Church	160 Broadway (offsite)	1922		Determined Eligible NRHP and rec Seattle Landmark
10	Residence	216 10 th Avenue (offsite)	1900		Determined Eligible NRHP and rec Seattle Landmark
12	Residence	208 10 th Avenue (offsite)	1905		Determined Eligible NRHP and rec Seattle Landmark
23	Star Apartments	170 11 th Avenue (offsite)	1901/1910		Determined Eligible NRHP and rec Seattle Landmark
28	Residence	1108 E Fir Street (offsite)	1904		Determined Eligible NRHP and rec Seattle Landmark
48	Yesler Terrace Steam Plant	120 8 th Avenue (onsite)	1941	Seattle Landmark	Determined Eligible NRHP

Source: BOLA Architecture + Planning, 2010.

East of 12th Sector

Onsite Buildings

There are four existing structures on the East of 12th Sector: two King County Archives warehouses, the Baldwin Apartments building and the Urban League building.

King County Archives and Records Center - The King County Archives buildings were constructed in 1954 (see Building No. 65 on **FEIS Figure 3.11-2**) and are located at 1215 E Fir Street. This property contains two single-story reinforced concrete warehouse buildings. The

two utilitarian structures are used for records storage and have no decorative details and limited fenestration². These buildings are unlikely to be eligible for designation as a Seattle Landmark as they are not architecturally or historically significant. DAHP has determined this property is not eligible for the NRHP. See **FEIS Appendix I** for more details about architectural features of the King County Archives building.

Baldwin Apartments Building - The Baldwin Apartments building was constructed in 1918 (see Building No. 64 on **FEIS Figure 3.11-2**) and is located at 124 13th Ave. This three-story L-shaped bearing brick building has a flat roof and minimal cast stone detailing. The main entrance is centrally located in the west façade, with a simple concrete surround. Windows at the first and second stories have simple cast stone lintels; all windows have brick sills. This apartment building does not have any distinctive architectural features and has been altered. This building is not likely to be eligible for designation as a Seattle Landmark as it is not architecturally or historically significant. DAHP has determined this property is not eligible for the NRHP. See **FEIS Appendix I** for more details about architectural features of the Baldwin Apartments building.

St. George Hotel/Seattle Urban League Building - The current Urban League building was constructed in 1910 (see Building No. 60 on **FEIS Figure 3.11-2**) and is located at 1310 E Yesler Way. It was opened as the St. George Hotel in 1910, with commercial space at street level along the south side and southern portion of the east side. In the 1930s community musicians gathered in the basement, making it an important part of the Central Area's music scene. Since 1974, the Urban League of Metropolitan Seattle has occupied the building.

The building has retained significant architectural integrity and expresses the Renaissance Revival style. The three-story bearing brick building is finished with brick and decorative cream-colored terra cotta. It is characterized by arched openings at the first and third stories, pilasters³ between window bays, a denticulated⁴ cornice, and decorative details at the terra cotta window trim.

This analysis has concluded that this building appears to be eligible for Seattle Landmark designation. DAHP has determined the building is eligible for listing in the NRHP. See **FEIS Appendix I** for more details about architectural features of the Urban League/St. George Hotel building.

Historic Resources in the Expanded FEIS APE

Within the expanded portion of the APE identified in this FEIS, there are 16 properties containing buildings constructed in 1964 or earlier. There are 3 eligible or locally designated or NRHP-listed properties east of 12th Avenue within the project's expanded APE which are presented in **FEIS Table 3.11-2** and illustrated in **FEIS Figure 3.11-2**.

One (1) property east of 12th Avenue within the APE, Washington Hall, is listed in the NRHP, the Washington Historic Register (WHR) and is a designated City of Seattle Landmark. Two other properties within the expanded FEIS APE have been determined by this FEIS analysis to be

² Fenestration is the design and arrangement of openings in a building envelope, such as windows, doors, and skylights

³ A pilaster is a slightly-projecting column built into or applied to the face of a wall.

⁴ Denticulated means to have dentils, which are a series of small rectangular blocks projecting like teeth from a molding or beneath a cornice.

likely eligible for nomination as a Seattle Landmark and have been determined eligible for listing in the NRHP, as shown on **FEIS Table 3.11-2**.

**Table 3.11-2
DESIGNATED OR ELIGIBLE NRHP, WHR & SEATTLE LANDMARK RESOURCES
WITHIN THE EXPANDED FEIS APE**

Bldg Number	Name	Address	Year Built	Listing Status	NRHP Determination & Seattle Landmark Eligibility Recommendation
55	Residence	1311 E. Spruce (offsite)	1900		Determined Eligible NRHP & rec Seattle Landmark
56	Washington Hall/Danish Brotherhood of America, Seattle Lodge #29	153 14 th Avenue (offsite)	1908	NRHP, WHR, Seattle Landmark	N/A
60	St. George Hotel/Urban League	1310 E. Yesler Way (onsite)	1910		Determined Eligible NRHP and rec Seattle Landmark

Source: BOLA Architecture + Planning, 2011.

Washington Hall/Danish Brotherhood of America, Seattle Lodge #29

The current Washington Hall/Danish Brotherhood of America, Seattle Lodge #29 was constructed in 1908 and is located at 153 14th Avenue (see Building No. 56 on **FEIS Figure 3.11-2**). The building is characterized by Mission-style features, its shaped parapet and arched wall openings. This building is a designated Seattle Landmark and is listed on the WHR and NRHP.

Washington Hall was designed by architect Victor Vorhees for the Danish Brotherhood of America as a fraternal lodge, serving as the center for social and cultural activities of Seattle's Danish population. From early on, the building's dance hall and meeting rooms were used by groups of various ethnic backgrounds and it served the Squire Park neighborhood as a gathering place and performing arts venue. Billie Holiday, Duke Ellington, Mahalia Jackson, Marian Anderson, Count Basie, and a young Jimi Hendrix all performed at Washington Hall.

1311 E Spruce Street

The single-family residence at 1311 E Spruce Street is a one-and-a-half-story single-family dwelling of wood-frame construction built in 1900 (see Building No. 55 on **FEIS Figure 3.11-2**). The building footprint is irregular and the house features a cross-gabled roof. The main entrance is centrally located in the primary north façade and is sheltered under a modest hipped roof supported by simple square posts. Cladding is clapboard, accented by a flat frieze band and corner boards. The building appears relatively intact, although its integrity has been compromised by the replacement of original Tuscan porch columns with thin posts, replacement of some wood windows and the original glazed wood entry door, and an addition constructed at the southeast corner of the house.

3.11.2 Impacts

DEIS Site

On-site Buildings

Redevelopment under Preferred Alternative would require demolition of all of the structures on the DEIS Site with the exception of the Yesler Terrace Steam Plant building and the Yesler Terrace Community Center, similar to DEIS Alternatives 2 and 3. The Preferred Alternative assumes that the Yesler Terrace Steam Plant building would be adaptively reused, potentially for neighborhood services uses.

The Yesler Terrace Steam Plant was designated as a local landmark in October 2010. Provided the building is adaptively reused in a manner consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, there would be no adverse impact. For designated Seattle Landmarks, any planned adaptive reuse activities affecting designated features of the property would have to be reviewed and approved by the Seattle Landmarks Preservation Board.

Under the Preferred Alternative, potential indirect and/or temporary construction-related impacts that could affect the onsite Steam Plant Building include:

- **Potential Structural Instability/Undermining** – Damage that could occur to an historic resource due to structural instability caused by construction-related vibration and/or earthwork.
- **Temporary Dirt/Unintended Damage** – Introduction of atmospheric elements that may temporarily alter and/or potentially damage historic building fabric or architectural features.

With implementation of appropriate mitigation measures as defined in **FEIS Section 3.11.3**, significant impacts to the Steam Plant building would not be anticipated.

Adjacency Analysis

When environmental review is done on individual projects outside of the Planned Action context, there is an “Adjacency Analysis” that is done when a project is proposed adjacent to or across the street from a designated Seattle Landmark site or structure. Under that SEPA process, the City's Historic Preservation Officer would prepare an assessment of any adverse impacts on the designated landmark. Mitigation may be required to insure the compatibility of the proposed project with the color, material and architectural character of the designated landmark and to reduce adverse impacts on the character of the landmark's site.

It is anticipated that the Planned Action Ordinance would require this same Adjacency Analysis as part of a Master Use Permit application, even if Yesler Terrace redevelopment is covered by this FEIS and no new environmental review is done in connection with the permit application. Thus, this FEIS discussion anticipates the Adjacency Analysis would address compatibility of new construction with Seattle Landmark buildings.

As described previously, the Steam Plant building, including its smokestack, has been designated as a Seattle Landmark. The Steam Plant building is located on the Yesler Terrace site near the intersection of 9th and Spruce Street. The Steam Plant building would be surrounded by new development to the north, east, south and west and would likely require an Adjacency Analysis at the time specific development is proposed adjacent to the building.

Site design details such as building location, orientation, design and materials cannot be determined at this time; therefore, this analysis would need to be done in the future when development is proposed for the area directly adjacent to the Steam Plant and specific design details have been determined. Mitigation may include development of sympathetic façade treatment, street treatment and/or design treatment, or reconfiguration of the project and/or its relocation on the project site. Mitigation measures shall not result in reductions to a project's gross floor area. This section provides a preliminary discussion of the height, bulk and scale of development assumed in the area adjacent to the Steam Plant.

FEIS Figure 3.11-3 provides a simulation of the Preferred Alternative in relation to the Steam Plant Building as viewed from 9th Avenue looking southeast. As shown in this simulation, under the Preferred Alternative, the height, bulk and scale of the new buildings on the site in the area adjacent to the Steam Plant building would be greater than under existing conditions and greater than the Steam Plant building.

Based on current massing concepts, no significant height, bulk or scale impacts to the adjacent Steam Plant building would be anticipated as a result of the proposed redevelopment.

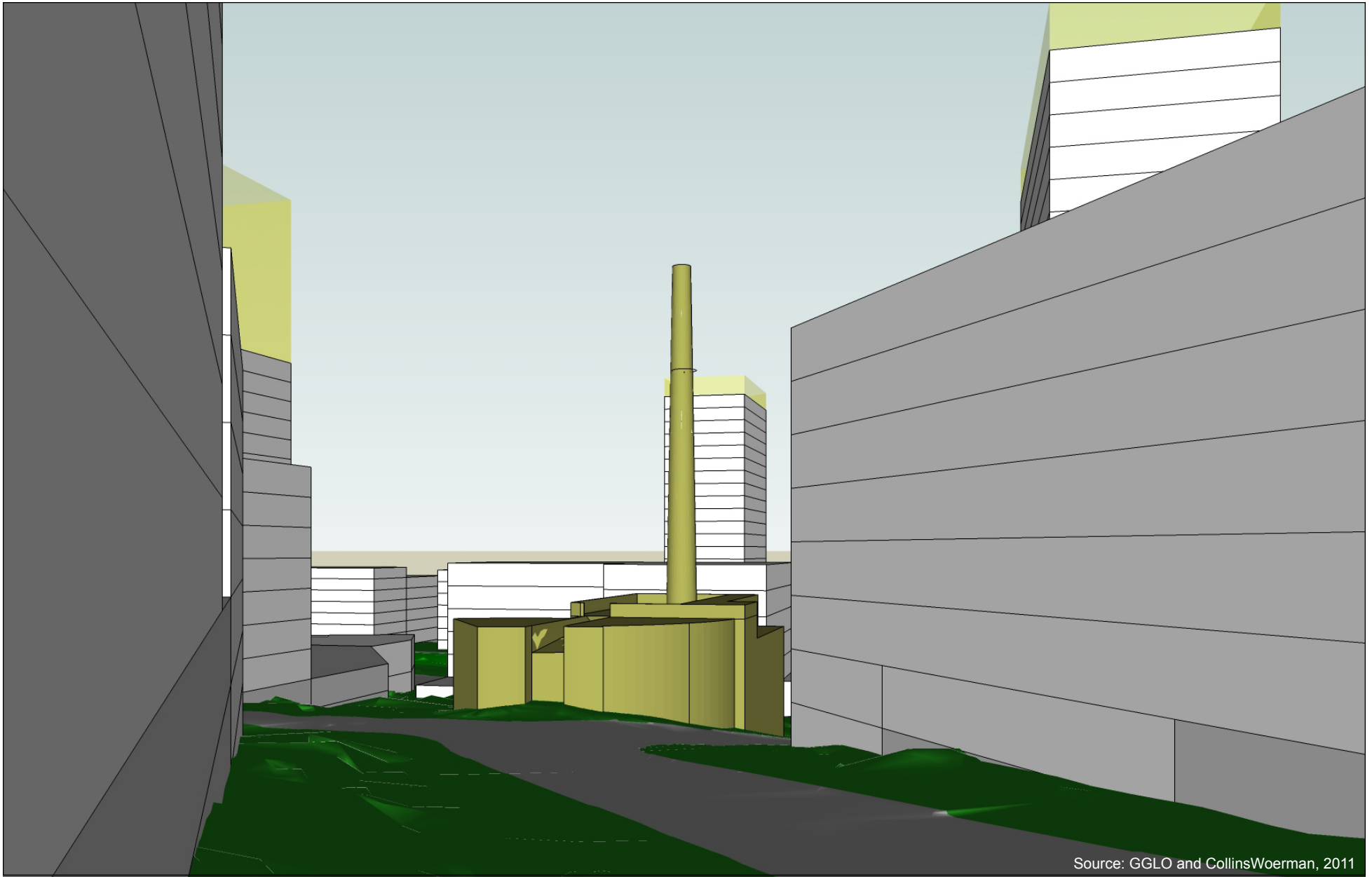
Off-site Historic Resources in the DEIS APE

Under the Preferred Alternative, potential indirect and/or temporary construction-related impacts that could affect certain nearby properties offsite within the DEIS APE would be similar to those described for the Steam Plant above and for the DEIS Alternatives 1-4 in DEIS Section 3.11-2. No other significant construction-related impacts to historic resources from redevelopment of the DEIS Site under the Preferred Alternative would be anticipated.

Adjacency Analysis

As described for the Steam Plant building above, when a project is proposed adjacent to or across the street from a designated Seattle Landmark site or structure, it is assumed that the Planned Action Ordinance would require the Adjacency Analysis that is a requirement of individual project SEPA review. Under that process, the City's Historic Preservation Officer would prepare an assessment of any adverse impacts on the designated landmark, and would provide comments on possible mitigating measures to assure the project's compatibility with the color, material and character of the designated landmark, and reduce impacts on the character of the local landmark's site. This assessment and commentary is part of the local SEPA review process, and the City's historic preservation policies.

As described in the DEIS Section 3.11.2, two buildings located near the site, the Central Wing of Harborview Hospital and Fire Station No. 3, are designated Seattle Landmarks (the Fire Station is also listed in the WHR and NRHP).



Source: GGLO and CollinsWoerman, 2011

Figure 3.11-3
Adjacency - Steam Plant

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Central Wing of Harborview Hospital

The Central Wing of Harborview Hospital is not directly adjacent to the Yesler Terrace site. It is across the street from the Yesler Terrace site, although this portion of Harborview Hospital is separated from the site by the intervening 15-story East Clinic building. As a result, an Adjacency Analysis may not be required. Redevelopment of the Preferred Alternative in the NW Sector closest to the Central Wing of Harborview would generally be similar to the adjacent Harborview Research and Training building and the East Clinic Building in terms of height, bulk and scale. Based on preliminary massing concepts, no significant height, bulk or scale impacts to the Central Wing of Harborview Hospital would be anticipated as a result of the proposed redevelopment.

FEIS Figure 3.10-6 in **FEIS Section 3.10, Aesthetics**, provides a simulation of the proposed Preferred Alternative in relation to the Central Wing of Harborview Hospital building.

Fire Station No. 3

Fire Station No. 3 is located across Alder Street, and north of the Yesler Terrace site. As such, an Adjacency Analysis would be required. This adjacency analysis would include a review of compatibility of the proposal with the color, material and architectural character of the designated landmark and a proposal to reduce impacts on the character of the landmark's site. Site design details such as building location, orientation, design and materials cannot be determined at this time; therefore, this analysis would need to be done in the future when development is proposed for the area directly adjacent to Fire Station No. 3 and specific design details have been determined. This section provides a preliminary discussion of the height, bulk and scale of development assumed in the area adjacent to Fire Station No. 3.

FEIS Figures 3.10-22 in **Section 3.10, Aesthetics**, provides a cross section that demonstrates the potential height, bulk and scale of Preferred Alternative structures in the area adjacent to Fire Station No. 3. As shown in these cross sections, building heights on the Yesler Terrace site adjacent to the 40 foot-tall Fire Station No. 3 would be approximately 75 feet.

FEIS Figure 3.10-7 in **Section 3.10, Aesthetics**, provides simulations of the Preferred Alternative in relation to the Fire Station No. 3 building as viewed from the Terry Avenue and Alder Street intersection.

Under the Preferred Alternative, the height, bulk and scale of the new buildings on the Yesler Terrace site in the area adjacent to the Fire Station No. 3 building would be greater than under existing conditions and greater than the Fire Station building, which is located across the street from the Yesler Terrace site. The original setting of the Fire Station has changed as development surrounding it has become more dense and taller. Neither changes in the setting resulting in the current context nor ones resulting from the Preferred Alternative are anticipated to reduce the Station's integrity in a way that disqualifies it from NRHP-listing. The Preferred Alternative would generally be similar in height, bulk and scale to the Harborview Research and Training building and senior housing apartment building, which are located directly to the west and east of Fire House, respectively.

Based on preliminary massing concepts, no significant adverse impacts would be anticipated due to the height, bulk or scale of the Preferred Alternative in relation to the nearby Fire Station

No. 3. If such impacts result from the Preferred Alternative design as it develops, they could be mitigated by use of revised colors, materials and/or architectural character, or revised massing.

East of 12th Sector

Potential indirect and/or temporary construction-related impacts of the Preferred Alternative could affect some properties within the East of 12th Sector and the expanded FEIS APE including Washington Hall and the St. George Hotel/Urban League building. The private residence at 1311 E Spruce Street would be unlikely to be impacted by the Yesler Terrace redevelopment activities due to the relative distance from the site boundary.

These potential impacts include the following:

- Potential Structural Instability/Undermining – Damage that could occur to an historic resource due to structural instability caused by construction-related vibration and/or earthwork.
- Temporary Dirt/Unintended Damage – Introduction of atmospheric elements that may temporarily alter and/or potentially damage historic building fabric or architectural features.

With implementation of appropriate mitigation measures as defined in **FEIS Section 3.11.3**, significant impacts to Washington Hall and the Urban League/St. George Hotel buildings would not be anticipated.

Onsite Buildings

Redevelopment under the Preferred Alternative on the East of 12th Sector would require the demolition of the King County Archives buildings. As stated in **FEIS Section 3.11.1**, these buildings are not architecturally or historically significant; therefore, no significant impacts to historic resources would be anticipated.

The Preferred Alternative assumes the Baldwin Apartments building would be rehabilitated to accommodate new residential uses. This analysis has determined that the Baldwin Apartments building is not likely eligible for nomination as a historic resource as it does not have any distinctive architectural features and the original building has been altered; therefore, no significant impacts to historic resources would be anticipated.

Under the Preferred Alternative, the St. George Hotel/Urban League building would be adaptively reused to accommodate new residential uses. Since this analysis has determined that this building is likely to be eligible for designation as a Seattle Landmark and has been determined Eligible for listing in the NRHP, any adaptive reuse plan would be required to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. If adaptive reuse complies with these standards, no significant impacts to historic resources would be anticipated.

Historic Resources in the Expanded FEIS APE

In addition to the existing designated or potentially eligible resources identified within the DEIS APE, two additional buildings, the Washington Hall/Danish Brotherhood of America (a designated Seattle Landmark) and a single-family dwelling at 1311 E Spruce Street (a potentially eligible resource) are located offsite within the expanded FEIS APE.

Adjacency Analysis

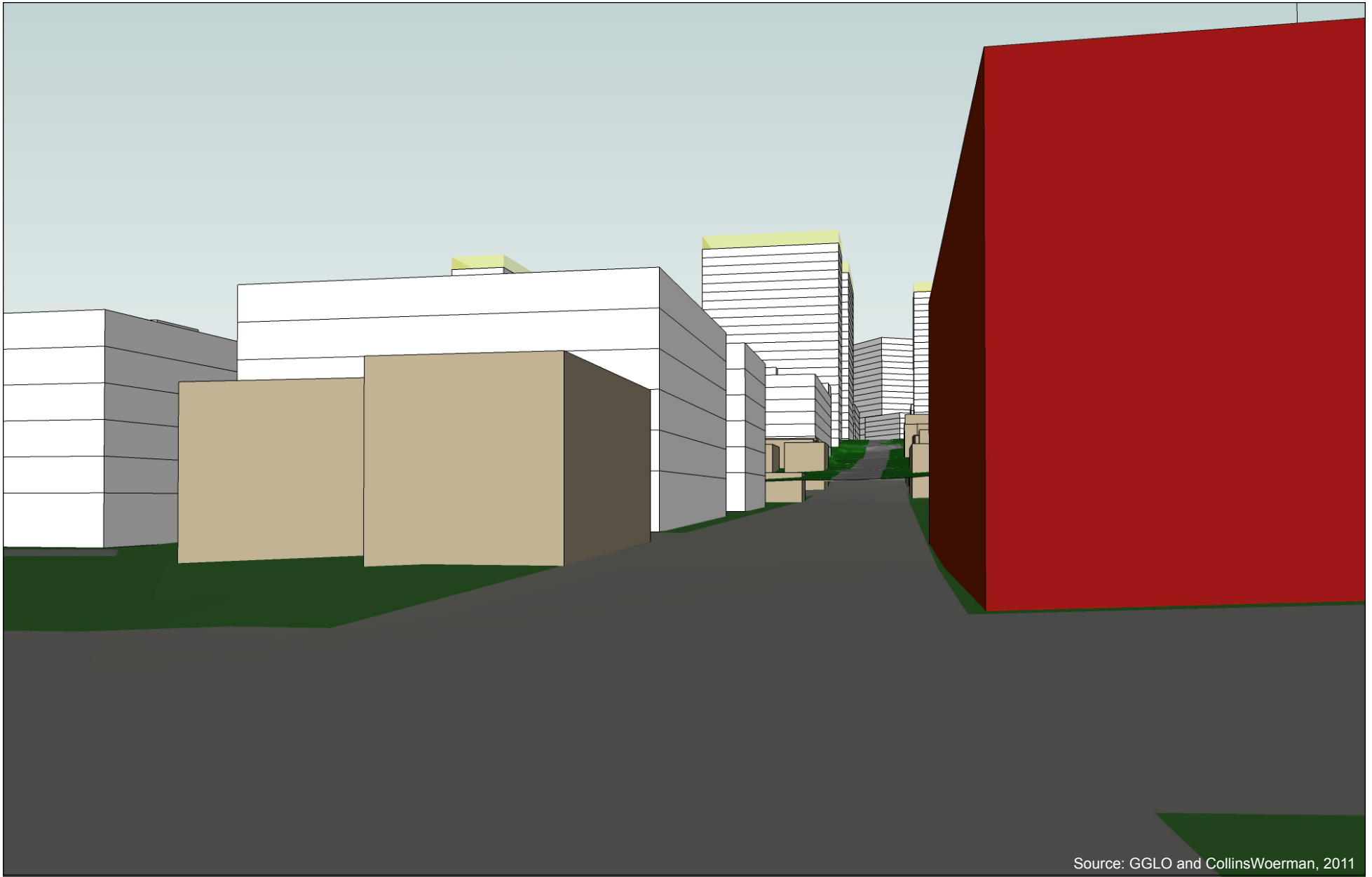
Per SMC 25.05.675.H(2)(d), when a specific project is proposed adjacent to or across the street from a designated Seattle Landmark site or structure, the City's Historic Preservation Officer will prepare an assessment of any adverse impacts on the designated landmark. Mitigation may be required to insure the compatibility of the proposed project with the color, material and architectural character of the designated landmark and to reduce impacts on the character of the landmark's site.

Washington Hall/Danish Brotherhood of America. The Washington Hall/Danish Brotherhood of America building is located north of the Baldwin Apartments building and northeast of the King County Archive building. Under the Preferred Alternative, the existing Baldwin Apartments building would be rehabilitated to accommodate new uses and the height, bulk and scale and relationship of the Baldwin Apartments building to the Washington Hall building would remain as under existing conditions; therefore, an adjacency analysis would not likely be required under the Preferred Alternative.

The Preferred Alternative assumes the two one-story King County Archive buildings would be demolished and redeveloped with a 65-foot tall mid-rise residential building. The proposed development on the King County Archives and Records Center would not be located directly adjacent to the Washington Hall building but would be across the street and at a diagonal to the Washington Hall building. As such, an Adjacency Analysis may not be required. Site design details such as building location, orientation, design and materials cannot be determined at this time; therefore, this analysis would need to be done in the future when development is proposed for the area directly adjacent to Washington Hall and specific design details have been determined. This section provides a preliminary discussion of the height, bulk and scale of development assumed in the area adjacent to Washington Hall.

FEIS Figure 3.11-4 provides a simulation that demonstrates the potential height, bulk and scale of the rehabilitated Baldwin Apartments building and new housing on the King County Archives site in the area adjacent to Washington Hall as viewed from the Squire Park P-Patch. As shown in this simulation, building heights on the Yesler Terrace site adjacent to the Washington Hall would be approximately 65 feet.

Under the Preferred Alternative, the height, bulk and scale of the new building on the King County Archives site on the East of 12th Sector in the area adjacent to the Washington Hall building would be greater than under existing conditions and greater than the Washington Hall building but would generally be similar in height, bulk and scale to other development in the vicinity. No significant height, bulk or scale impacts to the adjacent Washington Hall would be anticipated as a result of the proposed redevelopment. The height, bulk and scale of the Baldwin Apartments building would remain as under existing conditions; therefore, no impacts to the adjacent Washington Hall building would be anticipated.



Source: GGLO and CollinsWoerman, 2011



Figure 3.11-4
Adjacency - Washington Hall

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1311 E Spruce Street. The potentially eligible residence at 1311 E Spruce is not directly adjacent to the East of 12th Sector but is located one block north of the East of 12th Sector south across E. Spruce Street from the King County Juvenile Detention Facility. As a result, an Adjacency Analysis would likely not be required.

FEIS Site/Conclusion

The probable significant impacts from the Preferred Alternative on the FEIS Site (the DEIS Site and the East of 12th Sector) related to historic resources would be slightly greater than those analyzed under the DEIS Alternatives 1 and 4 on the DEIS Site, due to the adjacency of additional historic resources within the expanded FEIS APE. The probable significant impacts associated with DEIS Alternatives 2 and 3 would be greater than the Preferred Alternative due to the assumed demolition of the Yesler Steam Plant. With implementation of the mitigation measures noted in **FEIS Section 3.11.3** below, the cumulative impacts on the FEIS Site would not be anticipated to be significant.

Cumulative Impacts

Cumulative impacts to historic resources resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.11.3 Mitigation Measures

The following possible mitigation measures would address potential impacts to historic resources resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS except those identified below that have been modified (MODIFIED)⁵ or (NEW). Deletions of mitigation measures listed in the DEIS are shown in strikethrough.

Possible Mitigation Measures

- (MODIFIED) Yesler Terrace Steam Plant (designated City of Seattle Landmark and NRHP-eligible property) – The Preferred Alternative assumes the Steam Plant would be retained and adaptively reused/rehabilitated. Changes to the exterior (designated feature) of the Steam Plant, including demolition of the building, cannot be undertaken without the review and approval of the Landmarks Preservation Board. As a NRHP-eligible property, any adaptive reuse/rehabilitation plan would be required to comply with the *Secretary of the Interior's Standards and Guidelines for the Treatment of Historic Properties*.
- ~~Demolition of original (1941-1942) Yesler Terrace – Documentation of the property should be undertaken to mitigate its loss and should be easily accessible to the public. There are several options for providing a historic record, including development of a historic record in accordance with DAHP standards; development and posting of an expanded entry about Yesler Terrace on HistoryLink.org, the online encyclopedia of~~

⁵ Additional mitigation may be imposed if the proposed project is determined to have adverse effects on eligible or listed properties under the NHPA, and adverse effects are resolved through executing an MOA under the NHPA.

~~Washington State history; development of an oral history program by the Museum of History and Industry involving current and former long-term Yesler Terrace residents and managers, as well as early participants in SHA's history; and development and onsite installation of interpretive exhibits or interpretive artwork about the original Yesler Terrace, its social and cultural history, and buildings. Such exhibits or artwork should be located on the exterior, in easily accessible and visible locations on the new project site. Consideration should be given to an exhibit within or outside the Steam Plant. Any exhibit text should be provided in a variety of languages given the cultural diversity of Yesler Terrace. Retention and rehabilitation of the original Yesler Terrace Steam Plant, which does have architectural integrity, could also mitigate the loss of the overall property.~~

- (NEW) St. George Hotel/Urban League (recommended Seattle Landmark and NRHP-eligible) – The Preferred Alternative assumes the St. George Hotel/Urban League would be adaptively reused to accommodate new residential uses. Local permits are likely to trigger the Seattle Landmark Nomination process. Assuming this process results in designation of the property, changes to the designated feature(s) of the building cannot be undertaken without review and approval by the Landmarks Preservation Board. As a NRHP-eligible property, any adaptive reuse and/or rehabilitation plan would be required to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.
- Potential Structural Instability/Undermining – Care should be taken in order to avoid structural damage to nearby historic buildings that could occur due to construction-related vibrations and/or earthwork. All excavation, earthwork, pile driving, etc. should be designed and monitored in order to minimize and/or immediately address any such impacts to nearby or adjacent historic properties. Monitoring should include crack monitors placed on nearby structures, periodic observation, and photography to document the structural integrity of the historic buildings and determine whether there was resulting damage of interior or exterior finishes, or exterior masonry and/or framing. If such damage occurs as a result of the project, damage should be mitigated through repairs to the affected buildings.
- Temporary Dirt/Unintended Damage – Care should be taken in order to avoid or limit the introduction of atmospheric elements that could alter and/or potentially damage historic building fabric or architectural features of nearby historic resources. All construction activity should be monitored in order to prevent and address any such impacts to adjacent or nearby historic properties from construction vehicles carrying excavation materials. Dust control measures would be implemented (see **Section 3.2, Air Quality** of the EIS for details).
- (MODIFIED) Development pressure on low-scale properties – Mitigation in the form of preservation planning could be undertaken, by development and submittal of landmark nomination reports for those buildings offsite within the APE (*west of 12th Avenue portion only*) that are potentially eligible for listing as Seattle Landmarks but not currently designated.
- ~~Adjacency Analysis – SEPA calls for design analysis and review of new construction adjacent to or across the street from a designated local landmark, by the City Historic Preservation Officer.~~

- ~~• If Section 106 consultation results in a finding that the federal undertaking would have an adverse effect upon an NRHP-listed or eligible property or district, Section 106 requires measures to avoid, minimize, or mitigate such effects. A binding commitment to such measures is memorialized in a Memorandum of Agreement (MOA) between the parties and incorporated into the federal agency's Record of Decision.~~

3.11.4 Significant Unavoidable Adverse Impacts

With implementation of the appropriate mitigation measures, no significant unavoidable adverse impacts to historic resources would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.12 CULTURAL RESOURCES

The following section compares the probable significant impacts from the Preferred Alternative on cultural resources to those analyzed under Alternatives 1-4 in the *2010 Yesler Terrace Draft EIS* (DEIS) and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the impacts assumed in this sector under the Preferred Alternative. This section is based on the February 22, 2011, *Archaeological Assessment of the Yesler Terrace Redevelopment Project – East of 12th Sector* prepared by Cultural Resource Consultants and provided in **FEIS Appendix J**.

3.12.1 Affected Environment

Regulatory Context

In DEIS Section 3.12.1, the regulatory context of the cultural resources analysis is described. The existing regulatory context for cultural resources on the DEIS Site (NW, NE, SW, SE and East of Boren Sectors) and in the site vicinity have generally remained the same as presented in the DEIS, with the exception of the definition of the project's Area of Potential Effects (APE).

As discussed in the DEIS, Section 106 of the National Historic Preservation Act (NHPA) requires that a federal agency consider the effects of undertakings upon historic properties within the project's APE. The DEIS APE included only the DEIS Site. For purposes of this FEIS cultural resources analysis, the APE has been expanded to include the East of 12th Sector as shown in **FEIS Figure 3.12-1**. The site (and APE) is located in the First Hill area of the City of Seattle.

No other changes to the discussion of existing conditions within the DEIS Site are warranted in this FEIS.

Methodology

The methodology employed for the cultural resources analysis in the DEIS, as described in DEIS Section 3.12.1, was also used for this FEIS analysis.

DEIS Site

As documented in DEIS Section 3.12.1, the DEIS describes the general site history of the DEIS Site and site vicinity. The DEIS analysis indicates that there are no documented archaeological resources on or in the immediate vicinity of the site. There are 11 documented archaeological sites within 1 mile of the DEIS APE; the closest is located approximately 0.2 miles away. There are no known pre-contact villages within the DEIS APE; the closest is a former Duwamish village located 0.5 miles west southwest of the DEIS APE. The DEIS concluded that there is a low probability for encountering pre-contact and historical archaeological resources on the DEIS Site due to the site's environmental setting and its history of disturbance, including construction and demolition of buildings, transportation development and buried utilities. See DEIS Section 3.12.1 and DEIS Appendix M for additional details.

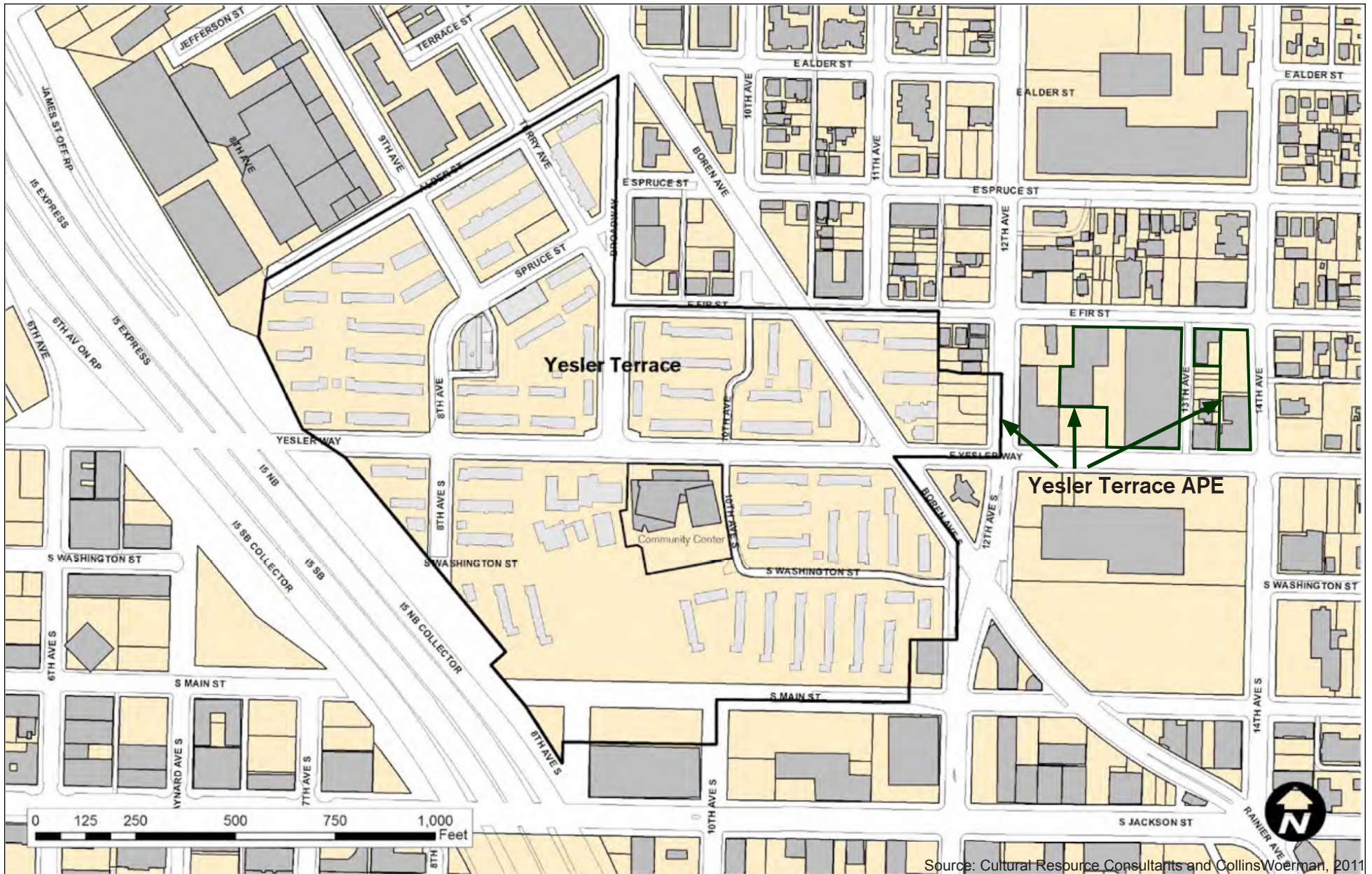


Figure 3.12-1
Cultural Resources: Area of Potential Effects (APE)

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East of 12th Sector

The King County Archive buildings, the Baldwin Apartments building and the Urban League building are currently located on the East of 12th Sector. The topography of the East of 12th Sector is relatively flat.

The formation of the landscape provides a record for the age and types of archaeological resources that may be found at the East of 12th Sector. The conditions related to cultural resources on the East of 12th Sector are similar to the conditions on the DEIS Site. Glaciation, sea level change, the response of the land to deglaciation, volcanism and tectonic movements formed and changed the land where people lived. Archaeological sites provide dates, locations, seasonality data and remnants of activities that characterize the pre-contact history of the Puget Sound basin. Historical data provides additional detailed accounts of Euroamerican activities within the Puget Sound landscape. See **FEIS Appendix J** for further information on the geomorphology, natural resources, paleoenvironments, ethnography, archaeology and archaeological history of the region in which the East of 12th Sector is located.

There are no previously recorded archaeological sites within or adjacent to the East of 12th Sector. Three sites have been recorded within approximately 1 mile of the East of 12th Sector. Archaeological data sources do not indicate the presence of any pre-contact villages within or adjacent to the East of 12th Sector APE. The closest recorded village is a former Duwamish village located 0.5 miles west southwest of the APE.

Historic uses of the East of 12th Sector include logging, transportation, agricultural, residential and commercial activities. The East of 12th Sector was first logged in the late 1800s and has experienced a series of significant ground disturbing activities since that time including: initial residential development in the late 1800s; increasing residential development, development of a baseball field and construction of the St. George Hotel (current Urban League building) through the 1910s; construction of the Baldwin Apartments building in the 1920s; redevelopment with new commercial uses and the King County Archive use through the 2000s.

Within the East of 12th Sector, there is a low probability for encountering pre-contact and historical archaeological resources due to the site's environmental setting and its history of disturbance, including construction and demolition of buildings, transportation developments and buried utilities (see **FEIS Appendix J** for details).

3.12.2 Impacts

This section summarizes the potential archaeological impacts associated with the proposed redevelopment of the Yesler Terrace site.

DEIS Site

There would generally be little difference between the types and levels of potential impacts on cultural resources on the DEIS Site (NW, NE, SW, SE and East of Boren Sectors) under the Preferred Alternative and the DEIS Alternatives 1-4. Similar to DEIS Alternatives 1-4, the Preferred Alternative would include ground disturbing activities during construction, such as demolition, clearing and grading, and excavating for utilities and foundations. Both the Preferred Alternative and DEIS Alternatives 1-4 include similar forms of building, roadway and utility

development that would be implemented over the long-term. While the Preferred Alternative includes new roadway alignments, similar to DEIS Alternatives 2 and 3 the site itself has been previously disturbed.

As indicated previously, there are no recorded archaeological sites or ethnographic places within the DEIS Site, and none were identified in this analysis. Within the DEIS Site there is a low probability to encounter pre-contact and historical archaeological resources due to the site's environmental setting and the history of ground disturbance. Therefore, construction and operations under the Preferred Alternative on the DEIS Site would not be expected to encounter archaeologically significant resources and no impacts would be anticipated.

East of 12th Sector

As indicated previously, there are no recorded archaeological sites or ethnographic places within the East of 12th Sector, and none were identified in this analysis. Similar to the DEIS Site, within the East of 12th Sector there is a low probability to encounter pre-contact and historical archaeological resources due to the site's environmental setting and the history of ground disturbance. Therefore, construction and operation on the East of 12th Sector under the Preferred Alternative would not be expected to encounter archaeologically significant resources and no impacts would be anticipated.

FEIS Site/Conclusion

Redevelopment of the Preferred Alternative on the FEIS Site (the DEIS Site and the East of 12th Sector) would not be expected to encounter archaeologically significant resources and no impacts would be anticipated.

Cumulative Impacts

Cumulative impacts to cultural resources resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.12.3 Mitigation Measures

Although no archaeological sites or ethnographic places have been identified within the FEIS APE and the Yesler Terrace site is considered to have a low potential to contain such resources, unanticipated resources could be encountered during construction. If at any time during construction archaeological resources were observed, the following mitigation measures would be implemented to address potential impacts to cultural resources resulting from the Yesler Terrace Redevelopment. All mitigation measures listed below are the same as those identified in the DEIS, since no new significant adverse impacts associated with the Preferred Alternative were identified.

Required/Proposed Mitigation Measures

- Project site work would be temporarily suspended at the location of the archaeological resource, the project manager would immediately be notified and a professional

archeologist would document and assess the discovery. The DAHP and all concerned tribes would be contacted for any issues involving Native American sites.

- If project activities expose human remains, either in the form of burials or isolated bones or teeth, or other mortuary items, work in that area would be stopped immediately. Local law enforcement, DAHP, and affected tribes would be immediately contacted. No additional excavation would be undertaken until a process has been agreed upon by these parties, and no exposed human remains would be left unattended.

3.12.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts would be anticipated.

3.13 Transportation

This section presents transportation analysis for the Yesler Terrace Redevelopment’s Preferred Alternative. The analysis uses the same methodologies as presented in the DEIS for trip generation and intersection level of service.

3.13.1 Affected Environment

The site area has been expanded to include the East of 12th Sector, bounded by 12th and 14th Avenues, Yesler Way, and Fir Street. This sector is located within the transportation analysis area that was evaluated in the DEIS. Therefore, the existing and future baseline traffic conditions described in the DEIS also apply for the site that includes the East of 12th Sector.

3.13.2 Impacts

Impacts of the FEIS Site

The Preferred Alternative would have a mix of residential, office, neighborhood commercial and neighborhood services uses. It would have approximately the same number of residential units as was previously evaluated for DEIS Alternative 3, but would have less space for the other types of uses. An additional sector—the East of 12th Sector—has been added to the site. The land uses assumed for the transportation analysis for each sector are summarized in **FEIS Table 3.13-1**. It should be noted that the allocation of land uses was refined after the transportation analysis was completed. The refined square footages of each land use category increased the total level of neighborhood commercial and neighborhood services, decreased the total level of office space, and slightly changed the allocation of the land uses between the sectors. Because the resulting reduction in projected office trips was greater than the increase projected for the other trips, the projected total PM peak hour vehicle trips for the refined land use allocation is 11 trips (0.8 percent) lower than the total projected for the program that had initially been developed. Therefore, the land use allocation assumed for the transportation analysis reflects a slightly more conservative traffic condition.

**Table 3.13-1
YESLER TERRACE – LAND USES ASSUMED FOR PREFERRED ALTERNATIVE
TRANSPORTATION ANALYSIS**

Land Use	NW Sector	NE Sector	SE Sector	SW Sector	East of Boren	East of 12th	Total
Residential (units)	1,449	804	962	1,278	252	250	4,995
Office (sf)	935,672	0	0	0	0	0	935,672
Neighborhood Commercial (sf)	34,428	7,000	0	0	3,690	0	45,118
Neighborhood Services (sf)	20,000	7,000	0	0	0	0	27,000

Source: GGLO, December 17, 2010.

**Note: this program is slightly different than presented in Chapter 2, as the Preferred Alternative data were refined after this transportation analysis was completed. The refined program would generate 11 fewer PM peak hour trips.*

The street network for the Preferred Alternative would be similar to the street networks defined in the DEIS for Alternatives 2 and 3. The exception is that 8th Avenue would remain in its current location and would not be realigned as previously proposed. Some improvements would be made to the intersection of 8th Avenue/9th Avenue/Fir Street to smooth the vertical and horizontal alignment.

Trip Generation

Trip generation for the Preferred Alternative was determined using the same methodology and assumptions used in the DEIS. This methodology was used to determine the net change in vehicle trips, transit trips, and pedestrian trips compared to the No Action conditions. **FEIS Table 3.13-2** summarizes the net change in vehicle trips. The trips include those generated by all sectors of the site, including those located with the East of Boren and East of 12th Sectors.

**Table 3.13-2
VEHICLE TRIP GENERATION SUMMARY– PREFERRED ALTERNATIVE**

Condition	Daily	AM Peak Hour			PM Peak Hour		
	Trips	In	Out	Total	In	Out	Total
Total Trips for Preferred Alternative	15,970	513	727	1,240	652	675	1,327
Net Increase from No Action Alt	14,370	468	640	1,108	573	603	1,176

Source: *Heffron Transportation, Inc., December 2010.*

Note: Trip generation values reflect the build out condition for each alternative.

FEIS Table 3.13-3 summarizes the daily project trips and the percent mode of travel. This shows that the Preferred Alternative would generate about 48 percent of its person trips by vehicle.

**Table 3.13-3
PERSON TRIP SUMMARY BY MODE – PREFERRED ALTERNATIVE**

Mode	Daily Trips ¹	Percent of Total
Non-Motorized ²	9,380	24%
Transit	11,180	28%
Person Trip by Vehicle ³	19,190	48%
Total	39,750	

Source: *Heffron Transportation, January 2011*

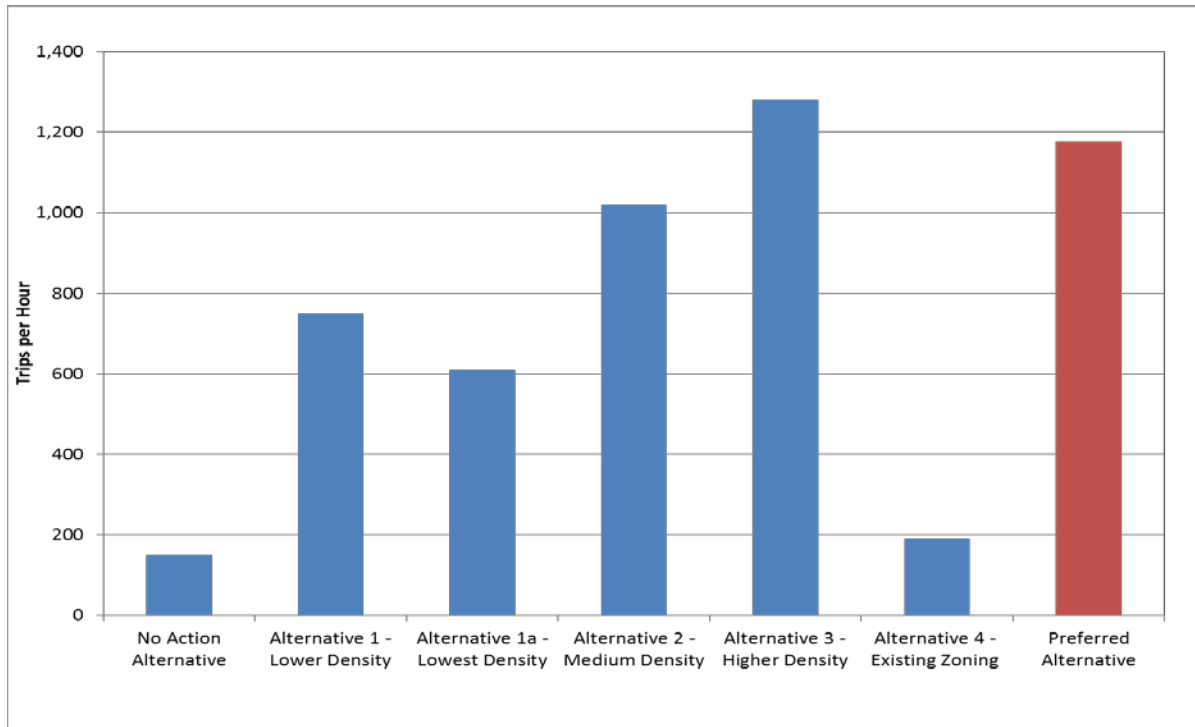
1. Total projected daily trips

2. Includes walk, bike, and internal trips

3. Vehicle trips are lower than person trips by vehicle, and are estimated by applying average vehicle occupancies of 1.2 persons per vehicle for retail, residential, and office trips, and 1.5 persons per vehicle for neighborhood service trips.

The Preferred Alternative would generate fewer trips than had previously been evaluated for Alternative 3 in the DEIS. **FEIS Figure 3.13-1** below shows the net increase in PM peak hour trips for all of the alternatives; daily and AM peak hour trips have similar trends.

**Figure 3.13-1
NET CHANGE IN PM PEAK HOUR TRIPS - COMPARISON OF ALL ALTERNATIVES**

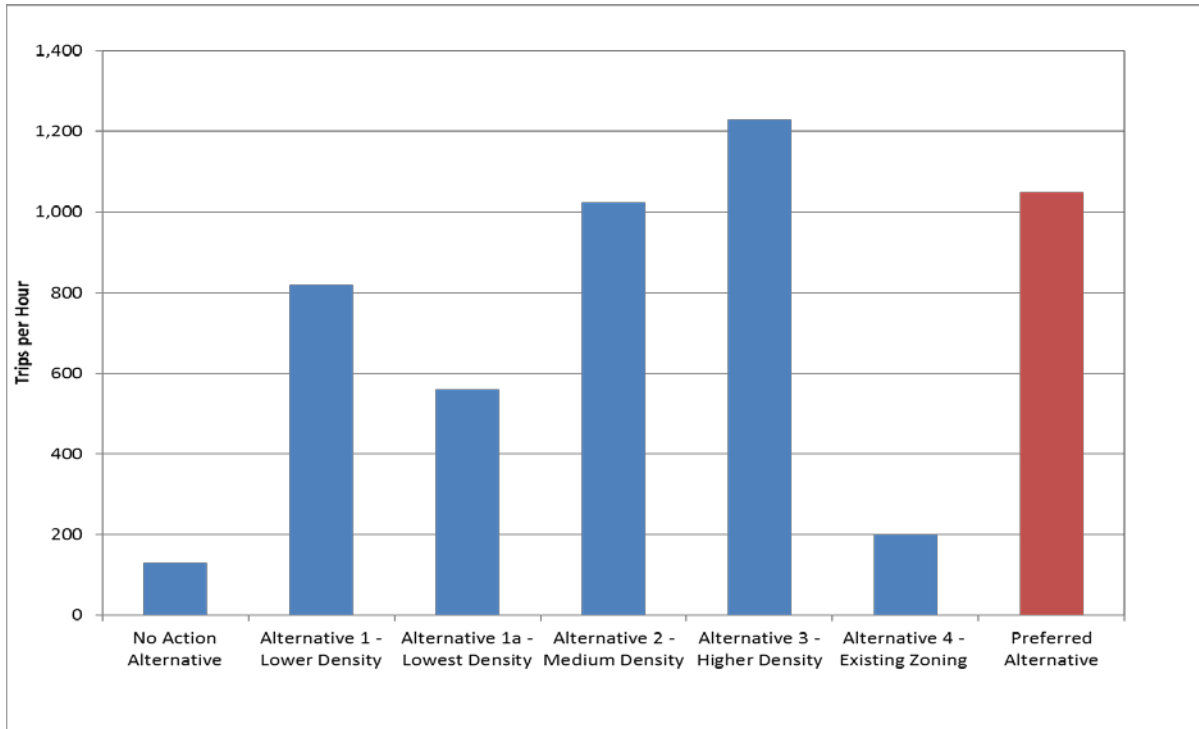


Source: Heffron Transportation, Inc., April and December 2010.

Trip generation for Alternatives 1 through 4 and the No Action Alternative is from the DEIS.

The Preferred Alternative would also generate about the same number of transit and pedestrian trips as previously evaluated for Alternative 2. These comparisons are shown on **FEIS Figure 3.13-2** and **FEIS Figure 3.13-3**, respectively.

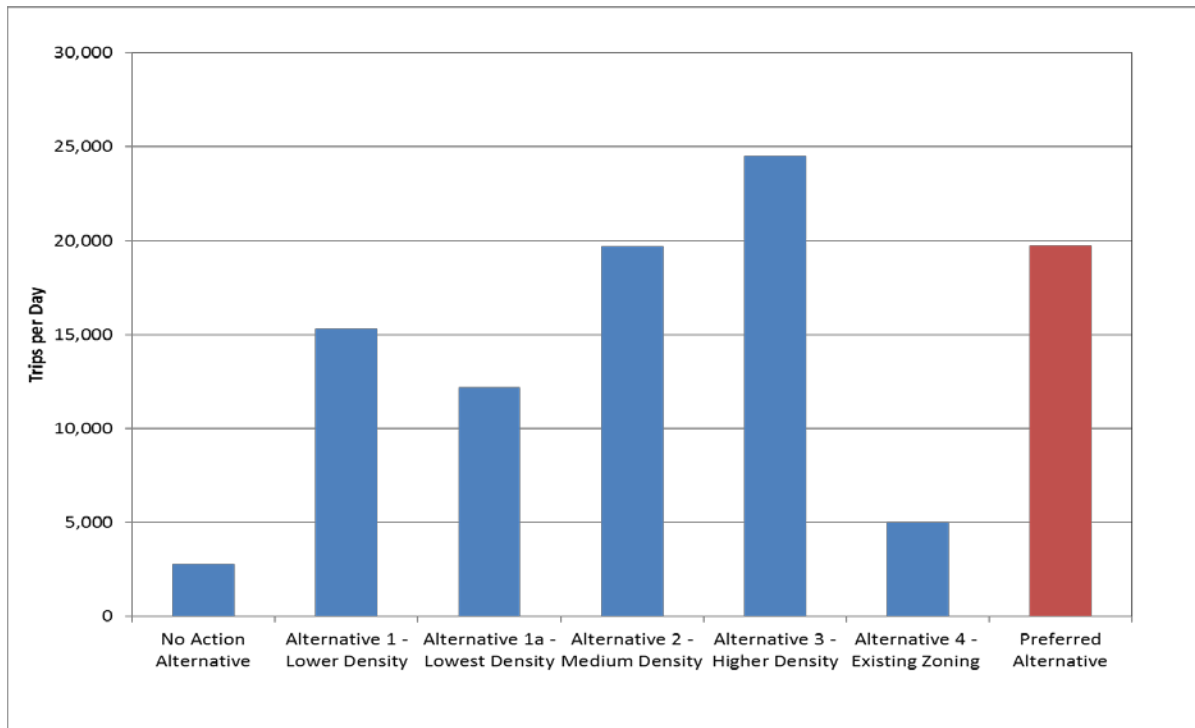
**Figure 3.13-2
TOTAL PEAK HOUR TRANSIT TRIPS - COMPARISON OF ALL ALTERNATIVES**



Source: Heffron Transportation, Inc., April and December 2010.

Trip generation for Alternatives 1 through 4 is from the DEIS.

**Figure 3.13-3
DAILY PEDESTRIAN/BICYCLE TRIPS – COMPARISON OF ALL ALTERNATIVES**

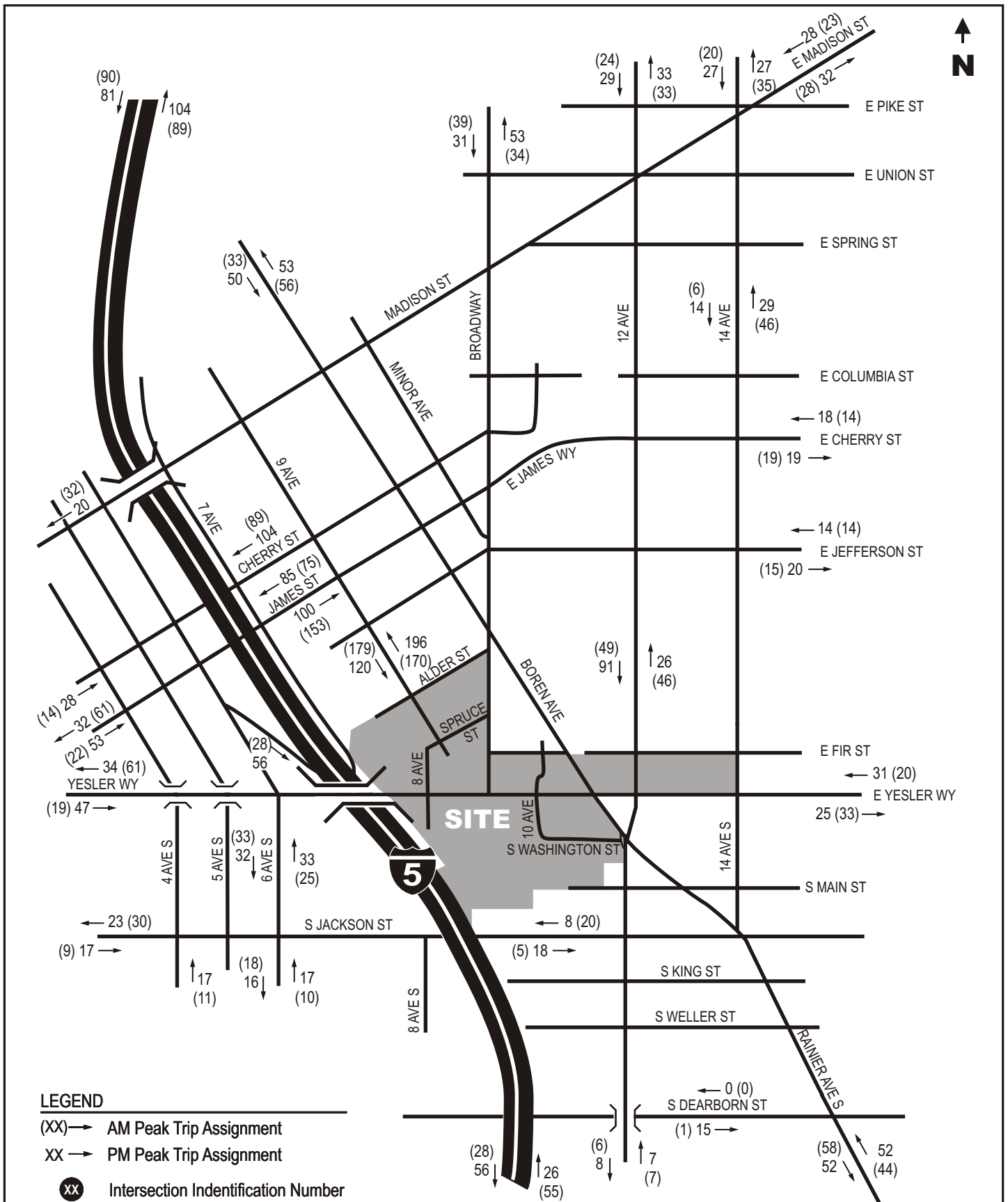


Source: Heffron Transportation, Inc., April and December 2010.

Trip generation for Alternatives 1 through 4 is from the DEIS.

The vehicle trips were assigned to the roadway network using the same trip distribution patterns as described in the DEIS. The net increase in vehicle trips generated by the Preferred Alternative are shown on **FEIS Figure 3.13-4**.

Trip assignments for the site vicinity are shown for the key intersection turning movements on **FEIS Figure 3.13-5** and **FEIS Figure 3.13-6** for the AM and PM peak hours, respectively. These volumes were added to the year 2030 No Action traffic volumes for these key intersections. The 2030 with Preferred Alternative traffic volumes are shown on **FEIS Figure 3.13-7** and **FEIS Figure 3.13-8**.

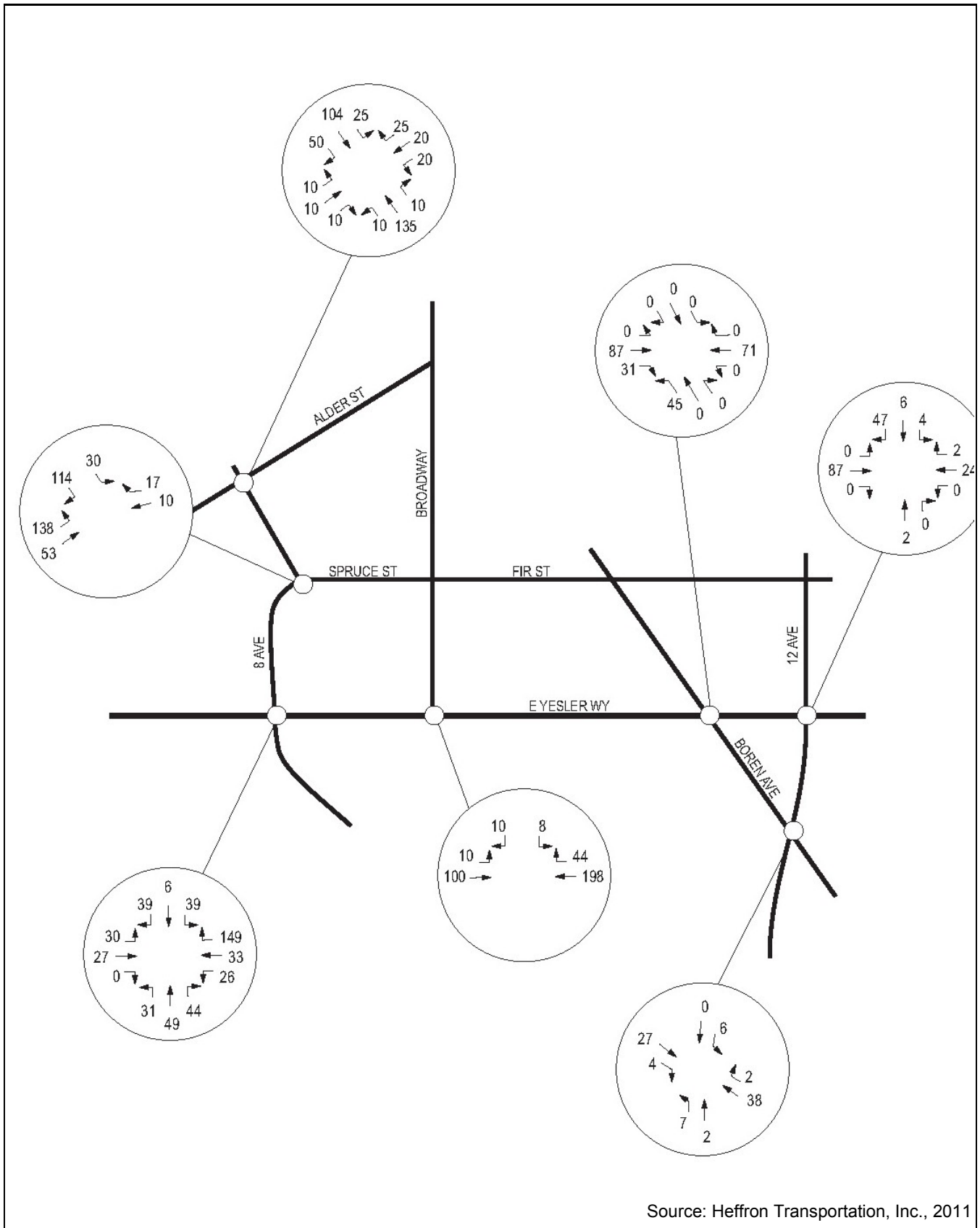


Source: Heffron Transportation, Inc., 2011



Figure 3.13-4
 Net Increase in Site Trips
 for Preferred Alternative

Yesler Terrace
 Redevelopment EIS

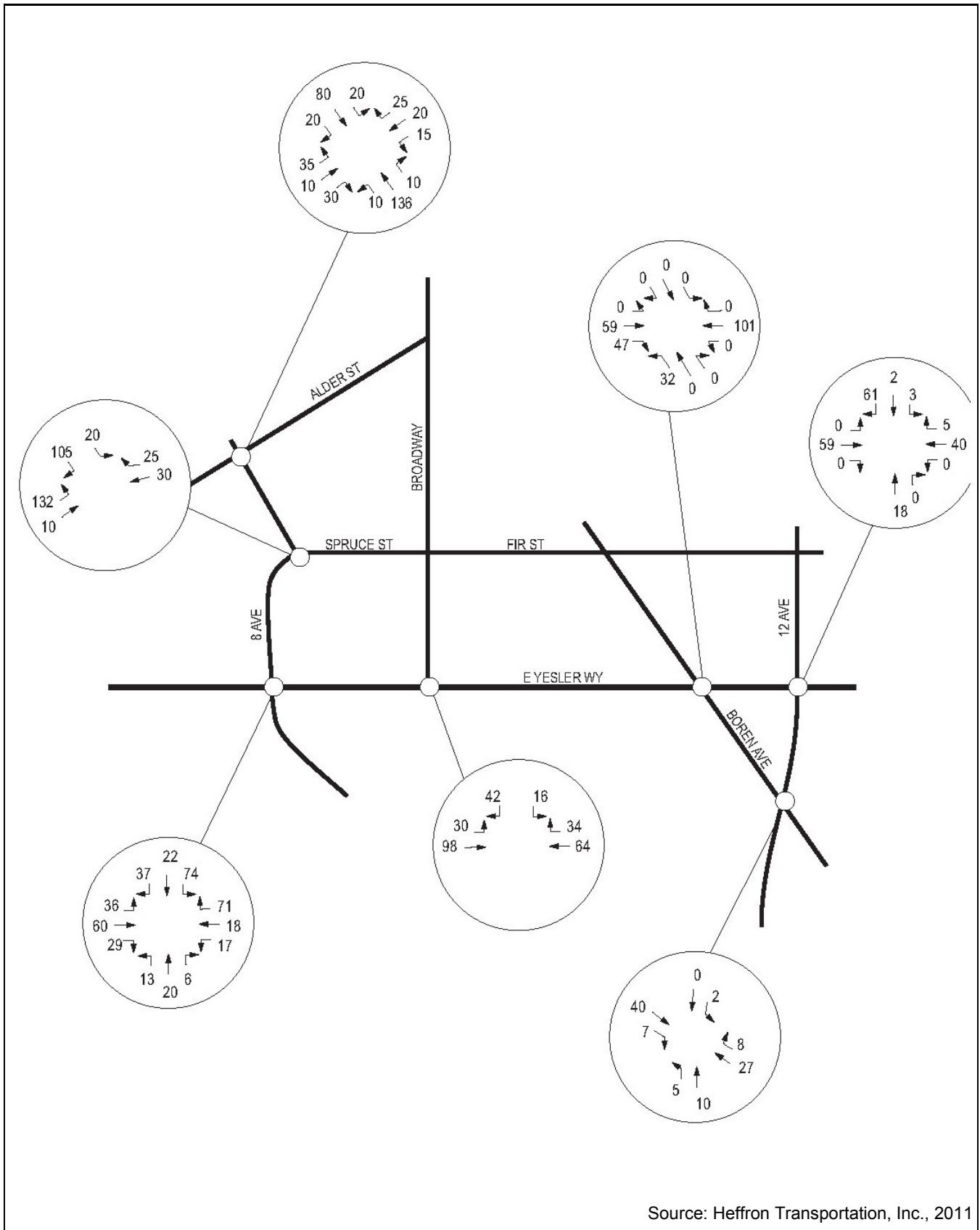


Source: Heffron Transportation, Inc., 2011



Figure 3.13-5
 Net Increase in Yesler Terrace Preferred
 Alternative Vehicle Trips Near Site Intersections—
 AM Peak Hour

Yesler Terrace
 Redevelopment EIS

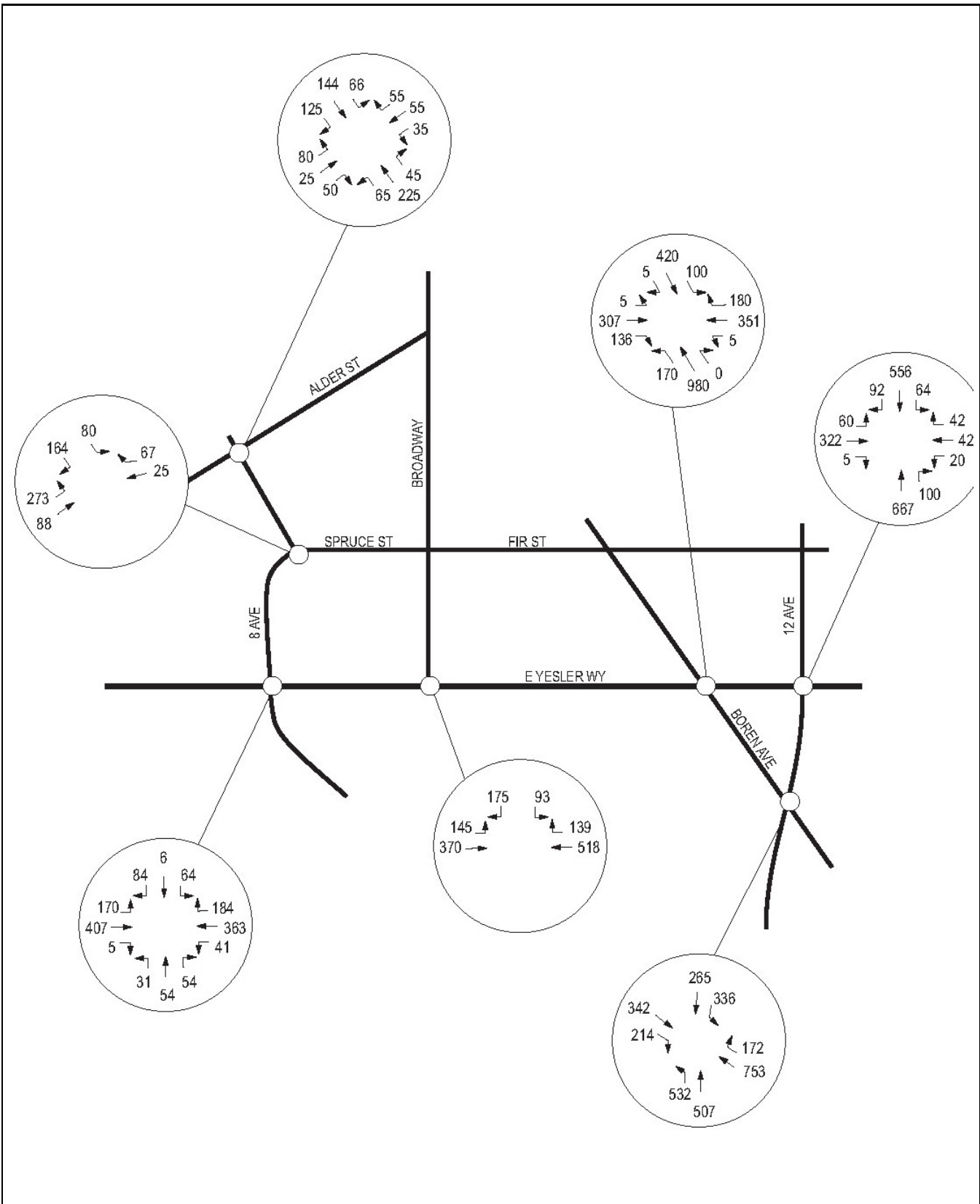


Source: Heffron Transportation, Inc., 2011



Figure 3.13-6
 Net Increase in Yesler Terrace Preferred
 Alternative Vehicle Trips Near Site Intersections—
 PM Peak Hour

Yesler Terrace
 Redevelopment EIS

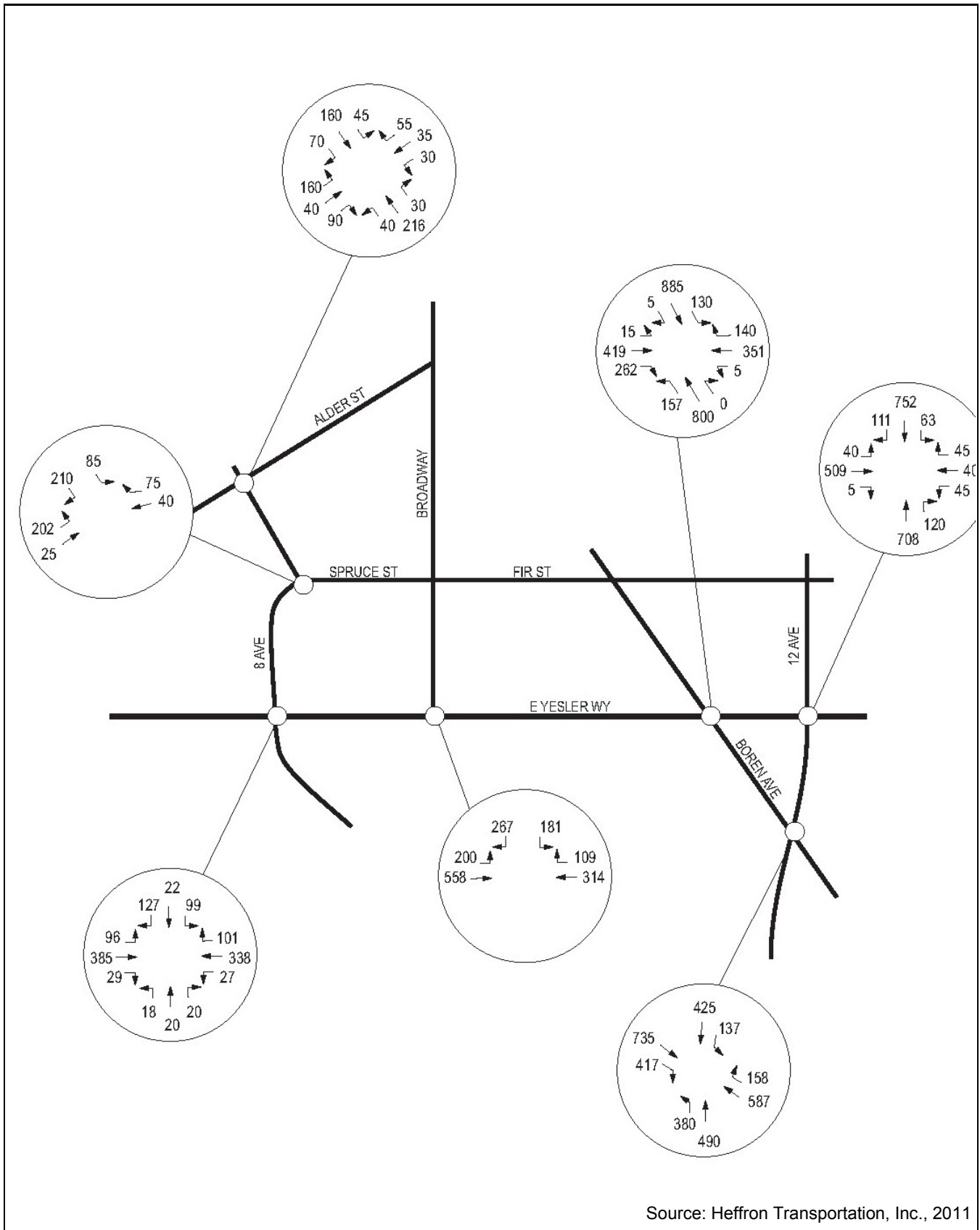


Source: Heffron Transportation, Inc., 2011



Figure 3.13-7
 Year 2030 Traffic Volumes with Yesler Terrace
 Preferred Alternative Near Site Intersections—
AM Peak Hour

Yesler Terrace
 Redevelopment EIS



Source: Heffron Transportation, Inc., 2011



Figure 3.13-8
 Year 2030 Traffic Volumes with Yesler Terrace
 Preferred Alternative Near Site Intersections—
 PM Peak Hour

Yesler Terrace
 Redevelopment EIS

Level of Service

Vehicle trips generated by the Preferred Alternative were added to the year 2030 No Action traffic volumes. These with-project volumes were then entered into the *Synchro 7.0* traffic operations models to determine the year 2030 study-area intersection levels of service. The analyses for all alternatives assume that the First Hill Streetcar would be complete and operating. The same methodology was used and is described in the DEIS. **FEIS Table 3.13-4** summarizes both the AM peak hour level of service and the PM peak hour results for the 2030 No Action Alternative and the Preferred Alternative conditions.

The City of Seattle has not adopted intersection level of service standards; however, project-related intersection delay that causes an intersection to operate at LOS E or F, or increases delay at an intersection that is projected to operate at LOS E or F without the project, may be considered a significant adverse impact. Many of the intersections to which the Yesler Terrace project would add project trips would already operate at LOS E or LOS F in the year 2030 without the project. The additional project traffic would exacerbate congestion at these locations. The intersections that would operate at LOS E or LOS F without or with the project include:

- Broadway/E Madison Street (intersection #3)
- 12th Avenue S/E Cherry Street (#6)
- Rainier Avenue S / S Dearborn Street (#19)
- 7th Avenue / Cherry Street (#21)
- 9th Avenue / Cherry Street (#22)
- 6th Avenue / James Street (#33)
- 6th Avenue / Yesler Way (#34)

Yesler Terrace traffic would degrade several other intersections to LOS E or F. These include:

- Broadway/E James Street (#7)
- 12th Avenue/E Yesler Way (#11)
- Boren Avenue/James Street (#25)
- 9th Avenue/Jefferson Street (#26)
- 9th Avenue/Alder Street (#28)
- Broadway/Boren Avenue (#29)
- 8th Avenue/Yesler Way (#31)

Table 3.13-4

LEVEL OF SERVICE SUMMARY– 2030 NO ACTION AND PREFERRED ALTERNATIVE CONDITIONS

Int. #	Intersection Name	AM Peak Hour				PM Peak Hour			
		2030 No Action ^a		Preferred Alt ^b		2030 No Action ^a		Preferred Alt ^b	
		LOS ^c	Delay ^d	LOS	Delay	LOS	Delay	LOS	Delay
SIGNALIZED INTERSECTIONS									
1	14th Avenue / E Madison Street	B	12.5	B	16.4	C	24.6	C	34.9
2	12th Avenue / Madison Street	B	17.7	B	18.2	C	27.8	D	47.0
3	Broadway / E Madison Street	C	32.2	D	36.3	E	55.4	E	75.9
4	Broadway / E Columbia Street	A	5.6	A	6.1	B	19.3	C	21.9
5	Broadway / E Cherry Street	A	7.2	A	9.0	A	9.9	B	17.7
6	12th Avenue / E Cherry Street	D	41.7	D	44.4	F	90.0	F	99.8
7	Broadway / E James Street	D	42.1	E	62.8	D	50.3	F	93.7
8	Broadway / E Jefferson Street	C	22.6	C	22.9	B	19.2	C	23.9
9	12th Avenue / E Jefferson Street	B	19.2	C	21.1	C	28.4	C	30.3
10	Boren Ave S / E Yesler Way	C	22.7	D	36.8	C	32.3	D	45.8
11	12th Avenue / E Yesler Way	D	37.5	E	64.5	D	46.5	E	66.1
12	14th Avenue / E Yesler Way	C	20.6	C	22.3	C	23.3	C	24.2
13	12th Avenue S / Boren Avenue S	C	28.4	C	29.2	D	36.3	D	39.6
15	12th Avenue S / S Jackson Street	D	45.4	D	49.8	C	29.1	C	31.1
16	14th Ave S/Rainier Ave S/S Jackson St	D	47.9	D	49.7	C	34.3	D	36.5
18	Rainier Avenue S / S Weller Street	A	1.1	A	1.2	A	4.1	A	4.6
19	Rainier Avenue S / S Dearborn Street	F	100.0	F	106.8	F	92.6	F	99.5
20	Boren Avenue / Madison Street	D	41.3	D	47.9	C	30.2	C	30.5
21	7th Avenue / Cherry Street	B	17.2	B	18.6	F	90.1	F	142.2
23	7th Avenue / James Street	C	29.0	D	37.2	C	22.8	C	26.8
24	9th Avenue / James Street	C	24.0	D	39.3	C	33.7	D	47.7
25	Boren Avenue / James Street	D	50.3	E	56.8	D	43.5	D	45.8
27	Boren Avenue / Jefferson Street	B	12.2	B	12.3	B	14.6	B	14.3
29	Broadway / Boren Avenue	C	25.2	C	33.6	D	38.4	E	72.7
32	Broadway / Yesler Way	B	12.3	B	14.2	B	19.5	C	23.8
33	6th Avenue / James Street	D	41.7	E	66.3	F	136.1	F	157.4
35	4th Avenue S / S Jackson Street	C	25.0	C	22.7	C	34.4	D	36.6
36	5th Avenue S / S Jackson Street	B	19.5	B	19.6	B	17.2	B	17.7
UNSIGNALIZED INTERSECTIONS ^e									
		LOS	LOS	Delay		LOS	LOS	Delay	
14	12th Avenue / S Main Street	C	16.7	C	18.2	C	23.1	D	26.2
17	Rainier Avenue S / S King Street	B	11.7	B	12.0	D	31.4	D	34.1
22	9th Avenue / Cherry Street	D	26.5	F	71.8	F	224.4	F	>500
26	9th Avenue / Jefferson Street ^f	B	12.4	D	29.5	B	14.7	E	49.2
28	9th Avenue / Alder Street	D	27.6	F	>400	D	27.0	F	368.3
30	9th Avenue / Spruce Street ^f	A	9.2	B	14.9	A	8.5	B	11.2
31	8th Avenue / Yesler Way	C	25.0	F	>500	B	14.7	F	282.3
34	6th Avenue / Yesler Way ^f	F	96.7	F	142.8	F	75.9	F	120.4

Source: *Heffron Transportation Inc., December 2010.*

- a. 2030 No Action condition reflects completion of the First Hill Streetcar plus regional growth.
 - b. Preferred Alternative reflects the condition with office space remaining. This reflects the highest trip generation for the Preferred Alternative.
 - c. Level of service.
 - d. Average seconds of delay per vehicle.
 - e. Delay reported for worst movement at the intersection, which is generally the left turn from a stop sign.
 - f. All-way stop controlled intersection. Delay reported for total intersection delay.
- Highlighted cells indicate LOS E and F intersections.

Site Access and Internal Circulation Impacts

On-site circulation would be similar to Alternatives 2 and 3. The exception is that 8th Avenue would remain in its current location and would not be realigned. Similar internal traffic control changes would be needed to accommodate the Preferred Alternative, including:

- New traffic signal at the intersection of Yesler Way/8th Avenue with left turn pockets on all approaches.
- A left turn pocket on Yesler Way eastbound at Broadway. The left turn pockets on Yesler Way between Broadway and 8th Avenue could be connected by a two-way left turn lane to maintain straight through lanes through this segment.
- Four-way stop at the 9th Avenue/Alder Street intersection.

The levels of development that may trigger these changes in traffic control are evaluated further in **FEIS Section 3.14.3, Mitigation Measures**, below.

Traffic Safety Impacts

Traffic safety impacts under the Preferred Alternative would be the same or less than were evaluated in the DEIS because the Preferred Alternative would generate less traffic than Alternative 3.

Transit Impacts

The net increase in PM peak hour transit trips is summarized in **FEIS Table 3.13-5**. As described in the Trip Generation section above, the number of transit trips generated by the Preferred Alternative is very similar to the trips generated by Alternative 2 from the DEIS: 925 PM peak hour transit trips for the Preferred Alternative compared to 895 PM peak hour transit trips for Alternative 2. In the peak direction of travel, however, the difference in riders between these two alternatives would be fewer than 10 peak hour trips. On any one route, the difference in ridership would be two or fewer riders. For this reason, the impacts and mitigation for the Preferred Alternative would be nearly identical to that presented in the DEIS.

**Table 3.13-5
NET INCREASE IN TRANSIT TRIPS TO/FROM YESLER TERRACE – PREFERRED
ALTERNATIVE**

Transit Route	Daily	PM Peak Hour Transit Trips		
		Inbound	Outbound	Total
27	3,050	105	165	270
60	610	15	40	55
9	690	15	55	70
Streetcar	2,680	65	195	260
Walk to Other Routes ^a	3,050	105	165	270
Total	10,080	305	620	925

Source: Heffron Transportation, Inc. January 2011.

Based on transit trip distribution percentages, route choice assumptions, and transit trip generation estimates.

Note: These values reflect the net increase in transit trips compared to the No Action condition.

a. Based on an estimated percent of riders who could choose to walk to another route in order to eliminate a transfer. Estimate is based on the walk distance and the potential bus wait time. The other routes are located within ½ mile of the site.

The DEIS noted that any of the previously evaluated alternatives could exacerbate overcrowded conditions on King County Metro’s Route 27. The DEIS discussed two possible mitigation measures to address overcrowding on the Route 27: increasing service on this route or rerouting Route 3/4 through the Yesler Terrace site. King County Metro’s comment letter on the DEIS stated that *“Of the two [mitigation options], rerouting Route 3 & 4 from James to Yesler street would better serve the interests of the proposed Yesler Terrace redevelopment. This is because the combined 3/4 route (which is partially subsidized by the City of Seattle) has significantly more service frequency and passenger capacity (243 daily including 78 peak period trips compared to Route 27’s 68 daily trips of which only 26 are in the peak period). Route 3 & 4 combined have a 7.5 minute headway, one of the most frequent in Metro’s system, resulting in over 4 times the daily passenger capacity. Route 3/4 quiet, zero-emissions, fixed guideway electric trolleys would provide the high quality, visible service that is appropriate for the large scale, mixed-use transit oriented development project proposed for Yesler Terrace.”* That letter goes on to state, *“Metro would welcome the opportunity to partner with SHA in pursuing such funding, possibly in conjunction with other beneficiaries that would benefit from a less-congested trolley route whose support could increase funding competitiveness.”* Metro’s mitigation preference has been incorporated into the Mitigation measures for Yesler Terrace.

Non-Motorized Impacts

The Preferred Alternative would have similar pedestrian facilities as previously evaluated. The proposed sidewalk widths and external connections would be adequate to serve the increase in pedestrian traffic.

The Preferred Alternative would also create a new pedestrian connection south to S Main Street that would be located along the 10th Avenue S right of way. Stairs would also be built in a central location to provide a more direct route to S Main Street. All new connections would be designed to maximize personal safety through proximity to proposed buildings and lighting. The connection to S Main Street would improve pedestrian access to the International District

and key transit routes along S Jackson Street or at the International District and King Street Stations.

Freight Impacts

The freight impacts would be the same as previously evaluated in the DEIS. Truck access would be provided for all buildings. Where possible, service drives would be created to the side or back of buildings to provide access to loading docks. Truck access to the site would be determined for individual building applications.

Transportation Concurrency

The DEIS determined that the highest-volume alternative—Alternative 3—would pass the City of Seattle's Concurrency requirements. Therefore, the Preferred Alternative, which would generate fewer trips than Alternative 3, would also pass Concurrency.

Parking Demand and Supply

The Preferred Alternative would target the same parking ratios for office, retail, and neighborhood services as defined in the DEIS. For residential uses, the Preferred Alternative would target a parking ratio of 0.70 stalls per unit (a blended average of SHA housing at 0.575 stalls per unit and Market Rate housing at 0.75 stalls per unit) which is lower than the residential parking ratio of 0.85 stalls per unit that was defined for the DEIS Alternatives.

Sustainability

The Preferred Alternative would have the same features as described in the DEIS for Alternatives 2 and 3, which would create a very sustainable transportation environment.

Construction Traffic Impacts

The Preferred Alternative would have the same potential construction impacts as described in the DEIS, which could include increases in construction-related traffic, as well as temporary closures (full or partial) of street lanes or sidewalks adjacent to construction activities. The most noticeable construction-related traffic impacts are likely to occur during demolition of existing uses and major earthwork stages. Other major impacts could occur during large concrete pours when a continuous supply of concrete could be trucked to the site. Other materials, such as steel, lumber, and other building supplies are expected to be trucked to the site as needed, but would not typically arrive in fleet shipments like those required for earthwork and concrete. Construction employees would also generate traffic and parking demand, but this volume would be much less than the site would generate when occupied.

Prior to commencing construction, the Seattle Housing Authority and/or its prime contractor(s) would prepare a *Construction Management Plan*. This plan would include information related to truck haul routes, staging areas, sidewalk and street detours, and employee parking. Details that should be included in the plan are described below in **FEIS Section 3.13.3**, Mitigation Measures.

East of Boren Sector

Traffic Impacts

Under the Preferred Alternative, the East of Boren Sector has fewer dwelling units and less commercial space than had been evaluated for this sector in the DEIS. Under the Preferred Alternative, the East of Boren Sector would generate approximately 640 vehicle trips per day, 44 trips during the AM peak hour, and 49 trips during the PM peak hour (the DEIS had evaluated up to 60 AM peak hour trips and 68 PM peak hour trips). Therefore, the transportation impacts associated with this sector under the Preferred Alternative would be less than previously evaluated. The DEIS determined that no mitigation would be needed to accommodate development of this sector.

Site Access Impacts

The East of Boren Sector was assumed to be accessed via 12th Avenue, which would operate at LOS C during both the AM and PM peak hours. An additional access point at Fir Street would also be provided, which would improve the operations at each driveway beyond what has been assumed.

Safety Impacts

As redevelopment of the East of Boren Sector would be expected to increase vehicle traffic, the potential for vehicle conflicts and probability for vehicle collisions in the study area would also be expected to increase. New traffic generated by this sector at the one high collision location identified in the DEIS (6th Avenue/James Street) would be far less than 1 percent of total entering traffic during the peak hours, and is not expected to have significant effect on operations. Similar to the larger proposal, site design would incorporate measures to maintain adequate sight lines between motorists and pedestrians, and minimize conflicts through traffic calming. Thus, traffic generated by the East of Boren Sector is not expected to result in significant adverse safety impacts.

Transit Impacts

Of the approximate 10,000 new daily transit trips projected for the Preferred Alternative, 220 are expected to be generated by the East of Boren Sector, with 16 trips occurring during the AM peak hour and 17 trips during the PM peak hour. When distributed among the streetcar and the Metro transit routes that would serve the site (using the distribution procedures described in the DEIS), one to five additional trips are projected on each route during the PM peak hour, which would be the hour with the highest expected use. The existing transit routes have capacity to accommodate this increase in demand. Thus, no adverse impacts to transit are identified for the East of Boren Sector.

Non-Motorized Impacts

Of the almost 20,000 daily non-motorized trips (pedestrian, bicycle, internal, and walking to transit) projected for the Preferred Alternative, approximately 580 are expected to be generated by the East of Boren Sector, with 35 trips occurring in the AM peak hour and 46 trips in the PM peak hour. The rate of pedestrian flow generated by this sector is far lower than the highest intensity flow projected for the project cumulatively, which analysis showed would be well

accommodated by the proposed 6-foot sidewalks that would allow projected pedestrian activity to operate at LOS A. Thus, LOS A is also projected for pedestrian demand generated by the East of Boren Sector, and no adverse impacts are identified.

Freight Impacts

Proposed land use in the East of Boren Sector consist of residential development and a small amount of neighborhood commercial. Truck traffic would primarily consist of waste pick-up, small package delivery (UPS or other freight haulers) and resident moving. Truck loading areas or “back-of-house” truck access may be needed for garbage and recycling pick-up. Other truck delivery or residential move in/move out could be accommodated on internal access drives or adjacent streets as needed. Thus, no adverse freight impacts are identified for redevelopment of the East of Boren Sector.

Parking Impacts

The East of Boren Sector would provide parking at a similar ratio as described above, at a blended rate of 0.70 parking stalls per unit. Expected parking demand would be accommodated on-site, determined individually for the buildings.

East of 12th Sector

The Yesler Terrace site has been extended east to include parcels that are east of 12th Avenue. This area could accommodate 250 housing units. These sites may be developed before other redevelopment sites to provide housing for residents that are relocated from existing Yesler Terrace units. The analysis presented above encompassed all development proposed at the Yesler Terrace site, including the East of 12th Sector. To support potential permitting of the East of 12th Sector, impacts associated with just that portion of the redevelopment have been assessed separately.

The East of 12th Sector is expected to generate approximately 620 vehicle trips per day, 44 vehicle trips during the AM peak hour (10 enter and 34 exit), and 47 vehicle trips during the PM peak hour (29 enter and 18 exit). Although there are some trips associated with existing uses of the East of 12th Sector, no credit for existing trips was assumed.

Because units in the East of 12th Sector would be desired early in the redevelopment schedule, a near-term analysis year of 2013 was selected to evaluate the effect of this sector’s traffic. To reflect a worst-case condition for greatest potential impacts, it was assumed that the First Hill Streetcar would be complete, which could reduce vehicular capacity at nearby intersections. In addition, traffic associated with the East of Boren Sector was included since that sector will likely also be developed in the near term. The three nearest intersections to the East of 12th Sector—Boren Avenue/E Yesler Way, 12th Avenue/E Yesler Way, and 14th Avenue/E Yesler Way—were evaluated. Traffic volume forecasts and level of service models for a year 2013 condition were prepared for the First Hill Streetcar project. Traffic from both the East of Boren and East of 12th Sectors was added to these models to determine the effect of proposed development on traffic operations. The results of this analysis are presented in **FEIS Table 3.13-6**.

**Table 3.13-6
LEVEL OF SERVICE SUMMARY FOR EAST OF BOREN AND EAST OF 12TH SECTORS –
YEAR 2013**

Int. #	Intersection	AM Peak Hour						PM Peak Hour					
		2013 No Action ^a		2013 with East of Boren Traffic Only ^b		2013 With East of Boren Plus East of 12 th Traffic ^b		2013 No Action ^a		2013 with East of Boren Traffic Only ^b		2013 With East of Boren Plus East of 12 th Traffic ^b	
		LOS ^c	Delay ^d	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
10	Boren Ave S/ E Yesler Way	C	22.3	C	22.6	C	22.9	C	32.4	C	32.5	C	32.6
11	12th Avenue/ E Yesler Way	C	27.0	C	27.7	C	27.8	C	30.7	C	31.2	C	31.8
12	14 th Avenue/ E Yesler Way	B	18.8	B	18.9	B	18.9	B	17.4	B	17.4	B	17.4

Source: Heffron Transportation, Inc. January 2011.

- 2013 No Action condition reflects completion of the First Hill Streetcar plus regional growth.
- Preferred Alternative traffic generation was used for both the East of Boren and East of 12th sites.
- Level of service.
- Average seconds of delay per vehicle.

The analysis shows that the East of Boren and East of 12th Sectors would add very little delay to area intersections. Each of the nearby intersections is projected to operate at LOS C or better without or with the proposed project. No mitigation would be needed to develop the East of 12th Sector.

Site Access Impacts

The East of 12th Sector was assumed to be accessed via one driveway on 13th Avenue, which would operate at LOS A during both the AM and PM peak hours.

Safety Impacts

As redevelopment of the East of 12th Sector would be expected to increase vehicle traffic, this also increases the potential for vehicle conflicts and probability for vehicle collisions in the study area. New traffic generated by this sector at the one high collision location identified in the DEIS (6th Avenue/James Street) would be far less than 1 percent of total entering traffic during the peak hours, and is not expected to have significant effect on operations. Similar to the West of Boren Sectors, site design would incorporate measures to maintain adequate sight lines between motorists and pedestrians, and minimize conflicts through traffic calming. Thus, traffic generated by the East of 12th Sector is not expected to result in significant adverse safety impacts.

Transit Impacts

Of the approximate 10,000 new daily transit trips projected for the Preferred Alternative, 220 are expected to be generated by the East of 12th Sector, with 16 trips occurring during the AM peak

hour and 17 trips during the PM peak hour. When distributed among the streetcar and the Metro transit routes that would serve the site (using the distribution procedures described in the DEIS), one to five additional trips are projected on each route during the PM peak hour, which would be the hour with the highest expected use. The existing transit routes have capacity to accommodate this increase in demand. Thus, no adverse impacts to transit are identified for redevelopment of the East of 12th Sector.

Non-Motorized Impacts

Of the almost 20,000 daily non-motorized trips (pedestrian, bicycle, internal, and walking to transit) projected for the Preferred Alternative, approximately 440 are expected to be generated by the East of 12th Sector, with 32 trips occurring in the AM peak hour and 34 trips in the PM peak hour. The rate of pedestrian flow generated by this sector is far lower than the highest intensity flow projected for the project cumulatively, which analysis showed would be well accommodated by the proposed 6-foot sidewalks that would allow projected pedestrian activity to operate at LOS A. Thus, LOS A is also projected for pedestrian demand generated by the East of 12th Sector, and no adverse impacts are identified.

Freight Impacts

Proposed land use in the East of 12th Sector consists of residential development. In general, all building sites would be accessible by truck, with their locations and physical dimensions guided by the City of Seattle's *Land Use Code* (SMC 23.54.035). Truck traffic would primarily consist of waste pick-up, small package delivery (UPS or other freight haulers) and resident moving. Truck loading areas or "back-of-house" truck access may be needed for garbage and recycling pick-up. Depending on the size and layout of the site, other truck delivery or residential move in/move out could be accommodated on internal access drives or adjacent streets as needed. Thus, no adverse freight impacts are identified for redevelopment of the East of 12th Sector.

Parking Impacts

The East of 12th Sector would provide parking at a similar ratio as described previously, at a blended rate of 0.70 parking stalls per unit.

3.13.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential impacts to the transportation system as a result of the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Proposed/Required Mitigation Measures

(NEW) The following transportation mitigation measures are proposed for the Preferred Alternative (see detailed mitigation measures below):

- Implement a construction management plan.
- Improve on-site and off-site intersections (see below).
- Develop strategies with King County Metro to improve service frequency on Route 27 and/or to reroute Route 3/4 to Yesler Way near the site.

- Build new pedestrian facilities throughout the site.
- Provide truck access (see measures outlined below)
- Implement a Transportation and Parking Management Plan.

Mitigation of Construction Impacts

Construction impacts would occur in stages until all development at Yesler Terrace is complete. Prior to commencing construction of the West of Boren Sectors, the SHA and/or its prime contractor(s) would prepare a *Construction Management Plan*. This plan would document the following:

- Truck haul routes to and from the site.
- Peak hour restrictions for construction truck traffic and how those restrictions would be communicated and enforced.
- Truck staging areas (e.g., locations where empty or full dump trucks would wait or stage prior to loading or unloading.)
- Construction employee parking areas.
- Measures to reduce construction worker trips such as rideshare, shuttles, carpool, transit passes or related programs.
- Road or lane closures that may be needed during utility construction or relocation, roadway construction, or building construction. If any arterial street is affected by a partial or full closure, the contractor should also prepare a Maintenance of Traffic Plan detailing temporary traffic control, channelization, and signage measures.
- Mechanism for notifying community if road or lane closures would be required.
- Sidewalk, bike lane, and/or bus stop closures and relocations. If any sidewalk or bike facility is affected by a partial or full closure, the contractor should also prepare a plan detailing temporary pedestrian detour and signage measures.
- Mechanism for notifying community if sidewalk, bike lane, or bus stop closures would be required.

Other elements or details may be required in the *Construction Management Plan* to satisfy street use permit requirements of the City of Seattle. SHA and the contractor would incorporate other City requirements into an overall plan, if applicable.

(MODIFIED) Off Site Intersection Improvements

Detailed analysis was performed related to improvement needs at study area intersections. Potential improvements along with the related improvement in traffic operations are summarized in **FEIS Table 3.13-7**. Three intersections where no improvements are proposed are noted. All three intersections are located on Broadway where changes in the lane configuration and/or signal phasing are proposed to accommodate the First Hill Streetcar. Further changes in intersection configuration are not possible at these intersections and they have been noted as “significant unavoidable adverse impacts.”

Three mitigation measures provide additional turn lanes at Yesler Way/8th Avenue, on eastbound Yesler Way at Broadway, northbound 9th Avenue at Jefferson Street, and southbound Rainier Avenue S at Dearborn Street. The roadway plan for Yesler Way includes these features. An additional lane on 9th Avenue at Jefferson Street would likely require removal

of a curb bulb at the intersection. If that is not desired by SDOT, the intersection could be signalized to improve operations. The short right turn pocket on Rainier Avenue S at Dearborn Street was previously proposed to accommodate the past Dearborn Street Project (major redevelopment of the Goodwill site and surrounding properties).

**Table 3.13-7
POTENTIAL INTERSECTION MITIGATION**

Int. #	Intersection Name	Description of Improvement	PM Peak Hour Operations with Preferred Alternative			
			Without Mitigation		With Mitigation	
			LOS	Delay	LOS	Delay
3	Broadway/E Madison St	None Proposed due to Streetcar	E	75.9	n/a	n/a
6	12 th Avenue/ E Cherry Street	Restripe E Cherry Street to provide conventional left turn phasing (instead of separate phases for eastbound and westbound traffic).	F	99.8	F	87.2
7	Broadway/E James Street	None Proposed due to Streetcar	F	93.7	n/a	n/a
11	12 th Avenue/Yesler Way	Change signal timing to provide slightly longer north-south phase to account for lane change due to Streetcar	E	66.1	D	37.4
19	Rainier Avenue S/ S Dearborn Street	Add a southbound right turn pocket on Rainier Avenue S	F	99.5	E	67.3
21	7 th Avenue/ Cherry Street	Change cycle length to full cycle to match intersection at 6 th Avenue/Cherry Street.	F	142.2	F	99.9
22	9 th Avenue/ Cherry Street	Convert to an all-way, stop-controlled intersection.	F	>500	C	17.8
25	Boren Avenue/James Street	None proposed due to right of way constraints	E (AM only)	56.8	n/a	n/a
26	9 th Avenue/ Jefferson Street	Provide a second northbound lane at the all-way stop-controlled intersection or signalize.	E	49.2	C (stop) B (signal)	21.1 13.6
28	9 th Avenue/ Alder Street	Convert to an all-way, stop-controlled intersection.	F	>300	C	19.3
29	Broadway/Boren Avenue	None proposed due to Streetcar	E	72.7	n/a	n/a
31	8 th Avenue/ Yesler Way	Install a traffic signal with left-turn pockets on all approaches.	F	282.3	C	29.1
33	6 th Avenue/ James Street	Retime intersection	F	157.4	F	140.0
34	6 th Avenue/ Yesler Way	Signalize.	F	120.4	C	25.8

Source: Heffron Transportation, Inc, January 2011.

(NEW) Thresholds for Mitigation Implementation

The potential timing of the off-site intersection improvements was estimated as a percentage of the overall project generated trips, and is summarized in **FEIS Table 3.13-8**. The range of total trips generated by all sectors of development that would trigger the mitigation was also estimated. This analysis was performed by determining the increase in intersection delay associated with many levels of project trip generation. For intersections that are currently signalized, the need for mitigation was determined when the increase in delay associated with project trips exceeded a 5.0 second increase in average vehicle delay. This is the threshold that the City often applies to indicate a “significant” impact. For intersections where a signal is proposed, the need for mitigation was based on volume threshold in which side street traffic would likely warrant installation of a signal (range of 75 to 150 trips per hour on side street depending on the main street volume).

The analysis below notes that several measures would be needed very early in the development process (between 5 and 10 percent of the project trips). That is because these intersections would operate at poor levels of service under the No Action condition, and even small increases in project trips would be associated with an increase in delay above 5.0 seconds. The range is denoted since the actual intersection operations would also depend on the level of background growth. For the purpose of this analysis, all of the background growth was assumed to have already occurred before project trips were added. Some of the off-site improvements would not be needed until late in the project development (after 75 percent of the development is complete). It is noted that if the East of 12th or East of Boren sectors were to proceed first, individually or together, the small number of trips that they generate and the distribution of those trips would not trigger the need for any of the mitigation measures.

The need for a signal at the Yesler Way/8th Avenue intersection will be primarily related to the rate of development in the NW Sector of the site. Office uses in the range of 200,000 to 300,000 square feet could trigger this signal, depending on the level of background growth that has occurred when those uses are completed. The need for that signal could occur earlier if it is desired to facilitate pedestrian crossings of Yesler Way.

Transit

Increased ridership from the project could increase loads on Route 27 to unacceptable levels. This route currently operates on 20 to 30-minute headways during the PM peak hour. Yesler Way is designated as part of the City’s UVTN, for which the goal is service at least every 15 minutes. Increased service on Route 27 would alleviate the loading. Another idea that has been considered is to divert the Route 3/4 from James Street to Yesler Way to avoid congestion at the I-5 interchange. That route has very frequent service which could accommodate the additional riders from Yesler Terrace.

SHA will work with King County Metro and SDOT to evaluate service needs as development at Yesler Terrace progresses. A key milestone would be 2016 when King County Metro may redeploy various services on First Hill and Capitol Hill in response to the University Link project opening. In addition, SHA could be a partner with other agencies pursuing funding opportunities, particularly new federal grants in which low-income housing and sustainable development increase a project’s chance of funding. (Note: King County Metro’s comment letter on the DEIS noted their support for this approach).

**Table 3.13-8
THRESHOLDS FOR MITIGATION IMPLEMENTATION**

Int. #	Intersection Name	Description of Improvement	Approximate PM Peak Trip Threshold for Mitigation ^{a,b}	
			Number of New Trips	Percent of Total New Trips
6	12th Avenue/ E Cherry Street	Restripe E Cherry Street to provide conventional left turn phasing (instead of separate phases for eastbound and westbound traffic).	1,060	80%
11	12 th Avenue/ Yesler Way	Change signal timing to provide slightly longer north-south phase to account for lane change due to Streetcar	730	55%
19	Rainier Avenue S/ S Dearborn Street	Add a southbound right turn pocket on Rainier Avenue S	1,000	75%
21	7th Avenue/ Cherry Street	Change cycle length to full cycle to match intersection at 6th Avenue/Cherry Street.	65-130	5-10%
22	9th Avenue/ Cherry Street	Convert to an all-way, stop-controlled intersection.	65-130	5-10%
26	9th Avenue/ Jefferson Street	Provide a second northbound lane at the all-way stop-controlled intersection or signalize.	1,060	80%
28	9th Avenue/ Alder Street	Convert to an all-way, stop-controlled intersection.	330	25%
31	8th Avenue/ Yesler Way	Install a traffic signal with left-turn pockets on all approaches.	330-660	25-50% ^c
33	6th Avenue/ James Street	Retime intersection	65-130	5-10%
34	6th Avenue/ Yesler Way	Signalize.	65-130	5-10%

Source: Heffron Transportation, Inc, January 2011.

- a. Approximate net increase of new project-generated PM peak hour trips generated by development at Yesler Terrace, East of 12th or East of Boren sectors expected to trigger the need for mitigation at each intersection where future operational impacts have been identified.
- b. For intersections that are currently signalized, the need for mitigation was determined when the increase in delay associated with project trips exceeded a 5.0 second increase in average vehicle delay. This is the threshold that the City often applies to indicate a “significant” impact. For intersections where a signal is proposed, the need for mitigation was based on volume threshold in which side street traffic would likely warrant installation of a signal (range of 75 to 150 trips per hour on side street depending on the main street volume).
- c. Need for traffic signal would relate to development in the NW Sector of the site as well as pedestrian crossing needs.

Non-Motorized Facilities

Extensive pedestrian and bicycle improvements would be made throughout the Yesler Terrace site, including street frontage improvements as well as connecting paths throughout the site. New connections would also be made to areas beyond Yesler Terrace, including south towards S Jackson Street. This connection would improve pedestrian access to the International District and key transit routes along S Jackson Street or at the International District and King Street transit stations. Many of the reconstructed streets would provide new or enhanced facilities for bicycles.

Other pedestrian and bicycle amenities would be provided on the site including pocket parks, resting areas, bike racks, secured long-term bicycle storage (in garages), and showers and locker facilities in office buildings. If any entity creates a bike sharing program in Seattle for which Yesler Terrace would be in the bike share zone, SHA would work with that entity to accommodate a bike sharing station within the Yesler Terrace site.

SHA will coordinate with the First Hill Streetcar project to improve the crosswalks at the Boren Avenue/Yesler Way intersection. The crosswalk across the south leg of the intersection is located along the school walk route between Yesler Terrace and Bailey Gatzert Elementary School. The First Hill Community Plan recommended improving this crossing location. (City of Seattle 1998)

Freight

Truck access would be provided for all buildings. Where possible, service drives would be created to the side or back of buildings to provide access to loading docks. Truck access and loading requirements within the site would be determined for individual building applications; however, most buildings could be designed to accommodate just small to medium-sized trucks since large trucks are not often used for deliveries near the downtown core area of Seattle. The exception would be for a grocery store.

On-street loading zones could also be provided. These should be limited to one per block face and located near service drives and away from pedestrian entrances. If an occasional large truck is needed for a delivery (e.g., during a business or resident move), then temporary on-street loading could be provided with a street-use permit.

Transportation and Parking Management Plans

Transportation Management Plans (TMPs) would be implemented for various elements of the Yesler Terrace Redevelopment. Parcels where office uses are to be built would likely be sold to developers. These parcels could be required to have individual TMPs that are directed at reducing employee commute trips. SHA and developers of residential parcels would distribute information to tenants (in several languages, as needed) regarding transportation options.

TMP Goal

Seattle's Comprehensive Plan for the First Hill/Capitol Hill Urban Center established a trip goal that all peak period trips using non-SOV modes reach 75% by the year 2010 and 80% by 2020. This means that trips by single-occupant vehicle (SOV) should be no more than 25% of the peak

period trips in 2010, or 20% in 2020. These goals are consistent with the analysis performed for the Yesler Terrace EIS. Overall, the trip generation estimates that are the basis for the traffic impact analysis assume that about 25% of the office trips would be made by single-occupant-vehicles (SOVs) and about 10% of the residential and retail trips would be made by SOVs. The Comprehensive Plan goals could be adopted as the short and long-range goals in TMPs for office development at for Yesler Terrace. For each office building within Yesler Terrace, it is recommended that no more than 20% of the employee commute trips would be by SOV.

(MODIFIED) TMP Elements – Office Building

The office-related TMPs would be required consistent with the City of Seattle’s Director’s Rule (DPD Director’s Rule 19-2008 or the Director’s Rule that is in effect at the time of each building permit application). The Yesler Terrace redevelopment would have many site amenities and design treatments that would promote the use of alternative transportation modes. These features would be inherent in the site design, and prescribed through Project Actions. Therefore, the TMP for each building only needs to address on-going management elements and site-specific design treatments. **FEIS Table 3.13-9** lists the elements from the Director’s Rule (along with the specific element number) that should be included in each office building’s TMP. Some of the elements may not be needed at all locations as noted.

TMP for Residential Uses

SHA and developers of residential parcels would have the opportunity to provide information about alternative modes of transportation. This would include information (in multiple languages) about transit routes, stop locations, and schedules, car-sharing programs, and walking/bicycle routes.

**Table 3.13-9
TRANSPORTATION MANAGEMENT PLAN (TMP) ELEMENTS FOR OFFICE BUILDINGS**

TMP Elements from Seattle Director's Rule 19-2009		Check all that apply	Notes
Building and Frontage Features			
1	Install commuter information center in appropriate location	As needed	May not be needed at all locations if centrally located.
3	Provide on-site shower and locker facility	√	
5	Install pedestrian wayfinding signs	√	
7	Provide bicycle storage and amenities.	√	
Management & Promotion			
8	Appoint Building Transportation Coordinator	√	
9	Produce and distribute a commuter information packet	√	
10	Require tenant participation in the TMP	√	
11	Submit regular reports about TMP elements as required by the City	√	
12	Conduct biennial survey of TMP effectiveness	√	
Parking Management			
15	Charge for parking at market rate for the site's vicinity	√	
17	Prohibit price reductions for all-day parking (e.g., "Early Bird" specials)	√	
18	Unbundle parking from building leases	√	
19	Provide designated parking spaces for car share programs	As needed	May not be needed at all sites if centrally located.
20	Create flex-use parking passes that provide fewer days of parking than a monthly pass.	√	
Transit, Carpool & Vanpool Programs			
21	Require tenant to offer transit pass subsidy to employees who work at the site.	√	Will be negotiated on a case-by-case basis
22	Provide free parking for vanpools registered with a public agency.	√	
23	Provide information about ride-match opportunities	√	
24	Provide reserved spaces for registered vanpools in convenient area that has adequate clearance and maneuvering space	√	
Bicycle/Walking Programs			
27	Offer incentive for commuters who bicycle or walk to work	√	
--	Support bike sharing program if one is formed for site area	√	

Source: DPD Director's Rule 19-2009, December 31, 2008.

The numbers in the left hand column match the element numbers from the Director's Rule.

Other Possible Mitigation Measures

Off-street Parking Supply

Off-street parking supply within the site area would be determined for individual buildings. The parking supply rate used for each residential building may differ based on the income target, average unit size, and whether the units would be rented or owned. Neighborhood services and retail parking supplies should be determined based on specified use needs and may vary by building.

Several parking management strategies and programs could be implemented to reduce the overall parking supply on the Yesler Terrace site. Potential program opportunities would be reviewed for each building and would vary depending on the type of land use and specific tenant requirements. Parking management programs could include:

- **Share office parking on weeknights and weekends.** Parking at key office garages could be made available for evening and weekend use by residential visitors or for residents who commute during the day. This would reduce the parking supply required.
- **Unbundle parking from office leases.** Office tenants could be required to pay for parking as a separate fee from their office space lease. This promotes use of alternative transportation modes by itemizing the cost of parking.
- **Charge for parking.** All office employees and visitors could be required to pay for parking at the market rate in the area. Discounts for all-day parking (e.g., Early Bird specials) should be discouraged.
- **Offer a flex-pass for parking that limits the number of days an employee can park.** Most parking passes are sold on a monthly basis and allow unlimited parking during that month. A flex-pass would be a lower-cost option that would limit the number of days it can be used each month. This type of pass is a good option for employees who may take transit or ride a bike to work some days a week, but need a car on certain days for work or personal business.
- **Do not reserve individual spaces for office parking.** Leases could be structured so that parking spaces at office buildings are not reserved for individual users. This allows all office parking to be shared by employees, and reduces the overall supply requirement.
- **Provide for car-sharing programs.** Car-sharing programs (e.g., Zipcar) allow residents and/or site employees to share a pool of vehicles, which reduces parking demand.

On-Street Parking Supply

Most of the on-street parking within the existing Yesler Terrace site is part of residential parking zone (RPZ) 7. With the redevelopment, most of the RPZ should be retained; however, the large increase in residents may substantially increase demand for RPZ permits. This could be particularly true if there is a cost for off-street parking associated with a new unit. The City's RPZ policies related to permit eligibility are applied evenly to all RPZ zones throughout the City.

Therefore, changing the eligibility requirements may require that a subzone be created for just Yesler Terrace, and new ordinance language adopted limiting the eligibility of RPZ permits in this subzone. Potential eligibility limits, which would have to be vetted for feasibility by City legal staff, could include:

- Issuing RPZ permits based on a hardship or need, which could include an income limit or a vehicle ownership requirement for work or school.
- Issuing RPZ permits on a lottery basis (which is done in some other cities).
- Limiting or prohibiting guest permits, and requiring visitors to park off-street.

Some of the on-street parking should be converted to short-term parking for use by customers of adjacent retail businesses or neighborhood services. Because of its location near the downtown core, it is likely that short-term on-street parking would be enforced as paid parking with payment available at pay stations.

3.13.4 Significant Unavoidable Adverse Impacts

Redevelopment of Yesler Terrace would increase vehicular traffic and transit use in the site vicinity. The Preferred Alternative would have a significant unavoidable traffic impact at three intersections along Broadway—at Boren Avenue, James Street, and Madison Street. The First Hill Streetcar would travel through these three intersections and the City is proposing some geometric and signal changes to accommodate the Streetcar. Further changes to mitigate the impacts of the proposed Yesler Terrace project are not desirable and/or feasible within available right of way at these intersections. In addition, mitigation is not feasible within available right of way at Boren Avenue/James Street, which is projected to operate at LOS E during the AM peak hour under 2030 with project conditions.

3.14 UTILITIES

This section compares the probable significant impacts from the Preferred Alternative on utilities to those from DEIS Alternatives 1-4 (as summarized in Chapter 3.14 of the DEIS). The impacts of the Preferred Alternative on the East of 12th Sector are also analyzed. Any changes in impacts and mitigation measures are identified. This section is based on new analysis prepared by SvR Design Company subsequent to issuance of the DEIS. Background information and figures for the new analysis is contained in **FEIS Appendix K**.

3.14.1 Affected Environment

DEIS Site

In DEIS Section 3.14.1, existing utilities at the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) are described including the existing water system, public and private sanitary sewer system, and other utilities including electrical and steam lines. The existing utilities on the site and in the site vicinity have generally remained the same as presented in the DEIS. Additional monitoring of flows in existing combined sewer maintenance structures has been conducted since issuance of the DEIS to begin the process of hydraulic analysis of the drainage and wastewater system downstream of the site (as described in the DEIS, during large storm events, stormwater flows exceed the capacity of the downstream conveyances system pipes, and flows are discharged into the adjacent water body instead of being conveyed to the treatment plant). Initial analysis of preliminary results of the monitoring indicates that actual peak flow rates are less than the peak flow rates used for the conveyance analysis in the DEIS. Therefore, the DEIS analysis is considered conservative (likely because that analysis accounted for future buildout of the upstream basin per the zoning code; see **FEIS** Section 3.3, **Water Resources** and **Chapter 4** for details).

East of 12th Sector

This section describes the existing utilities at the East of 12th Sector. Two buildings are expected to remain in the East of 12th Sector:

- Baldwin Apartments has 30 units, with an average unit size of 370 square feet.
- Urban League Building has a total of 32,700 net square feet of office space.

See Figure 3 in **FEIS Appendix K**, for an illustration of the existing utilities in the East of 12th Sector.

Water

The East of 12th Sector is located within the 430 feet pressure zone of the Yesler Terrace Development site. A 20-inch water main is located in 12th Avenue and also E Yesler Way. There are existing 8-inch water mains in E Fir Street and 14th Avenue. The properties making up the sector have existing water services connected to these water mains.

Sanitary Sewer

The East of 12th Sector is split between two blocks separated by 13th Avenue. West of 13th Avenue, the buildings connect to the public combined sewer main that runs through the properties and discharges to the public combined sewer main in E Yesler Way. East of 13th Avenue the buildings connect to the public combined sewer mains in 14th Avenue and E Yesler Way. The E Yesler Way and 14th Avenue combined sewer mains both discharge to the 30-inch wide by 45-inch tall elliptical combined sewer system located in Rainier Avenue that flows south (similar to the East Conveyance Basin described in the Draft EIS).

Other Utilities

Electrical

The East of 12th Sector is served by Seattle City Light with overhead electrical feeder lines. See section **FEIS Section 3.5 Climate Change, Greenhouse Gas Emissions, and Energy**, for existing electrical use information.

Communications

The East of 12th Sector is currently served by overhead communications services, including telephone, cable television, and high-speed internet.

3.14.2 Impacts of Alternatives¹

Water

DEIS Site

Construction

Under the Preferred Alternative, the impacts of constructing the proposed water improvements would be similar to the impacts described for Alternatives 2 and 3 in Section 3.14.2 of the DEIS.

Operation

The methodology for the water demand generated by the Yesler Terrace Redevelopment would be the same as the methodology presented in Section 3.14.2 and Appendix O of the DEIS. The water demand at the DEIS Site under the Preferred Alternative is presented in **Table 3.14-1**. The Peak Hourly demand was used for EPANet model simulations of distribution water mains.

¹ Separate from this EIS, the "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics, dated December 12, 2010, has been conducted to assess various strategies for sustainable development.

**Table 3.14-1
DEIS SITE - PREFERRED ALTERNATIVE WATER DEMAND**

	Average Daily Demand (gpd)	Maximum Daily Demand (gpd)	Peak Hour Demand (gpm)
NW Sector	586,600	1,173,200	2,490
NE Sector	166,300	332,600	528
SE Sector	192,400	384,800	586
SW Sector	265,400	530,800	789
East of Boren Sector	53,100	106,200	188
DEIS Site	1,263,800	2,527,600	4,581

Source: SvR Design, 2011

gallons per day

gpm = gallons per minute

All existing public water mains on and in the vicinity of the DEIS Site would be adequate to meet the estimated peak hourly demand and fire hydrant flow. The NW and NE sectors would utilize the existing water mains. In the SW and SE sectors, the existing 6-inch water main would be upsized to a minimum 8-inch main, per City of Seattle code, with the addition of fire hydrants.

North of Yesler Way, in the NW and NE Sectors, it is assumed that street improvements would include water main improvement for Fir Street (between Broadway and 9th Avenue). The existing water main bisecting the East of Boren sector would be removed and a new 8-inch water main installed in E Fir Street (between 11th Avenue and 12th Avenue).

South of Yesler Way, in the SW and SE Sectors, the existing 6-inch water main would be removed or abandoned and a new 8-inch water main installed. In addition, 10th Avenue S and S Main Street would have new 8-inch mains. The following subsections present a description of the assumed water system under the Preferred Alternatives by sector. See Figure 4 in **FEIS Appendix K**, Preferred Alternative Public Water Main System.

NW Sector

The west portion of the NW Sector would receive water service from an existing 12-inch water main in Yesler Way, an existing 12-inch water main in 8th Avenue and an existing 8-inch water main in 9th Avenue. The northeast section of the NW Sector would be served by the existing 8-inch water main in Alder Street and a proposed 8-inch water main in the new Fir Street. The southeast section of the NW Sector would be served by the existing 12-inch water main in Yesler Way, the proposed 8-inch water main in Fir Street and the existing 12-inch water main in 8th Avenue. The existing water main in Broadway would not to be accessible to this sector in order to avoid interruptions to the streetcar operations.

NE Sector

The NE Sector would receive water service from an existing 8-inch water main in 10th Avenue.

SE Sector

All of the existing 6-inch water mains in this sector would be replaced. The north portion of the SE Sector would receive water service from the existing 8-inch water main in 10th Avenue S

and a new 8-inch water main in the private drive easement. The southern portion of the SE Sector would receive water service from a new 8-inch water service in the private access road easement between 10th Ave S and 12th Avenue S south of E Yesler Way, 10th Avenue S and S Main Street. The new 8-inch water main in the private access road and S Main Street would be connected to the existing 12-inch water main in 12th Avenue S. The 8-inch water main located in S Washington Street would connect to the existing water main in 10th Avenue S to complete the water main loop.

SW Sector

All of the existing 6-inch water mains located in 8th Avenue S and S Washington Street would be removed or abandoned in place, and a new minimum 8-inch water main would be installed with roadway improvements.

East of Boren Sector

The existing 8-inch water main that currently bisects the property would be removed or abandoned in place and a new 8-inch water main would be installed in E Fir Street.

East of 12th Sector

Construction

Under the Preferred Alternative, the impacts of constructing proposed water improvements would be similar to the impacts described for Alternatives 2 and 3 in Section 3.14.2 of the DEIS.

Operation

The methodology for calculating the water demand of the Yesler Terrace Redevelopment in the East of 12th Sector would be the same as the methodology presented in Section 3.14.2 and Appendix O of the DEIS. The water demand of the East of 12th Sector under the Preferred Alternative is presented in **FEIS Table 3.14-2**.

**Table 3.14-2
EAST OF 12TH SECTOR - PREFERRED ALTERNATIVE WATER DEMAND**

	Average Daily Demand (gpd)	Maximum Daily Demand (gpd)	Peak Hour Demand (gpm)
East of 12 th Sector	51,200	102,400	184

Source: SvR Design, 2011
gallons per day
gpm = gallons per minute

The existing public water main has capacity for the increased water demand in this sector; therefore, no improvements are proposed.

FEIS Site/Conclusion

Construction

Impacts of constructing proposed water improvements on the FEIS Site (DEIS Site and East of 12th Sector) under the Preferred Alternative would be the same as described for the DEIS Site and East of 12th Sector above. No additional impacts to water utilities are anticipated.

Operation

Irrigation demand for the Preferred Alternative would be similar to DEIS Alternatives 1-4, as described in Appendix O of the DEIS (see **FEIS Table 3.14-3**).

**Table 3.14-3
FEIS SITE - PREFERRED ALTERNATIVE IRRIGATION DEMAND**

	Planting areas***		Maximum Daily Demand*	Peak Hourly Demand**
	Acre	SF	gpd	gpm
FEIS Site	7.77	338,500	29,000	60

Source: SvR Design, 2011

* Maximum Daily Demand [gpd] was estimated for summer months. 600 [gpd]:Lawn and Garden (per 1,000 sq. ft., Assumes 1-inch per day) Table 5-2: Guide for Average Daily Nonresidential Water Demand, Water System Design Manual December 2009 DOH

** PHD [gpm] was estimated 24hr/8hr x MDD gallon/day /24 hr / 60 Min

*** Planting areas include East of 12th Sector.

FEIS Table 3.14-4 shows water demand by sectors for the total site under the Preferred Alternative.

**Table 3.14-4
FEIS SITE - PREFERRED ALTERNATIVE WATER DEMAND BY SECTORS**

	Average Daily Demand (gpd)	Maximum Daily Demand (gpd)	Peak Hourly Demand (gpm)
NW Sector	586,600	1,173,200	2,490
NE Sector	166,300	332,600	528
SW Sector	192,400	384,800	586
SW Sector	265,400	530,800	789
East of Boren Sector	53,100	106,200	188
DEIS Site	1,263,800	2,527,600	4,581
East of 12th Sector	51,200	102,400	184
FEIS Site	1,315,000	2,630,000	4,765

Source: SvR Design Company, 2011.

gpd = gallons per day

gpm = gallons per minute

FEIS Table 3.14-5 shows water demand under the Preferred Alternative as compared to DEIS Alternatives 1-4. The water demand under the Preferred Alternative is similar to the water demand under DEIS Alternative 2 for the DEIS Site.

**Table 3.14-5
FEIS SITE – WATER DEMAND
COMPARISON OF PREFERRED ALTERNATIVE TO DEIS ALTERNATIVES**

	Average Daily Demand (gpd)	Maximum Daily Demand (gpd)	Peak Hourly Demand (gpm)
DEIS Alternative 1	1,216,000	2,433,000	4,195
DEIS Alternative 1A	1,081,000	2,175,000	3,600
DEIS Alternative 2	1,362,000	2,725,000	4,208
DEIS Alternative 3	1,642,000	3,283,000	4,877
DEIS Alternative 4	327,000	653,000	1,325
Preferred Alternative - DEIS Site	1,263,800	2,527,600	4,581
Preferred Alternative - FEIS Site	1,315,000	2,630,000	4,765

Source: SvR Design, 2011

gpd = gallons per day

gpm = gallons per minute

Sanitary Sewer

DEIS Site

Construction

Under the Preferred Alternative, the impacts of constructing sanitary sewer improvements would be similar to the impacts described for Alternatives 2 and 3 in Section 3.14.2 of the DEIS.

Operation

The methodology for the sewer analysis for the Preferred Alternative is similar to that described in Section 3.14.2 of the DEIS. For the pipe capacity analysis, the upstream off-site flows and the storm drainage flows were added to the on-site estimated sewer flows. See **FEIS Chapter 4, Update to DEIS Analysis**, for revised off-site flow information.

FEIS Table 3.14-6 provides a summary of sanitary sewer estimated flows in the sector within the DEIS Site under the Preferred Alternative.

The Preferred Alternative applied the same assumptions as were made for the sewer analysis under DEIS for Alternative 2 and Alternative 3, as outlined in DEIS Section 3.14.2 and DEIS Appendix O. See Figure 5 in **FEIS Appendix K** for an illustration of the Preferred Alternative Public Sanitary Sewer System.

**Table 3.14-6
DEIS SITE - SANITARY SEWER ESTIMATED FLOW BY SECTORS**

	Average Daily Flow	Peak Flow
	gpd	cfs
NW Sector	701,000	3.25
NE Sector	228,000	1.06
SE Sector	269,000	1.25
SW Sector	368,000	1.71
East of Boren Sector	73,000	0.34
DEIS Site	1,639,000	7.61

Source: SvR Design Company, 2011.

gpd = gallons per day

cfs = cubic feet per second

NW Sector

The existing 8-inch combined sewer main located between 9th Avenue and Yesler Way through the Steam Plant property does not have capacity for the estimated flows. With the construction of the First Hill Streetcar and no improvements to the combined sewer in Broadway, a new sewer main would be installed from the intersection of 9th Avenue and Fir Street south along its current location east of the Steam Plant building, then south to Yesler Way, then west along Yesler Way to 8th Avenue S, then south to the downstream point of connection at I-5. A new sewer main would be located in Fir Street to provide sewer service to the northeast section of the NW Sector. The existing combined sewer main along the west edge of the NW Sector would remain and connect to the proposed combined sewer main in Yesler Way.

NE Sector

A new 8-inch sewer main would be installed in 10th Avenue. Building side sewer connections would connect to this sewer main or to an existing side sewer connection in E Yesler Way.

SW Sector

New sewer mains would be located in 8th Avenue S and S Washington Street. The existing combined sewer main in the northwest section of the sector would be removed or abandoned and a new combined sewer main would be installed along Yesler Way connecting to the new combined sewer along 8th Avenue S.

SE Sector

A new combined sewer main located in 10th Avenue S would convey sanitary sewer flows from both the NE and SE Sector to the new sewer main located in S Main Street. The existing combined sewer main in S Main Street would be removed and upsized with a new combined sewer main installed from 10th Avenue S to the connection to the 30-inch x 45-inch combined sewer main located east of Boren Avenue.

East of Boren Sector

No public sewer improvements are assumed in this sector, because there is existing capacity in the system and side sewer connections are available. Connections to the existing combined sewer would be made at existing and new side sewer connections.

East of 12th Sector

FEIS Table 3.14-7 provides a summary of sanitary sewer estimated flows within the East of 12th Sector under the Preferred Alternative.

No public sewer improvements are assumed in this sector, because there is existing capacity in the system and side sewer connections are available. Connections to the existing combined sewer are assumed to be made at existing and new side sewer connections.

**Table 3.14-7
SANITARY SEWER ESTIMATED FLOW - EAST OF 12TH SECTOR**

	Average Daily Flow	Peak Flow
	gpd	cfs
East of 12th Sector	71,000	0.33

Source: SvR Design Company, 2011.

gpd = gallons per day

cfs = cubic feet per second

FEIS Site/Conclusion

Construction

Under the Preferred Alternative, the impacts of constructing sanitary sewer improvements would be similar to the impacts described for Alternatives 2 and 3 in Section 3.14.2 of the DEIS.

Operation

The methodology for the sewer analysis for the Preferred Alternative is similar to that described in Section 3.14.2 of the DEIS. For the pipe capacity analysis, the upstream off-site flows and the storm drainage flows were added to the on-site estimated sewer flows. See **FEIS Chapter 4, Update to DEIS Analysis**, for revised off-site flow information.

Table 3.14-8 compares the sanitary sewer estimated flows at full buildout of the Preferred Alternative to flows from the DEIS Alternatives. The sanitary sewer flows under the Preferred Alternative would be similar to DEIS Alternative 2.

**Table 3.14-8
FEIS SITE - SANITARY SEWER ESTIMATED FLOW
COMPARISON OF PREFERRED ALTERNATIVE TO DEIS ALTERNATIVES**

	Average Daily Flow	Peak Flow
	gpd	cfs
Alternative 1	1,310,000	6.09
Alternative 1A	1,020,000	4.75
Alternative 2	1,700,000	7.88
Alternative 3	2,040,000	9.45
Alternative 4	490,000	2.26
Preferred Alternative - DEIS Site	1,639,000	7.61
Preferred Alternative - FEIS Site	1,710,000	7.94

Source: SvR Design Company, 2011.

gpd = gallons per day

cfs = cubic feet per second

Cumulative Impacts

Cumulative impacts (i.e. of proposed redevelopment under the Preferred Alternative together with the King County Youth Detention Facility and Seattle University MIMP Expansion projects) on utilities would be similar to the cumulative impacts of DEIS Alternatives 2 and 3 and the above projects, described in Section 3.14.2 of the DEIS.

3.14.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential utility impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative on the FEIS Site. All mitigation measures listed below are the same as those identified in the DEIS, with a slight change in wording to remove reference to specific DEIS Alternatives or for clarification (shown as MODIFIED), since no new significant adverse impacts have been identified in this FEIS.

Required/Proposed Mitigation Measures

Water

- The design and construction of all water distribution facilities would comply with the City of Seattle regulations for extensions and improvements to the City's water system.
- (MODIFIED) New water mains would be located within the new public roadway network or easements, consistent with the City of Seattle public utilities regulations and design standards.

Sanitary Sewer

- A hydraulic analysis of stormwater drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment to determine

necessary improvements to the City's and site's drainage and wastewater infrastructure. Improvements could include additional upsizing of the combined sewer pipe downstream of the Yesler Terrace Redevelopment in Main Street and 7th Avenue S, as well as GSI and stormwater flow control at the site (see **FEIS Section 3.3, Water Resources**, for details on the GSI).

- The design and construction of public sanitary sewer systems would comply with the City of Seattle standard plans and specifications for extensions and improvements to the City's sewer system.
- (MODIFIED) New sewer mains would be located within the new public roadway network or easements, consistent with the City of Seattle public utilities regulations and design standards.

Other Possible Mitigation Measures

- (MODIFIED) The Yesler Terrace Redevelopment could include provisions to encourage water conservation during building construction and long-term operation of the redevelopment.

3.14.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and modified/restated in this FEIS, no significant unavoidable adverse impacts to utilities would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.15 PUBLIC SERVICES

3.15.1 PARKS

This section compares the probable significant impacts of the Preferred Alternative on parks, recreation and open spaces resources to those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.15.1 of the DEIS) and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the impacts assumed in this sector under the Preferred Alternative.

3.15.1.1 Affected Environment

DEIS Site

In DEIS Section 3.15.1, the existing Project (SHA) and City-owned parks, recreation and open space resources on and in the vicinity of the site are described. The existing conditions onsite and in the site vicinity have generally remained the same as presented in the DEIS; therefore, no additional descriptions of the existing conditions are warranted. The existing parks, recreation and open space resources on and in the vicinity of the site are presented in **FEIS Figure 3.15.1-1**.

On DEIS Table 3.15.1-2, the amount of existing Yesler Terrace P-Patch area provided on the DEIS Site is incorrect and should be listed as 0.6 acres. (This error is also noted in the **FEIS Chapter 7, Errata**.)

East of 12th Sector

A 0.1-acre courtyard is located adjacent to the existing Baldwin Apartments building. No other parks or open space resources are located within the sector. Resources proximate to the East of 12th Sector are the same as identified for the DEIS Site in DEIS Section 3.15.1 and on **FEIS Figure 3.15.1-1**.

3.15.1.2 Impacts

DEIS Site

This section describes the construction and operational impacts on parks and open space resources as a result of the Yesler Terrace redevelopment activities on the DEIS Site (the NW, NE, SE, SW and East of Boren Sectors).

Construction Impacts

Clearing and grading and other construction activities associated with redevelopment of the DEIS Site under the Preferred Alternative would result in periodic increases in dust and noise levels, which could affect users of the on and offsite parks, recreation and open space areas in

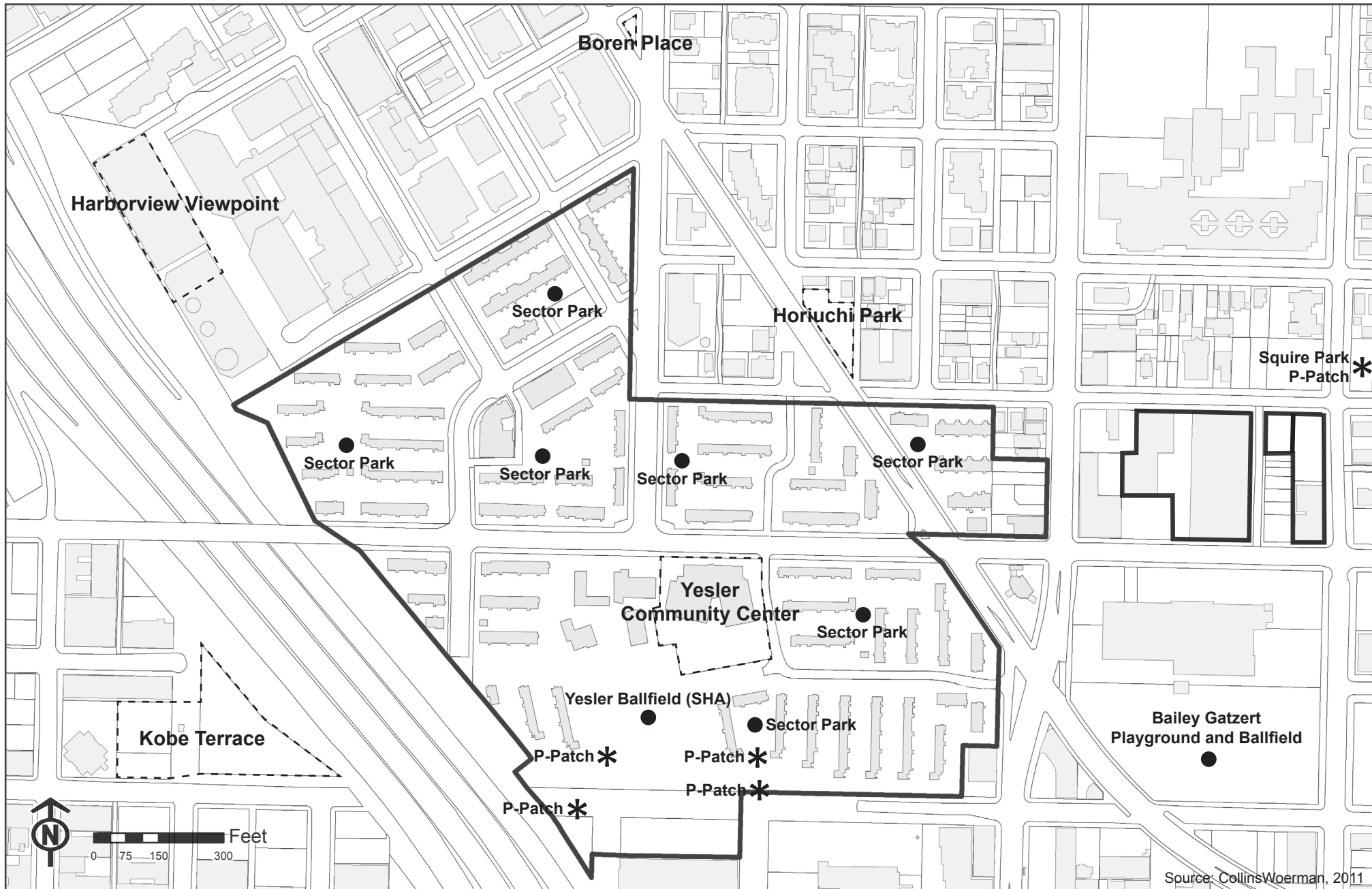


Figure 3.15.1-1
Parks & Open Space Resources

Yesler Terrace
Redevelopment EIS



the vicinity of the site such as Yesler Playfield, Yesler Community Center, Horiuchi Park and Harborview Viewpoint, and residential playgrounds. These impacts would be temporary and periodic in nature, would be mitigated in accordance with City of Seattle requirements for construction, and would not, therefore, be anticipated to be significant.

Displacement of Existing Parks, Open Space and Recreational Facilities

Under the Preferred Alternative, the SHA-owned Yesler Playfield, the four Yesler Terrace P-Patches, and seven sector parks (small play areas) within the residential areas of the DEIS Site would be displaced over the buildout period. As phased redevelopment occurs and existing parks and recreational resources are displaced, temporary increases in demand could be experienced at remaining on-site SHA facilities until development of new parks and open spaces occurs.

The Yesler Playfield, located in the SW Sector, would be displaced to accommodate the proposed redevelopment and would not be relocated onsite. Existing users of the playfield, including the Seattle Central Little League, would need to relocate to other offsite City-owned facilities (see discussion provided in City of Seattle Parks and Recreation Department Operational Facilities in DEIS Section 3.15.1.1).

The four existing Yesler Terrace P-Patches which are currently located in the SW Sector would be displaced. Under the Preferred Alternative, very few private yards are assumed; therefore, the opportunity for residents to plant gardens in private yards would also be displaced. New P-Patch Community gardens could be provided in locations across the site. Specific locations and amounts of P-Patch area would be determined during future design and permitting phases. Residents could also apply for space at the existing P-Patch located in the vicinity of the site near the intersection of 14th Avenue and E Fir Street.

The seven existing small play areas within the residential areas onsite would be displaced as phased redevelopment occurs. It is assumed that with redevelopment, new play areas would be provided in sector and pocket parks that would provide comparable or improved facilities relative to existing conditions (see the Preferred Alternative Proposed Parks and Open Space Facilities section below for details). It is anticipated that new facilities would be developed as existing facilities are displaced.

The Yesler Terrace households that currently have in-home daycare businesses could be temporarily displaced as redevelopment occurs (see also **FEIS Section 3.16**, for additional details). As stated in the DEIS, licensed daycares must provide each child with a minimum amount of space for indoor and outdoor play areas. Under the Preferred Alternative, a portion of the low income housing units within the redeveloped site would be configured to meet the requirements for licensed in-home daycare businesses. The provision of adequate indoor and fenced outdoor space in these units would allow Yesler Terrace residents to continue to operate daycares within their homes on the redeveloped site.

Under the Preferred Alternative, the City-owned Yesler Community Center and the associated playground area would remain. No City-owned parks or recreational resources would be displaced to accommodate redevelopment.

Preferred Alternative Proposed Parks, Open Space and Recreational Facilities

Under the Preferred Alternative, approximately 15.9 acres of usable parks, open space and recreational facilities would be provided on the DEIS Site, as shown in **FEIS Table 3.15.1-1**. Approximately 15.1 acres of these resources would be located in the four West of Boren Sectors and 0.8 acres in the East of Boren Sector. The Preferred Alternative would provide an increase in usable public and semi-private open space on the DEIS Site relative to existing conditions (15.9 acres versus the existing 12.1 acres). These parks and recreational resources are described in more detail in this section. In addition to the 15.9 acres of public and semi-private parks and open space areas, additional private open space in the form of balconies, building roofs and upper level courtyards would be provided at each building for building residents' exclusive use. The location and amount of private open space provided under the Preferred Alternative would be determined during the site-specific design and permit review stage.

**Table 3.15.1-1
ONSITE PARKS, OPEN SPACE & RECREATIONAL FACILITIES
UNDER THE PREFERRED ALTERNATIVE
ON THE DEIS SITE
(ACRES)**

Parks and Open Space Resources	NW Sector	NE Sector	SE Sector	SW Sector	Subtotal West of Boren Sectors	East of Boren Sector	TOTAL
<i>City of Seattle Parks Department Facilities</i>							
Yesler Community Center				1.4	1.4		1.4
TOTAL SEATTLE PARKS DEPT USABLE PARKS AND OPEN SPACE				1.4	1.4		1.4
<i>Project Parks and Open Space¹</i>							
Project Public Open Space							
Commons Park				1.7	1.7		1.7
Sector and Pocket Parks	0.8	0.5	0.8	0.7	2.9	0.04	2.9
Other Open Space ²	0.4				0.4		0.4
Project Semi-Private Open Space	3.4	1.1	2.1	2.2	8.7	0.8	9.5
TOTAL PROJECT PARKS AND OPEN SPACE	4.6	1.5	2.9	4.6	13.7	0.8	14.5
TOTAL CITY AND PROJECT USABLE OPEN SPACE	4.6	1.5	2.9	6.0	15.1	0.8	15.9
Project Unusable Open Space							
TOTAL CITY AND PROJECT OPEN SPACE	4.6	1.5	2.9	6.0	15.1	0.8	15.9

Source: CollinsWoerman, 2011.

¹ Project Parks – In the DEIS, Project Parks were referred to as SHA Parks. The term has been updated in this FEIS to more accurately reflect that ownership and maintenance of public parks and open space areas provided under the Preferred Alternative could be managed and maintained through various legal mechanisms, such as open space associations and cost-sharing entities that are provided via covenants. Private open space would be maintained by the property owner.

² Other open space includes natural open space with trees and plants.

The Preferred Alternative would create a new pedestrian connection in the SW Sector to the south of the site to S Jackson Street that would improve pedestrian access to the Chinatown/International District Urban Village as well as key transit routes along S Jackson Street and the International District and King Street Stations. All new connections would be designed to maximize personal safety through proximity to proposed buildings and lighting (refer to **FEIS Section 13, Transportation**, for details).

The Preferred Alternative would provide approximately 15.9 acres of usable parks, open space and recreational facilities at the DEIS Site (including 14.5 acres of new project facilities and the existing 1.4-acre Yesler Community Center assumed to remain). The features and configurations of these resources have not yet been specifically designed; however, it is assumed that a mix of landscaped open space, play areas, plazas and courtyards would be provided as elements of on-site redevelopment. Recreational opportunities provided with redevelopment of the DEIS Site would help meet the demands of on-site residents, employees and visitors to the site.

The open space concept for the Preferred Alternative would be based upon providing a variety of public, semi-private and private open space areas of various types and sizes in order to accommodate different uses and user populations. The provision of hillclimbs or meandering paths in areas of the site with steep topography would also facilitate connections within the site and to adjacent neighborhoods, especially the Little Saigon area to the south of the site. The open space concept would also be intended to provide access to the site's views of downtown Seattle and Puget Sound.

Public Open Space

A total of approximately 5 acres of Project public open space would be provided under the Preferred Alternative on the DEIS Site. These open space areas would include a number of new recreational opportunities that would be available for use by the general public, including a large open area intended to serve the community, as well as smaller sector and other open spaces.

- **Commons Park:** Under the Preferred Alternative, an approximately 1.7-acre park would be developed in the SW Sector, adjacent to the existing Yesler Community Center. A complete description of the features assumed for the Commons Park facilities is provided in DEIS Section 3.15.1.2.
- **Sector Open Space:** The approximately 2.9 acres of open space distributed across all sectors of the DEIS Site (sector and pocket parks) would be intended to serve the daily needs of surrounding neighbors and on-site building residents and employees and to highlight the unique qualities of the neighborhood for visitors from outside the district. To the extent feasible, outdoor use areas, where quiet conditions are required for optimal use, would be located away from areas with high noise levels. A complete description of the features assumed for the Sector Open Space facilities is provided in DEIS Section 3.15.1.2.
- **Other Open Space:** An approximately 0.4-acre natural, undeveloped area with trees would be developed near the northwest corner of the NW Sector.

Semi-Private Open Space

Under the Preferred Alternative, a total of approximately 9.5 acres of semi-private open space would be provided on the DEIS Site. Semi-private open space in the proposed redevelopment is defined as all ground-level open space that is not public open space. Some of these spaces may not be physically open to the public, but would visually extend the perceived open space. A complete description of the features assumed in the Semi-Private Open Space is provided in DEIS Section 3.15.1.2.

Private Open Space

Under the Preferred Alternative, additional open space in the form of balconies, building roofs and upper level courtyards would be provided at each building for building residents' exclusive use.

Steep Slopes and Unusable Area

Under the Preferred Alternative, the existing 1.4-acre steep slope and unusable area in the SW Sector (which is currently undeveloped open space) would be graded and redeveloped with new uses.

FEIS Table 3.15.1-2 compares the parks and open space resources provided under the Preferred Alternative and DEIS Alternatives 1-4 on the DEIS Site. The amount of parks and open space assumed under the Preferred Alternative would be similar to DEIS Alternatives 2 and 3.

Redevelopment of the Yesler Terrace site would create new capacity for a range of residential, office, commercial and neighborhood service uses, along with associated employment and population. Increases in employment and population on the site over the 20-year build-out period would create related increases in demand for parks and recreational facilities (refer to **FEIS Section 3.16, Socioeconomics**, for more detail on population and employment). Redevelopment on the site would occur over a 20-year period and demands on parks and recreational facilities would increase incrementally through 2030.

Further, as described in DEIS Section 3.15.1.1, the First Hill area in which the site is located is identified as one of the urban villages with the greatest need for open space in the City. The proposed parks and open space areas associated with the Preferred Alternative would serve to support the City's existing village commons, distribution-based and population-based goals for the area identified in DEIS Table 3.15.1-1.

As part of the definition of the Preferred Alternative, the general size and location of the various proposed parks and recreational facilities have been identified. However, the specific features that would be provided, and the design, layout and configuration of the on-site parks and recreational facilities have not been determined at this stage but would be defined and described in permit applications.

**Table 3.15.1-2
COMPARISON OF PARKS AND OPEN SPACE RESOURCES PROVIDED
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(ACRES)**

Parks and Open Space Resources	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
<i>City of Seattle Parks Dept Facilities</i>							
Yesler Community Center	1.4	1.4	1.4	1.4	1.4	1.4	1.4
TOTAL SEATTLE PARKS DEPT PARKS AND OPEN SPACE	1.4	1.4	1.4	1.4	1.4	1.4	1.4
<i>Project Parks and Open Space¹</i>							
Project Public Open Space	5.0	4.6	4.6	5.1	5.5	3.8	2.3
Project Semi-Private Open Space	9.5	7.3	7.8	9.4	9.2	7.9	8.5
TOTAL PROJECT PARKS AND OPEN SPACE	14.5	11.9	12.4	14.5	14.7	11.7	10.8
TOTAL CITY AND PROJECT USABLE PUBLIC AND SEMI-PRIVATE OPEN SPACE	15.9	13.3	13.8	15.9	16.1	13.1	12.2
Project Unusable Open Space ²		1.4	1.4			1.4	1.4
TOTAL CITY AND PROJECT OPEN SPACE³	15.9	14.7	15.2	15.9	16.1	14.5	13.6

Source: CollinsWoerman, 2011.

¹ Project Parks – In the DEIS, Project Parks were referred to as SHA Parks. The term has been updated in this FEIS to more accurately reflect that ownership and maintenance of public parks and open space areas provided under the Preferred Alternative could be managed and maintained through various legal mechanisms, such as open space associations and cost-sharing entities that are provided via covenants. Private open space would be maintained by the property owner.

² Includes approximately 0.6 acres of open space located at the base of a 0.8 acre steep slope which makes the area inaccessible.

³ Private open space is not included in this comparison of alternatives. New private open space is assumed to be provided under the EIS Alternatives 1-4 in the form of balconies and rooftop areas. The amount of private open space provided would depend on the design of specific buildings and, therefore, cannot be quantified at this time. Existing private open space, in the form of fenced yards, is assumed to remain but is not included in the No Action Alternative calculations in order to provide a more accurate comparison of alternatives.

Operational Impacts

Operations of the redeveloped DEIS Site under the Preferred Alternative would increase demands on local and recreational parks and recreational facilities on an incremental basis through buildout in 2030, similar to the DEIS Alternatives 1-4. See DEIS Section 3.15.1.2 for details.

East of 12th Sector

This section describes the construction and operational impacts on parks and open space resources as a result of the Yesler Terrace redevelopment activities on the East of 12th Sector.

Construction Impacts

Clearing and grading and other construction activities associated with redevelopment of the East of 12th Sector under the Preferred Alternative would be similar to those described for the DEIS Site and could result in periodic increases in dust and noise levels, which could affect users of the offsite parks, recreation and open space areas in the vicinity of the site, such as the 14th/Fir Street P-patch Garden, Bailey-Gatzert Elementary School Playground and residential playgrounds. These impacts would be temporary and periodic in nature, and would be mitigated in accordance with City of Seattle requirements for construction. They would not, therefore, be anticipated to be significant.

Displacement of Existing Parks, Open Space and Recreational Facilities

The 0.1-acre courtyard located at the existing Baldwin Apartments building would remain under the Preferred Alternative.

Preferred Alternative Proposed Parks, Open Space and Recreational Facilities

Under the Preferred Alternative, a total of approximately 1.2 acres of semi-private open space would be provided in the form of a semi-private courtyard within the redeveloped King County Archives site. Semi-private courts and entries associated with each building would provide passive open space for building residents. Between buildings, additional semi-private open space with amenities would be shared by several buildings. These semi-private open spaces could allow public access during designated hours.

Operational Impacts

Operational impacts on the East of 12th Sector would be similar to those described for the Preferred Alternative on the DEIS Site.

FEIS Site/Conclusion

Under the Preferred Alternative, approximately 17.2 acres of usable parks, open space and recreational facilities would be provided on the FEIS Site (DEIS Site and East of 12th Sector), as shown in **FEIS Table 3.15.1-3**. The Preferred Alternative would provide an increase in usable public and semi-private open space on the FEIS Site relative to existing conditions (17.2 acres versus the existing 12.1 acres). In addition to the 17.2 acres of public and semi-private parks and open space areas, additional private open space in the form of balconies, building roofs and upper level courtyards would be provided at each building for building residents' exclusive use. The location and amount of private open space would be determined during the site-specific design and permit review stage.

Construction impacts, displacement of existing facilities and operational impacts on the FEIS Site under the Preferred Alternative would generally be as described under the DEIS Alternatives 1-4 on the DEIS Site and would not be anticipated to be significant with the implementation of mitigation measures identified in **FEIS Section 3.15.1.3**.

**Table 3.15.1-3
COMPARISON OF PARKS AND OPEN SPACE RESOURCES PROVIDED
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(ACRES)**

Parks and Open Space Resources	FEIS Preferred Alternative	DEIS Alternatives					
		1	1A	2	3	4	No Action
<i>City of Seattle Parks Dept Facilities</i>							
Yesler Community Center	1.4	1.4	1.4	1.4	1.4	1.4	1.4
TOTAL SEATTLE PARKS DEPT PARKS AND OPEN SPACE	1.4	1.4	1.4	1.4	1.4	1.4	1.4
<i>Project Parks and Open Space¹</i>							
Project Public Open Space	5.0	4.6	4.6	5.1	5.5	3.8	2.3
Project Semi-Private Open Space	10.8	7.3	7.8	9.4	9.2	7.9	8.5
TOTAL PROJECT PARKS AND OPEN SPACE	15.8	11.9	12.4	14.5	14.7	11.7	10.8
TOTAL CITY AND PROJECT USABLE PUBLIC AND SEMI-PRIVATE OPEN SPACE	17.2	13.3	13.8	15.9	16.1	13.1	12.2
Project Unusable Open Space ²		1.4	1.4			1.4	1.4
TOTAL CITY AND PROJECT OPEN SPACE³	17.2	14.7	15.2	15.9	16.1	14.5	13.6

Source: CollinsWoerman, 2011.

¹ Project Parks – In the DEIS, Project Parks were referred to as SHA Parks. The term has been updated in this FEIS to more accurately reflect that ownership and maintenance of public parks and open space areas provided under the Preferred Alternative could be managed and maintained through various legal mechanisms, such as open space associations and cost-sharing entities that are provided via covenants. Private open space would be maintained by the property owner.

² Includes approximately 0.6 acres of open space located at the base of a 0.8 acre steep slope which makes the area inaccessible.

³ Private open space is not included in this comparison of alternatives. New private open space is assumed to be provided under the EIS Alternatives 1-4 in the form of balconies and rooftop areas. The amount of private open space provided would depend on the design of specific buildings and, therefore, cannot be quantified at this time. Existing private open space, in the form of fenced yards, is assumed to remain but is not included in the No Action Alternative calculations in order to provide a more accurate comparison of alternatives.

Cumulative Impacts

Cumulative impacts to parks, open space and recreational areas under the Preferred Alternative would be assumed to be similar to those described for the DEIS Alternatives 1-4 in DEIS Section 3.15.1.1.

3.15.1.3 Mitigation Measures

Future increases in employment and population at the site over the assumed 20-year buildout period under the Preferred Alternative would be incremental and would be accompanied by increases in demands on park and recreational resources onsite and in the site vicinity. These impacts would be addressed by the following required/proposed and other possible mitigation

measures. All mitigation measures listed below are the same as those identified in the DEIS, unless otherwise noted as (MODIFIED).

Required/Proposed Mitigation Measures

- Onsite parks, open space and recreational facilities would be provided with redevelopment. These resources would include a substantial amount of new usable public and semi-private open space to accommodate the increased population and serve the surrounding community. If these facilities are not owned or maintained by the City, they would not be included in the City's official calculations of parks and open space gaps but would, in practice, serve to offset existing open space deficiencies in the area.
- A portion of the tax revenues generated from development of the site – potentially including construction sales tax, retail sales tax, business and occupation tax, property tax, utilities tax, leasehold excise tax, and other fees from City licenses and permits during site redevelopment – would accrue to the City of Seattle and could help offset demands for public services, including parks and recreation. The City's Capital Improvement Program has identified a need for another new park in the First Hill Urban Village, where Yesler Terrace is located, but a site has not yet been selected. SHA, as a First Hill community stakeholder, would continue to advocate for additional parks and open space resources in the neighborhood.
- (MODIFIED) It is anticipated that increases in employees and resident population onsite over the buildout period, along with general growth in this area of the City, would be planned for through the City's ongoing capital facilities planning process, including planning for parks and open space.
- (MODIFIED) Under the Preferred Alternative, it is assumed that a portion of the low income housing units within the redeveloped site would be configured to meet the outdoor play area requirements for licensed in-home daycare businesses to accommodate existing relocated daycare uses.

Other Possible Mitigation Measures

- (MODIFIED) SHA could enter into discussions with the Seattle Public School District to determine if improvements to the existing playfield on the Bailey-Gatzert Elementary School grounds could be made to help offset the elimination of the existing onsite playfield due to redevelopment.
- (MODIFIED) New P-Patch community gardens could be provided onsite as part of redevelopment and could offset displacement of the existing P-Patch gardens. The specific amount and location of new P-patch gardens would be determined as part of future design and permitting phases.

3.15.1.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in this FEIS, no significant unavoidable adverse impacts to parks, recreation and open space resources would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.15.2 SCHOOLS

This section compares the probable significant impacts from the Preferred Alternative on schools to those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.15.2 of the DEIS) and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the school impacts assumed in this sector under the Preferred Alternative.

3.15.2.1 Affected Environment

DEIS Site

In DEIS Section 3.15.2.1, the affected environment of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) is described including the Seattle Public School (SPS) facilities, student enrollment policies, existing enrollment, projected enrollment, building excellence program, career and technical education, capital facilities planning and school transportation policies. The existing school conditions on the site and in the site vicinity have generally remained the same as presented in the DEIS. **FEIS Figure 3.15.2-1** shows the location of the Yesler Terrace attendance area schools relative to the DEIS Site.

East of 12th Sector

Existing school conditions on the East of 12th Sector would be as described in DEIS Section 3.15.2.1 for the Yesler Terrace DEIS Site. The East of 12th Sector is located within the attendance area boundaries for Bailey-Gatzert Elementary School (kindergarten through 5th grade), Washington Middle School (6th through 8th grade) and Garfield High School (9th through 12th grade). **FEIS Figure 3.15.2-1** shows the location of the Yesler Terrace attendance area schools relative to the East of 12th Sector. There are no existing school age children currently residing in the East of 12th Sector, as the King County Archive buildings, Baldwin Apartments building and Urban League building have no current residential populations.

3.15.2.2 Impacts

Methodology

The methodology employed for the schools analysis in the DEIS, as described in DEIS Section 3.15.2.2, was also used for this FEIS analysis. Student generation rates have been calculated for the Preferred Alternative and are provided in **FEIS Appendix L**.

DEIS Site

Residential development on the DEIS Site under the Preferred Alternative would generate additional student enrollment at the Yesler Terrace attendance area schools (beyond the approximately 346 students currently generated from the site). Under the Preferred Alternative, approximately 1,275 students would be generated by the proposed Yesler Terrace Redevelopment at full buildout in 2030 (approximately 929 of which would be new students),

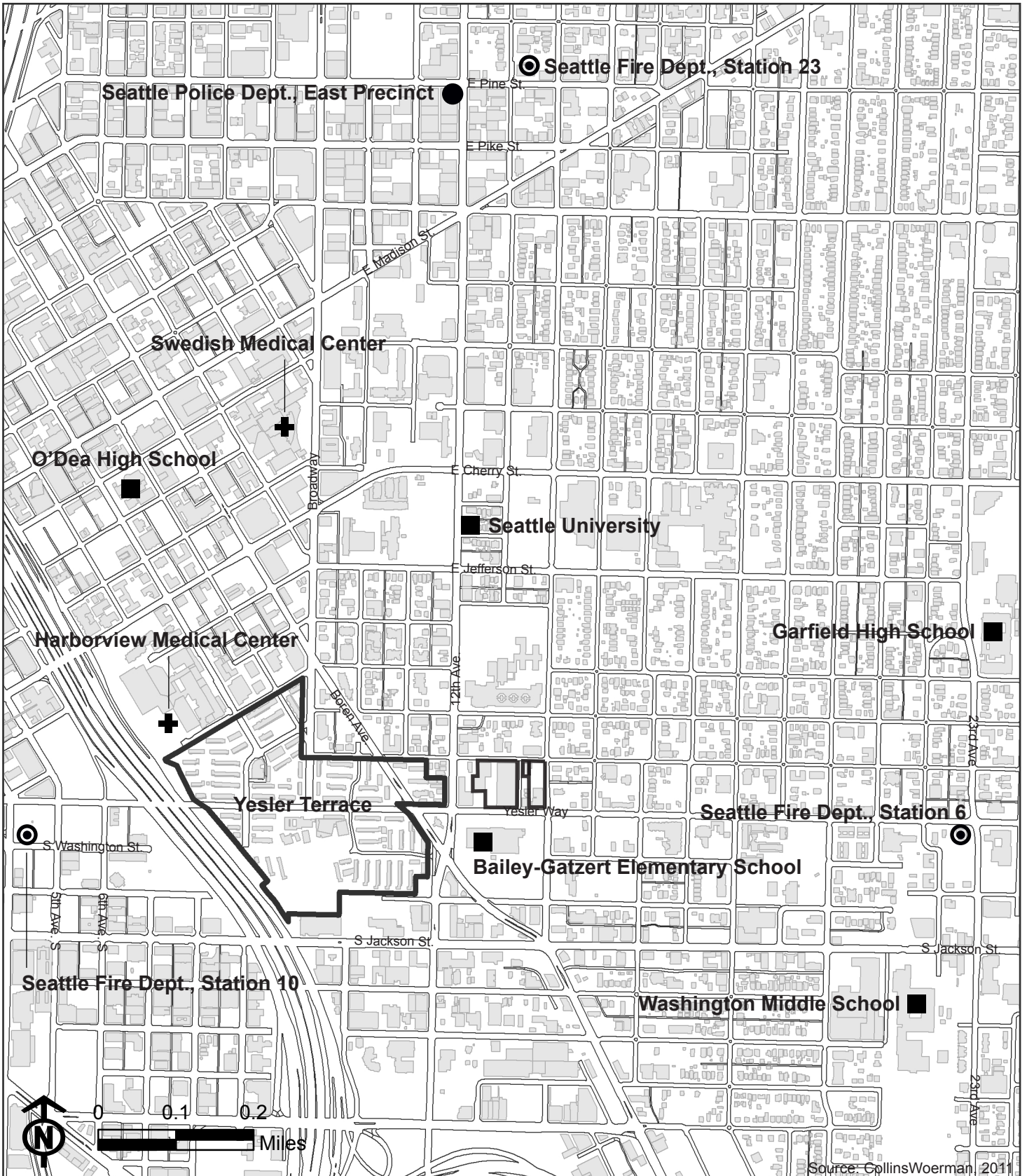


Figure 3.15.2-1
Location of School, Police and Fire Facilities

Yesler Terrace
Redevelopment EIS



based on the student generation rates described in DEIS Section 3.15.2.2 and shown in **FEIS Appendix L**. It is estimated that the 1,275 students would be comprised of 637 elementary students (464 of which are new), 268 middle school students (195 of which are new) and 370 high school students (270 of which are new). Approximately 100 of these students would be assumed to be generated from the 250 housing units located in the East of Boren sector, including 50 elementary, 21 middle school and 29 high school students.

FEIS Table 3.15.2-1 shows projected student generation from the Yesler Terrace redevelopment at buildout under the Preferred Alternative.

**Table 3.15.2-1
PREFERRED ALTERNATIVE PROJECTED K-12
SCHOOL NEW STUDENT GENERATION
ON DEIS SITE**

Students	Students West of Boren	Students East of Boren	Students on DEIS Site
Total New Students Generated	1,175	100	1,275
Existing Students	346		346
TOTAL INCREASE IN STUDENTS UNDER PREFERRED ALTERNATIVE	829	100	929

Source: EA/Blumen, 2011

Under the Preferred Alternative, the increase in 929 students from the existing Yesler Terrace redevelopment would represent an approximately 2 percent increase over 2015 SPS District total forecasted enrollment¹, a 15.7 percent increase over 2015 Central District area enrollment, and a 30 percent increase over 2015 enrollment for the Yesler Terrace attendance area schools. The number of students generated under the Preferred Alternative on the DEIS Site would be between the number of students generated by DEIS Alternatives 2 and 3.

As shown in **FEIS Table 3.15.2-2**, excess functional capacity is anticipated to exist within the SPS District as a whole (surplus capacity for 3,067 students in 2015) to serve the students generated by the Preferred Alternative.

Similar to DEIS Alternative 3, at build-out under the Preferred Alternative on the DEIS Site there would be insufficient functional capacity to serve the Yesler Terrace redevelopment within the schools in the Central District area. It is anticipated that a portion of these students would need to be accommodated at other schools outside of the Central District area. This could result in the need for the District to adjust the attendance area boundaries, provide transportation service for these students and/or take other measures to accommodate the number of students in excess of the forecasted functional capacity.

¹ Projected Seattle Public Schools Functional Capacity and Student Enrollment for 2015 are discussed in DEIS Section 3.15.2.1 and shown in Table 3.15.2-3.

**Table 3.15.2-2
PROJECTED K-12 SCHOOL ENROLLMENT AND EXISTING CAPACITY,
PREFERRED ALTERNATIVE
ON DEIS SITE**

School Level	Increase in Students at Yesler Terrace Under Preferred Alternative	Available Functional Capacity in SPS District (2015)	Functional Capacity in Overall District After Redevelopment of Preferred Alternative	Available Functional Capacity in Central District Area (2015)	Functional Capacity in Central District After Redevelopment of Preferred Alternative	Available Functional Capacity in Attendance Area Schools (2015)	Functional Capacity in Attendance Area Schools after Redevelopment of Preferred Alternative
Elementary School	464	835	371	330	(134)	47	(417)
Middle School	195	725	530	75	(120)	75	(120)
High School	270	1,507	1,237	(26)	(296)	(26)	(296)
TOTAL	929	3,067	2,138	379	(550)	96	(833)

Source: Seattle Public Schools; EA/Blumen 2011.

¹ Numbers in parenthesis are negative and represent a deficiency in capacity.

FEIS Table 3.15.2-3 below provides a summary comparison of the new students assumed to be generated under the Preferred and DEIS Alternatives 1-4 using the methodology described in DEIS Section 3.15.2.1. The calculations in Table 3.15.2-3 excludes the approximately 346 students that currently reside at the Yesler Terrace site who are already being served by the SPS District.

**Table 3.15.2-3
COMPARISON OF FORECASTED NEW STUDENT GENERATION FOR
THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE**

School Level	FEIS Preferred Alternative	DEIS Alternatives			
		1 and 1A	2	3 ¹	4
Elementary	464	300	415	507	105
Middle School	195	125	174	213	44
High School	270	174	241	294	61
TOTAL	929	599	830	1,014	210

Source: EA/Blumen 2011.

¹ As noted in FEIS Chapter 7, Errata, the number of new students generated on the DEIS Site under Alternative 3 was incorrectly stated in DEIS Section 3.15.1-1 and has been corrected in this table.

It is not possible to accurately predict what total student enrollment in the SPS District would be at buildout in 2030, since enrollment forecasts have only been calculated by the District to 2015. However, it is estimated that students generated by the Preferred Alternative on the DEIS Site would represent a minor increase over typical historical and projected annual enrollment

fluctuations for the SPS District as a whole, but would represent a relatively substantial increase in students in the Central District area and the three attendance area schools. Redevelopment of the Yesler Terrace site under the Preferred Alternative and the addition of new students and their associated impacts on the District would occur incrementally over the 20-year buildout period.

Employment associated with the Preferred Alternative could encourage new people to move to the area, resulting in additional new students in the District. However, such in-migration or relocation would likely be distributed over a broad area and would not likely represent a significant impact on the District.

East of 12th Sector

Residential development on the East of 12th Sector under the Preferred Alternative would generate additional student enrollment at the Yesler Terrace attendance area schools. No students currently reside within the East of 12th Sector. Under the Preferred Alternative, approximately 100 students would be generated on the East of 12th Sector by full buildout, based on the student generation rate methodology discussed in DEIS Section 3.15.2.2 (see **FEIS Appendix L**). It is estimated that the 100 students would be comprised of 50 elementary students, 21 middle school students and 29 high school students.

Under the Preferred Alternative, the increase in 100 students on the East of 12th Sector would represent an approximately 0.002 percent increase over 2015 SPS District total forecasted enrollment², a 0.02 percent increase over 2015 Central District area enrollment, and a 3 percent increase over 2015 enrollment for the Yesler Terrace attendance area schools. The number of students generated would be similar to the East of Boren Sector.

Functional capacity exists within the Seattle Public School District as a whole to accommodate the 100 new students generated on the East of 12th Sector. Bailey-Gatzert Elementary School and Washington Middle School would have capacity to accommodate the estimated number of new students; whereas, Garfield High School would not have sufficient capacity to accommodate the additional new high school students.

FEIS Site/Conclusion

Residential development on the FEIS Site (DEIS Site and East of 12th Sector) under the Preferred Alternative would generate additional student enrollment. Under the Preferred Alternative, approximately 1,375 students would be generated on the FEIS Site at full buildout (approximately 1,030 of which would be new students), based on the student generation rates described in DEIS Section 3.15.2.2 and shown in **FEIS Appendix L**. It is estimated that the 1,375 students would be comprised of 688 elementary students (515 of which are new), 289 middle school students (216 of which are new) and 399 high school students (299 of which are new).

A comparison of the total number of students generated under the Preferred Alternative on the FEIS Site with the total number of students generated under the DEIS Alternatives 1-4 are shown in **FEIS Table 3.15.2-4** below. Detailed calculations are provided in **FEIS Appendix L**.

² Projected Seattle Public Schools Functional Capacity and Student Enrollment for 2015 are discussed in DEIS Section 3.15.2.1 and shown in Table 3.15.2-3.

**Table 3.15.2-4
COMPARISON OF FORECASTED NEW STUDENT GENERATION FOR
THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE**

School Level	FEIS Preferred Alternative	DEIS Alternatives			
		1 and 1A	2	3 ¹	4
Elementary	515	300	415	507	105
Middle School	216	125	174	213	44
High School	299	174	241	294	61
TOTAL	1,030	599	830	1,014	210

Source: EA/Blumen 2011.

¹ As noted in FEIS Chapter 7, **Errata**, the number of new students generated on the DEIS Site under Alternative 3 was incorrectly stated in DEIS Section 3.15.1-1 and has been corrected in this table.

The total number of new students generated on the FEIS Site under the Preferred Alternative would be similar to the number of students generated on the DEIS Site under Alternative 3. While both the Preferred Alternative and Alternative 3 assume the same number of housing units (5,000), they have a different distribution of housing unit types. Since student generation rates vary by housing unit type, slightly different numbers are generated under the respective alternatives.

As shown in **FEIS Table 3.15.2-5**, excess functional capacity is anticipated to exist within the SPS District as a whole (surplus capacity for 3,067 students in 2015) to serve the students generated by the FEIS Site under the Preferred Alternative.

Similar to DEIS Alternative 3, under the Preferred Alternative on the FEIS Site there would be insufficient functional capacity to serve the Yesler Terrace redevelopment within the attendance area schools or schools in the Central District area. It is anticipated that a portion of these students would need to be accommodated at other schools outside of the Central District area. This could result in the need for the District to adjust the attendance area boundaries, provide transportation service for these students and/or take other measures to accommodate the number of students in excess of the forecasted functional capacity. Redevelopment of the FEIS Site under the Preferred Alternative and the addition of new students and their associated impacts on the District would occur incrementally over the 20-year buildout period. No significant adverse impacts would be anticipated.

**Table 3.15.2-5
PROJECTED K-12 SCHOOL ENROLLMENT AND EXISTING CAPACITY,
PREFERRED ALTERNATIVE
ON FEIS SITE**

School Level	Increase in Students at Yesler Terrace Under Preferred Alternative	Available Functional Capacity in SPS District (2015)	Functional Capacity in District After Redevelopment of Preferred Alternative	Available Functional Capacity in Central District Area (2015)	Functional Capacity in Central District After Redevelopment of Preferred Alternative	Available Functional Capacity in Attendance Area Schools (2015)	Functional Capacity in Attendance Area Schools after Redevelopment of Preferred Alternative
Elementary School	515	835	320	330	(185)	47	(468)
Middle School	216	725	509	75	(141)	75	(141)
High School	299	1,507	1,208	(26)	(325)	(26)	(325)
TOTAL	1,030	3,067	2,037	379	(651)	96	(934)

Source: Seattle Public Schools; EA/Blumen 2011.

¹ Numbers in parenthesis are negative and represent a deficiency in capacity.

Cumulative Impacts

Cumulative impacts to schools under the Preferred Alternative would be assumed to be similar to those described for the DEIS Alternatives 1-4 in DEIS Section 3.15.1.1.

3.15.2.3 Mitigation Measures

Future increases in housing units and students associated with these units over the assumed 20-year buildout period under the Preferred Alternative would be incremental and would be accompanied by increases in demands on the Seattle Public Schools District. As noted in DEIS Section 3.15.2, the three existing attendance area schools and the Central District would likely exceed available capacity to accommodate the additional students from the Yesler Terrace Redevelopment (Garfield High School is already over capacity). These impacts would be addressed by the following required/proposed and other possible mitigation measures, which are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Required/Proposed Mitigation Measures

- (MODIFIED) A portion of the tax revenues generated from development of the site – potentially including construction sales tax, retail sales tax, business and occupation tax, property tax, utilities tax, leasehold excise tax, and other fees licenses and permits – would accrue to the School District and could help offset demand for services from the District.

Other Possible Mitigation Measures

- It is anticipated that increases in student population over the buildout period would be addressed through the Seattle School District capital facilities capacity planning process (policy H13.00) to insure that no significant impacts would occur as a result of redevelopment at Yesler Terrace. As stated in DEIS Section 3.15.2.1, the Seattle School District could take one or more of the following actions to match capacity and enrollment as buildout occurs on the Yesler Terrace site:
 - Adding, relocating or removing programs;
 - Adjusting school boundaries;
 - Adjusting geographic zones for option schools;
 - Adding or removing portables;
 - Adding to or renovating buildings; and/or,
 - Opening, reconstituting or closing buildings.

3.15.2.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in this FEIS, no significant unavoidable adverse impacts to schools would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.15.3 FIRE AND EMERGENCY MEDICAL SERVICES

This section compares the probable significant impacts from the Preferred Alternative on fire protection and emergency medical services (EMS) to those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.15.3 of the DEIS) and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the impacts assumed in this sector under the Preferred Alternative.

3.15.3.1 Affected Environment

DEIS Site

Under the Preferred Alternative, the Affected Environment at the DEIS site (including the Seattle Fire Department stations, equipment and staff resources serving the site, response times and, fire/Emergency Service Incident History) would be generally as described in the DEIS in Section 3.15.3.1.

Fire Station 10 (400 S Washington Street) is the closest station to the DEIS Site and provides first response for fire and EMS. As needed, other stations also provide service to the site including Station 6, Station 25 and Harborview Medical Center (EMS Services only). Fire Station 10 currently has nine firefighters and two supervisors on duty at all times. Equipment at the station includes: one engine, one ladder truck, one BLS vehicle and one Hazardous Materials vehicle.

East of 12th Sector

Fire protection, Basic Life Support (BLS) and Advanced Life Support (ALS)/Emergency Medical Services (EMS) services to the East of 12th Sector would be provided by the Seattle Fire Department. Fire Station 6 (101 23rd Avenue S) located approximately 0.55 miles east of the site, is the closest station to the sector and provides first response for fire and EMS. Fire Station 6 currently has eight firefighters on duty at all times. Equipment at the station includes: one engine and one ladder truck.

The East of 12th Sector contains limited office and warehouse uses and does not currently contain active residential uses. According to the Fire Department, there were 10 calls for service within the sector in 2008 and 7 calls in 2009.³

3.15.3.2 Impacts

This section summarizes the potential impacts to fire and EMS services with proposed redevelopment under the Preferred Alternative. Impacts are discussed separately for the DEIS Site and the East of 12th Sector. As stated in the DEIS, increases in employment and population on the site over the 20-year build-out period would result in related increases in

³ Personal Communication with William Hepburn, Assistant Chief of Operations. Seattle Fire Department. March 2011.

demand for fire and EMS services. Redevelopment on the site would occur gradually over time and demands on fire and EMS services would increase incrementally through 2030.

DEIS Site

Construction

As described in **FEIS Chapter 2**, overall levels of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1-4. Therefore, construction-related impacts on fire/EMS at the DEIS Site under the Preferred Alternative would generally be similar to those identified in the DEIS for Alternatives 1-4.

Proposed redevelopment under the Preferred Alternative on the DEIS Site could result in a temporary increase in demand for fire/EMS services during construction, similar to under DEIS Alternatives 1-4. As stated in the DEIS, existing Fire Department staffing and equipment are expected to be sufficient to handle increased service needed for onsite construction activities.

Operation

Increases in the on-site population and employment over the 20-year buildout under the Preferred Alternative would be incremental and would be accompanied by increases in demand for all types of services provided by the Fire Department, including fire protection, BLS and EMS. As noted in the DEIS, EMS is the service that generates the highest demand. The Seattle Fire Department indicated that they would have the capacity to meet the added demand for EMS service, as projected in Table 3.15.3-3 of the DEIS for Alternatives 1-4. The projected site population on the DEIS Site under the Preferred Alternative would be 7,799. As demonstrated by **FEIS Table 3.15.3-1**, below, this residential population would be greater than DEIS Alternatives 2 and less than DEIS Alternative 3. The resulting number of EMS calls could therefore be expected to be within the range identified in the DEIS.

**Table 3.15.3-1
PROJECTED INCREASE IN EMS CALLS FOR THE DEIS ALTERNATIVES 1-4
(DEIS SITE)**

	Projected Site Population	Projected EMS Calls
DEIS Alternative 1 and 1A	5,228	382
DEIS Alternative 2	6,815	445
DEIS Alternative 3	8,315	514
DEIS Alternative 4	2,795	302

Source: EA/Blumen 2011.

East of 12th Sector

Construction

Redevelopment under the Preferred Alternative on the East of 12th Sector could result in a temporary increase in demand for fire/EMS services during construction, similar to that described for the DEIS Site, above. As stated in the DEIS, existing Fire Department staffing

and equipment are expected to be sufficient to handle increased service needed for construction activities within this sector.

As described in **FEIS Chapter 2**, overall levels of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1-4. Therefore, construction-related impacts on fire/EMS service at the East of 12th Sector under the Preferred Alternative would generally be similar to those identified in the DEIS for Alternatives 1-4.

Operation

The projected site population within the East of 12th Sector would be 475 individuals. The Fire Department indicates that they would have the capacity to meet this demand for EMS and other fire services.

FEIS Site/Conclusion

Redevelopment under the Preferred Alternative on the FEIS Site (DEIS Site and East of 12th Sector) would result in an increase in demand for fire services, particularly EMS services, during construction and operation. The total projected site population under the Preferred Alternative would be 8,274. This population is within the range evaluated in the DEIS. The projected number of EMS calls under the Preferred Alternative is 512, which is similar to DEIS Alternative 3. Overall, impacts to fire/EMS services as a result of redevelopment on the DEIS Site and East of 12th Sector under the Preferred Alternative would be generally be similar to those identified in the DEIS.

**Table 3.15.3-2
COMPARISON OF EMS CALLS
UNDER THE PREFERRED ALTERNATIVE AND DEIS ALTERNATIVES 1-4
(FEIS SITE)**

	Projected Site Population	Projected EMS Calls
Preferred Alternative (FEIS Site)	8,274	512
DEIS Alternative 1 and 1A	5,228	382
DEIS Alternative 2	6,815	445
DEIS Alternative 3	8,315	514
DEIS Alternative 4	2,795	302

Source: Seattle Fire Department, 2010/2011.

All new buildings in the Yesler Terrace redevelopment under the Preferred Alternative would be constructed in compliance with the version of the Seattle Fire Code adopted at the time of permit application; adequate fire flow to serve the proposed redevelopment would be provided as required by the Fire Code; and, specific code requirements would be adhered to regarding emergency access to structures.

Cumulative Impacts

Cumulative impacts to Fire/EMS Services under the Preferred Alternative would be assumed to be similar to those described for the DEIS Alternatives 1-4 in DEIS Section 3.15.1.1.

3.15.3.3 Mitigation Measures

The following required/proposed mitigation measures would address potential impacts to fire/EMS services resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted as (MODIFIED).

Required/Proposed Mitigation Measures

- Increases in population and employment over the 20-year buildout of the Yesler Terrace project would be incremental and would be accompanied by increases in demand for fire/EMS services under all of the EIS redevelopment alternatives. A portion of the tax revenues generated from redevelopment of the site – including construction sales tax, retail sales tax, business and operation tax, property tax, utility tax and other fees, licenses and permits – would accrue to the City of Seattle and could help offset demand for public services.
- (MODIFIED) All new buildings would be constructed in compliance with the version of the Seattle Fire Code adopted at the time of building permit application.

3.15.3.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse fire and EMS service-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.15.4 POLICE

This section compares the probable significant impacts from the Preferred Alternative on police protection services to those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.15.4 of the DEIS) and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the impacts assumed in this sector under the Preferred Alternative.

3.15.4.1 Affected Environment

DEIS Site

The Affected Environment, including existing police protection services and total calls for police service and on-views (Table 3.15.4-2) at the DEIS Site under the Preferred Alternative would be generally as described in the DEIS in Section 3.15.4.1.⁴

As noted in the DEIS, police protection service to the Yesler Terrace site is currently provided by the Seattle Police Department's East Precinct, headquartered at 1519 12th Avenue approximately one mile to the north of the site. The DEIS Site is located in the East Precinct's Edward sector, beat E3. Staffing at the East Precinct currently includes: 112 patrol officer, 15 patrol sergeants, four police lieutenants, eight detectives, one detective sergeant, and one police captain. SHA also provides funding for a Community Police Team officer to work with Yesler Terrace management and residents on crime and crime-related concerns.

East of 12th Sector

As with the DEIS Site, police protection services to the East of 12th Sector are currently provided by the Seattle Police Department's East Precinct. The East of 12th Sector is also located within the East Precinct's Edward sector, beat E3.

The East of 12th Sector does not currently contain active residential uses. The site is occupied by three buildings including: the Baldwin Apartments, the King County Elections facility, and the Urban League offices. The Baldwin Apartment building is vacant and boarded-up. Limited service calls are assumed to be generated by vandalism and/or trespass incidents. The King County Archive facility is fenced and has limited public access; police service calls to this facility are assumed to be extremely limited. The Urban League building is occupied by office uses, and contains a great deal of un-leased office space. Overall, police calls and on-views to the buildings/uses within this sector are assumed to be limited. In summary, overall crime levels and violence at the East of 12th Sector are assumed to be minimal.

3.15.4.2 Impacts

This section summarizes the potential impacts to police services associated with the proposed redevelopment of Yesler Terrace under the Preferred Alternative. Impacts are discussed separately for the DEIS Site and the East of 12th Sector. As stated in the DEIS, increases in employment and population on the site over the 20-year build-out period would create related

⁴ On-views are events that officers log during routine patrols, based on field observation and follow-up, as opposed to responses to 9-1-1 calls from dispatch.

increases in demand for police services. Redevelopment on the site would occur gradually over time and demands on police services would increase incrementally through 2030.

DEIS Site

Construction

Redevelopment construction under the Preferred Alternative on the DEIS Site could result in an increase in demand for police services due to site theft and vandalism, similar to that described in the DEIS for Alternatives 1-4. As stated in the DEIS, existing Police Department staffing and equipment are expected to be sufficient to handle increased service needed for onsite construction activities.

As described in **FEIS Chapter 2**, overall levels of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1-4. Therefore, construction impacts on the DEIS site under the Preferred Alternative would generally be similar to those identified in the DEIS for Alternatives 1-4.

Operation

Increases in the on-site population and employment over the 20-year buildout of the Yesler Terrace mixed-use development under the Preferred Alternative would be incremental and would be accompanied by increases in demand for police service.

As described in **FEIS Chapter 2**, overall levels of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1-4. Therefore, operational impacts to police services as a result of redevelopment on the DEIS site under the Preferred Alternative would generally be similar to those identified in the DEIS for Alternatives 1-4. Additional safety problems and need for police service would not be expected to be significant under the Preferred Alternative. SHA would continue funding for one dedicated police staff at the site, who serves as a Community Police Team officer, in the near-term (i.e. until market rate housing is introduced to the site). As redevelopment of the site progresses, SHA's funding of dedicated police staff would be reevaluated annually. As market rate housing is added to the site, SHA could elect to contribute to a shared fund along with new homeowners associations to fund a dedicated police officer or to fund private security for the site. SPD's capability to deliver proactive police-community problem solving services to the site and vicinity is anticipated to substantially increase with the implementation of the Neighborhood Policing Plan.⁵

The design and physical layout of the site under the Preferred Alternative is also intended to improve safety, generally as described for Alternatives 2 and 3 in the DEIS, by reconfiguring the circulation infrastructure across the site, removing dead-end streets and sidewalks, and creating better connections to the surrounding neighborhoods. Crime Prevention Through Environmental

⁵ In 2007, the Seattle Police Department published the *Neighborhood Staffing Plan (NPP) 2008-2012* that called for a net increase of 105 patrol officers (or an approximate 20 percent increase) to the force between 2008 and 2012. By 2012, the Department expected to have a total police force of approximately 600 patrol officers for emergency call response and proactive work. The Department proceeded with its recruitment efforts beginning in 2008, and 65 fully trained 9-1-1 patrol responders have been added to the force thus far, for a total current staff of 555 patrol officers.

Design (CPTED) principles would be considered in the design and layout of the redeveloped site. Refer to DEIS Appendix Q for additional details.

East of 12th Sector

Construction

Construction impacts in the East of 12th Sector would be generally as described above for the DEIS Site. Existing Police Department staffing and equipment would be expected to be sufficient to handle any increased service needed for construction activities within this sector.

Operation

Changes in the use of the site, including the introduction of a residential population to this sector could be accompanied by increases in demand for police service. Additional safety problems and need for police service would not be expected to be significant however, for similar reasons as those identified for the DEIS Site. That is, SHA would continue funding (in the near-term) for one dedicated police staff at the site, who serves as a Community Police Team officer, and SPD's capability to deliver proactive police-community problem solving services to the site and vicinity is anticipated to substantially increase with the implementation of the Neighborhood Policing Plan.

Also, the design of this sector, including the renovation and occupation of a presently vacant building (Baldwin Apartments), and the integration of the King County Archives property with the rest of the block, could improve safety conditions within this area. The residential population would also establish a more constant level of activity on the site, which could contribute to safety improvements.

FEIS Site/Conclusion

The overall level of development (including residential units) on the FEIS Site would be within the range analyzed within the Draft EIS (similar to DEIS Alternative 3), although the site boundary would be expanded. As concluded in the DEIS, significant additional safety problems and need for police service are not expected to result from the increases in residential population and employment at the site. Any such increases would be within the range anticipated for the DEIS Alternatives, due to the similar level of overall redevelopment anticipated for the entire site, including in the East of 12th sector.

Cumulative Impacts

Cumulative impacts to police services resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.15.4.3 Mitigation Measures

The following required/proposed mitigation measures would address potential impacts to police services resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are assumed to be the same as those identified in the DEIS unless otherwise noted as (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

- Increases in population and employment over the 20-year buildout of the Yesler Terrace project would be incremental and would be accompanied by increases in demand for police services under all of the EIS redevelopment alternatives. A portion of the tax revenues generated from redevelopment of the site – including construction sales tax, retail sales tax, business and operation tax, property tax, utility tax and other fees, licenses and permits – would accrue to the City of Seattle and could help offset demand for police services.
- (MODIFIED) The portions of the site that are under construction during phased redevelopment of the site should to the extent feasible be fenced and lit, and monitored by surveillance cameras to help prevent construction site theft and vandalism.
- Permanent site design features could be included to help reduce criminal activity and calls for service, including: orienting building towards sidewalks, streets and/or public open spaces; providing convenient public connections between buildings onsite and to the surrounding area; and, providing adequate lighting and visibility onsite.
- (MODIFIED) In the near-term (i.e. until market rate housing is introduced to the site), SHA would continue funding for one dedicated police staff at the site, who serves as a Community Police Team officer to work with Yesler Terrace management and residents on crime and crime-related concerns. As redevelopment of the site progresses, SHA's funding of dedicated police staff would be reevaluated annually. As market rate housing is added to the site, SHA could elect to contribute to a shared fund along with new homeowners associations to fund a dedicated police officer, or to fund private security for the site.

Other Possible Mitigation Measures

- (NEW) SHA and SPD could work together to ensure effective collaboration between SPD officers and SHA security staff, and both could explore opportunities to secure outside grant support for additional crime prevention program activities.

3.15.4.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse police service-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.15.5 SOLID WASTE

This section compares the probable significant impacts from the Preferred Alternative on solid waste collection services to those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.15.5 of the DEIS) and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the impacts assumed in this sector under the Preferred Alternative.

3.15.5.1 Affected Environment

DEIS Site

In DEIS Section 3.15.5.1, the affected environment of the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) is described including the existing SHA Solid Waste Division collection services at the site (garbage, yard waste, composting), current collection locations and current amounts of solid waste collected at the site. Recycling is collected by Cleanscapes. The existing solid waste services on the site and in the site vicinity have generally remained the same as presented in the DEIS; therefore, no additional descriptions of the existing conditions is warranted.

East of 12th Sector

It is estimated that the 29 employees of the Seattle Urban League and King County Archive buildings located on East of 12th Sector currently generate approximately 6.7 tons of non-residential waste per year.⁶

As stated in **FEIS Section 2.2.2**, the presently occupied properties that comprise the East of 12th Sector are not currently owned by SHA; therefore, solid waste collection services are not currently provided by SHA's Solid Waste Division as they are at the DEIS Site. Solid waste collection services, including garbage and recycling, are currently provided to the East of 12th Sector tenants by Seattle Public Utilities (SPU). SPU presently has 350,000 solid waste collection customers. Every year, SPU handles over 256,000 tons of garbage; 57,000 tons of yard waste; 24,900 tons of recyclable material; 3,300 tons of wood waste received at the stations each year and 56 tons of household hazardous waste. SHA's Solid Waste Division would provide trash collection services for the East of 12th properties if it were to acquire, redevelop, and/or rehabilitate those sites.

King County Archives also currently contracts out certain paper waste collection services to private vendors due to the high volume and special handling requirements of some disposal materials.

Solid waste collection for the existing employees at the East of 12th Sector is generally collected by SPU from dumpsters and containers located in parking lots or near buildings.

⁶ The amount of waste generated by the existing onsite office and neighborhood services uses was calculated by multiplying the number of existing employees (29) by 0.23 tons (the average annual amount of waste generated per employee in the City of Seattle's *Recycling Potential Assessment*, 1998).

Trash and recycling is collected by SPU at the East of 12th Sector on a weekly basis. Garbage and recycling materials are delivered to the South Recycling and Disposal Station (SRDS) at 8100 2nd Avenue S in Seattle, which is managed and operated by Seattle Public Utilities (SPU).

3.15.5.2 Impacts

DEIS Site

Construction

Impacts to solid waste collection services on the DEIS Site during construction activities associated with the Preferred Alternative would be the same as described for DEIS Alternatives 1-4 in the DEIS. During redevelopment, solid waste would be generated by both demolition and construction activities. Solid waste from these activities could be collected by private waste haulers or SHA's Solid Waste Division and would be determined at the time of construction.

To the extent feasible, construction-generated solid waste from the DEIS Site would be diverted from landfills and sent to recycling or composting facilities via the SRDS. Other means of reducing the solid waste generated by Preferred Alternative construction activities on the DEIS Site include: on-site source separated recycling; potential reuse of demolition materials on-site, and, salvage and reuse of building components.

Due to the presence of asbestos and lead-based paint in the majority of the existing buildings on the DEIS Site, it is unlikely that most construction and demolition debris would be recyclable. Building materials would be tested as part of demolition activities in order to determine the levels of contamination present. The test results would be used to determine whether building materials would be sent to a landfill or to a specialized facility that handles hazardous waste (see **FEIS Section 3.6, Environmental Health**, for details).

Operation

For purposes of this FEIS analysis, it is assumed that under the Preferred Alternative each resident of the DEIS Site would generate approximately 0.348 tons of solid waste per year;⁷ non-residential office and neighborhood commercial uses would generate approximately 0.23 tons of solid waste per employee per year;⁸ and, retail uses would generate approximately 0.93 tons⁹ per employee per year. **FEIS Table 3.15.5-1** shows the estimated amount of waste generated under each alternative without implementation of measures to reduce solid waste generation.

The amount of solid waste generated on the DEIS Site under the Preferred Alternative would be within the range assumed for DEIS Alternatives 2 and 3. As discussed in DEIS Section 3.15.5.2, if solid waste management services continue to be provided to the Yesler Terrace site by the SHA Solid Waste Division over the buildout period, the amount of solid waste handled by SHA would increase substantially from the 580 tons collected at Yesler Terrace each year under

⁷ The 0.348 tons of solid waste generated per year per person was derived by dividing the estimated 2006 multi-family residential population of Seattle (160,100) by the amount of waste generated by multi-family uses in 2006 (55,664 tons), per the City of Seattle report *Residential Waste Stream Composition Study* (published in 2007).

⁸ Per the City of Seattle's *Recycling Potential Assessment*. 1998.

⁹ Per the City of Seattle's *Recycling Potential Assessment*. 1998.

existing conditions to over 3,500 tons. The existing workforce and equipment capacity at SHA Solid Waste Division may not be sufficient to meet future waste collection needs. As a result, SHA may need to hire additional drivers, add vehicles to their fleet, extend workdays and/or add additional workdays in order to handle the additional solid waste tonnage from the Yesler Terrace Redevelopment. However, SHA may not choose to provide waste and recycling collection for the entire redeveloped site depending upon logistical and economic conditions.

**Table 3.15.5-1
COMPARISON OF THE ESTIMATED SOLID WASTE GENERATED PER YEAR
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE DEIS SITE
(TONS)**

Source	FEIS Preferred Alternative	DEIS ALTERNATIVE					
		1	1A	2	3	4	No Action ⁴
West of Boren Sectors							
Residential Waste ¹	2,549	1,663	1,663	2,214	2,705	784	428
Office & Neighborhood Services Waste ²	722	637	331	791	945	33	33
Neighborhood Commercial Waste ³	116	47	47	77	109	0	0
TOTAL WEST OF BOREN	3,387	2,347	2,041	3,082	3,759	817	461
East of Boren Sectors							
Residential Waste ¹	165	156	156	158	189	189	0
Neighborhood Commercial Waste ³	0	16	16	16	28	16	0
Office & Neighborhood Services Waste ²	14	0	0	0	0	0	2
TOTAL EAST OF BOREN	179	172	172	174	217	205	2
Site							
Residential Waste ¹	2,714	1,819	1,819	2,372	2,894	973	428
Non-Residential Waste ^{2 & 3}	853	700	394	884	1,082	49	35
TOTAL DEIS SITE	3,567	2,519	2,213	3,256	3,976	1,022	461⁴

Source: EA/Blumen, 2011.

¹ Residential waste was calculated by multiplying the assumed residential population under each alternative by 0.348 tons. For more details on population assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-1**.

² Office and neighborhood services waste was calculated by multiplying the assumed number of employees under each alternative by 0.23 tons. For more details on employment assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-8**.

³ Neighborhood commercial waste was calculated by multiplying the assumed number of employees under each alternative by 0.93 tons. For more details on employment assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-1**.

⁴ Assumptions regarding the amount of waste generated under the No Action Alternative are based on data provided by SHA Solid Waste Services regarding the amount of waste generated by the existing Yesler Terrace development.

Staff at Seattle Public Utilities have indicated that the SRDS would have capacity to handle the increased solid waste that could be generated by the Preferred Alternative when the new facility is opened in 2012.¹⁰

¹⁰ Personal communication with Hans Van Dusen, Seattle Public Utilities, Solid Waste Contracts Manager. July 2010.

East of 12th Sector

As the parcels that comprise the East of 12th Sector are acquired by SHA for redevelopment, it is assumed that solid waste collection services at the site would be transferred from SPU to SHA's Solid Waste Division, similar to SHA's other developments.

Construction

During redevelopment and rehabilitation of the buildings on the East of 12th Sector under the Preferred Alternative, construction and demolition debris would be generated and collected by private waste haulers or SHA's Solid Waste Division.

To the extent feasible, construction and demolition debris from the East of 12th Sector would be diverted from landfills and sent to recycling or composting facilities via the SRDS. Other means of reducing the construction and demolition debris generated by the East of 12th Sector include: on-site source separated recycling; potential reuse of demolition materials on-site, and, salvage and reuse of building components.

Due to the presence of asbestos and lead-based paint in the majority of the existing onsite buildings, it is unlikely that construction and demolition debris would be recyclable. Building materials would be tested as part of demolition activities in order to determine the levels of contamination present. The test results would be used to determine whether building materials would be sent to a landfill or to a specialized facility that handles hazardous waste (see **FEIS Section 3.6, Environmental Health**, for details).

Operation

Under the Preferred Alternative, the amount of solid waste generated from uses on the East of 12th Sector would substantially increase, as compared to existing conditions. It is assumed that the existing King County Archive and Urban League uses (and their associated 29 employees) would be relocated outside of the neighborhood. It is assumed that the 6.7 tons of solid waste currently generated and collected onsite would continue to be generated at the current rate at their new location and would continue to be collected by SPU or King County Archives' other private waste collection vendors. No significant adverse impacts to solid waste collection services at SPU would be anticipated.

For purposes of this FEIS analysis, it is assumed that each of the new 475 residents of the East of 12th Sector would generate approximately 0.348 tons of solid waste per year¹¹. Neighborhood commercial waste was calculated by multiplying the assumed number of employees (7) by 0.93 tons of solid waste per employee per year.¹² **FEIS Table 3.15.5-2** shows the estimated amount of waste generated at the East of 12th Sector under the Preferred Alternative without implementation of measures to reduce solid waste generation.

It is assumed that the SHA Solid Waste Division would collect the estimated 172 tons of solid waste generated per year on the East of 12th Sector. The existing workforce and equipment

¹¹ The 0.348 tons of solid waste generated per year per person was derived by dividing the estimated 2006 multi-family residential population of Seattle (160,100) by the amount of waste generated by multi-family uses in 2006 (55,664 tons), per the City of Seattle report *Residential Waste Stream Composition Study* (published in 2007).

¹² Per the City of Seattle's *Recycling Potential Assessment*. 1998.

capacity at SHA Solid Waste Division would be anticipated to have sufficient capacity to provide collection services to the East of 12th Sector. However, as with the DEIS site, SHA may choose to not provide waste and recycling collection for this sector depending upon logistical and economic conditions.

**Table 3.15.5-2
ESTIMATED SOLID WASTE GENERATED PER YEAR
UNDER THE PREFERRED ALTERNATIVE
ON THE EAST OF 12TH SECTOR
(TONS)**

Source	Amount of Waste
Residential Waste ¹	165
Office & Neighborhood Services Waste	0
Neighborhood Commercial Waste ²	7
TOTAL EAST OF 12TH SECTOR	172

Source: EA/Blumen, 2011.

¹ Residential waste was calculated by multiplying the assumed residential population of 475 by 0.348 tons. For more details on population assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-1**.

² Neighborhood commercial waste was calculated by multiplying the assumed number of (7) by 0.93 tons. For more details on employment assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-1**.

FEIS Site/Conclusion

Construction

Impacts to solid waste collection on the FEIS Site (DEIS Site and East of 12th Sector) during construction of the Preferred Alternative would be the same as described for the DEIS Site and East of 12th Sector above. No additional significant adverse impacts to solid waste collection services would be anticipated.

Operation

Under the Preferred Alternative, the amount of solid waste generated from uses on the total FEIS Site (DEIS Site and the East of 12th Sector) would substantially increase, as compared to existing conditions as shown in **FEIS Table 3.15.5-3** but would fall within the range assumed for DEIS Alternatives 2 and 3 in the DEIS. No additional significant adverse impacts would be anticipated.

**Table 3.15.5-3
COMPARISON OF THE ESTIMATED SOLID WASTE GENERATED PER YEAR
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE
(TONS)**

Source	FEIS Preferred Alternative	DEIS ALTERNATIVE					
		1	1A	2	3	4	No Action ⁴
West of Boren Sectors							
Residential Waste ¹	2,549	1,663	1,663	2,214	2,705	784	428
Office & Neighborhood Services Waste ²	722	637	331	791	945	33	33
Neighborhood Commercial Waste ³	116	47	47	77	109	0	0
TOTAL WEST OF BOREN	3,387	2,347	2,041	3,082	3,759	817	461
East of Boren Sector							
Residential Waste ¹	165	156	156	158	189	189	0
Neighborhood Commercial Waste ³	0	16	16	16	28	16	0
Office & Neighborhood Services Waste ²	14	0	0	0	0	0	2
TOTAL EAST OF BOREN	179	172	172	174	217	205	2
East of 12th Sector							
Residential Waste ¹	165						
Office & Neighborhood Services Waste	0						
Neighborhood Commercial Waste ³	7						
TOTAL EAST OF 12TH SECTOR	172						
Site							
Residential Waste ¹	2,879	1,819	1,819	2,372	2,894	973	428
Non-Residential Waste ^{2&3}	860	700	394	884	1,082	49	35
TOTAL FEIS SITE	3,739	2,519	2,213	3,256	3,976	1,022	461⁴

Source: EA/Blumen, 2011.

¹ Residential waste was calculated by multiplying the assumed residential population under each alternative by 0.348 tons. For more details on population assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-1**.

² Office and neighborhood services waste was calculated by multiplying the assumed number of employees under each alternative by 0.23 tons. For more details on employment assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-1**.

³ Neighborhood commercial waste was calculated by multiplying the assumed number of employees under each alternative by 0.93 tons. For more details on employment assumptions, see **FEIS Section 3.16.1**, including **Table 3.16-1**.

⁴ Assumptions regarding the amount of waste generated under the No Action Alternative are based on data provided by SHA Solid Waste Services regarding the amount of waste generated by the existing Yesler Terrace development.

Cumulative Impacts

Cumulative impacts to solid waste collection services resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.15.5.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential solid waste management service impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative on the FEIS Site. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (MODIFIED).

Possible Mitigation Measures

In conjunction with the overall stewardship and sustainability principle of the redevelopment, the following mitigation measures could be employed by SHA in order to reduce the amount of solid waste generated by the Yesler Terrace Redevelopment, thereby reducing impacts on collection by SHA Solid Waste Division, Seattle Public Utilities and on disposal at the SRDS and ultimately the Columbia Ridge Landfill and Recycling Center in Gilliam County, Oregon:

- Accommodate onsite composting using various types of equipment, including earth bins and anaerobic digestion;
- Provide or encourage household composting units;
- Provide offsite composting after site collection; and/or,
- Expand urban agriculture on the site to utilize organic waste.

(MODIFIED) SHA could be required to contract out collection services to other agencies (such as SPU), hire additional drivers, add vehicles to their fleet, extend workdays and/or add additional workdays in order to handle the additional solid waste from the Yesler Terrace Redevelopment, even with implementation of the above mitigation measures.

3.15.5.4 Significant Unavoidable Adverse Impacts

No significant unavoidable adverse impacts to solid waste management services would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.15.6 COMMUNITY SERVICES

This section compares the probable significant impacts from the Preferred Alternative on community services to those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.15.6 of the DEIS) and identifies any new or increased significant impacts and/or mitigation. This section also describes the existing conditions on the East of 12th Sector and provides an analysis of the impacts assumed in this sector under the Preferred Alternative.

3.15.6.1 Affected Environment

DEIS Site

The programs, community organizations and service agencies located on the DEIS Site would be generally as described in the DEIS in Section 3.15.6.1, and include: Neighborhood House, Food Bank – Food Not Bombs, Youth Tutoring – Catholic Community Services of Western Washington, International District Housing Alliance, GroundUp, YWCA, Community Policing, Yesler Terrace Community Council, the Yesler Community Center and various SHA Programs. These programs, community organizations and service agencies provide support to Yesler Terrace residents and to the greater community.

East of 12th Sector

The East of 12th Sector contains one community service organization/nonprofit group: the Urban League of Metropolitan Seattle. The goal of the Urban League is to empower, enable and assist African Americans, other people of color and disadvantaged individuals in becoming self-sufficient. This goal is achieved through public advocacy, providing services and developing strong business and community partnerships.¹³ While this organization may assist Yesler Terrace residents on an individual basis, the Urban League is not specifically focused on serving the Yesler Terrace community.

3.15.6.2 Impacts

DEIS Site

Construction

Community Service Providers

As described in the DEIS, SHA anticipates that the community service providers/organizations currently located on the DEIS Site would be offered the opportunity to return to the redeveloped community, if space is available, and assuming that SHA and service providers who are currently contracted for services enter into a new contract after current agreements expire. During construction, it is possible that some organizations and programs could move directly into redeveloped space as described in the DEIS. As well, the 8,467 SF Steam Plant in the NW Sector would be retained and could be adaptively reused for community service uses under the Preferred Alternative. Some organizations and programs could move directly into this building

¹³ Urban League of Metropolitan Seattle. <http://urbanleague.org/index.php/about-us>.

without having to leave the site. It is also possible that some organizations and programs would need to relocate offsite during construction, as described in the Section 3.15.6.2 of the DEIS.

Access to Social Services

Yesler Terrace Residents. Redevelopment under the Preferred Alternative could temporarily disrupt residents' access to social services which are based on the site, due to the need for some residents to temporarily relocate offsite during construction, as described in the DEIS. SHA's proposed relocation plan (see Section 3.16, Socioeconomics, for details) specifically addresses the need to maintain service connections for residents as part of relocation assistance.

Resident's access to social services could also be disrupted due to the potential displacement of these organizations themselves during construction activity, generally as described in the DEIS. As mentioned above, the retention and adaptive reuse of the Steam Plant building could allow some community service providers to move directly into new space without having to leave the site. This could ease the transition during construction and redevelopment of the site for some community service providers/programs.

Community. As detailed in the DEIS, certain programs and services based on the DEIS site are available to the wider community, in addition to Yesler Terrace residents. Some of these, including programs based in the Yesler Terrace Community Center, would continue to be available and accessible throughout the redevelopment construction process, while other programs/services could be temporarily or permanently relocated from the site, as described in the DEIS.

Operation

Community Service Providers

Under the Preferred Alternative, approximately 43,029 SF of neighborhood services space would be provided on the DEIS Site, not including the 21,971 SF Yesler Community Center, which would be retained. Neighborhood service uses could include (but are not limited to) police, education, library, social services, non-profit organizations, government funded health agencies, and SHA offices open to the public.

Additional space would be provided for community services uses as compared to existing conditions (65,000 SF) vs. (50,000 SF existing), and therefore, more programs/groups will likely be based on the DEIS Site following redevelopment. Existing community service providers could also potentially provide increased services or expanded programs with the additional space. It is also possible that different social service providers or organizations to those described in the Affected Environment section would locate on the site.

SHA commissioned a Social Infrastructure report that was completed in February of 2011 in order to provide recommendations to guide the negotiation of service partnerships and the allocation of space at the redeveloped site. This report is intended to provide SHA with recommendations to guide the location of space and the negotiation of services partnerships on the redeveloped site.

Access to Social Services

Yesler Terrace Residents. As described above, residents of Yesler Terrace are currently served by a number of on-site social services. The redeveloped Yesler Terrace site would provide increased space for neighborhood service uses (43,029 SF) as compared to existing conditions (approximately 28,000 SF). Also, the Yesler Community Center would be retained and all services and programs based in this facility would be expected to continue.

Current SHA programs based onsite, as well as the Yesler Terrace Community Council, would be expected to continue as described in the DEIS. It is possible that some of the existing service providers on the site would remain on or return to the redeveloped site, as described in Section 3.15.6.2 of the DEIS. Service providers and organization could include those programs identified in Section 3.15.6.2 of the DEIS including police, library, social services, non-profit organizations, government-funded health agencies, and SHA offices open to the public.

Community. The redeveloped Yesler Terrace site would provide 43,029 SF for neighborhood service uses, which is greater than currently exists on the site. It is not known at this time specifically which community service providers would return to the site and which would permanently relocate. Depending on where organizations permanently relocated, services could be more or less accessible to the community/clients. It is assumed that community service providers would take steps to inform clients of their changed location and to assure maximum public accessibility, as noted in Section 3.15.6.2 of the DEIS.

East of 12th Sector

Construction

Community Service Providers

It is assumed that the Urban League office uses would permanently relocate prior to the adaptive reuse of the Urban League building.

Access to Social Services

Yesler Terrace Residents. As noted previously, the East of 12th Sector does not presently contain active housing units, and there is no residential community onsite.

Community. Depending on where the Urban League relocates, the organization could be more or less accessible to the community members who access these services. It is assumed that the Urban League would inform clients of their changed location to assure and maintain public accessibility.

Operation

Community Service Providers

Under the Preferred Alternative, no neighborhood services space would be developed in the East of 12th Sector; these uses would be concentrated on the DEIS Site within the West of

Boren Sectors, primarily in the NW and NE Sectors, in addition to the existing Yesler Community Center and the Steam Plant. Typical locations would be along Broadway.

Access to Social Services

Yesler Terrace Residents. As described previously, residents of Yesler Terrace are currently served by a number of community service providers. The redeveloped site would provide more space for neighborhood services uses (i.e. community services) than are currently available under existing conditions. Although no community services space would be provided in this sector, the residents of the site living within the East of 12th Sector would have access to all services and organizations available within the larger site area on the DEIS Site, which is located one-half block to the west.

Community. As noted above, the redeveloped Yesler Terrace site would not include neighborhood service uses within the East of 12th Sector.

FEIS Site/Conclusion

Redevelopment under the Preferred Alternative on the FEIS Site (DEIS Site and East of 12th Sector) would result in an increase in space for community services as compared to existing conditions. In total, it is estimated that 65,000 SF of community services space would be provided, including the 21,971 SF Yesler Community Center. This is approximately 15,000 SF greater than the range evaluated in the DEIS, which assumed 49,971 SF of community services space for Alternatives 1-4. The retention and adaptive reuse of the Steam Plant for community services uses is expected to reduce disruption to community service providers, Yesler Terrace residents and the community, by allowing some programs/services to move directly from their current locations into the renovated building.

3.15.6.3 Mitigation Measures

The following required/proposed mitigation measures would address potential impacts to community services resulting from the Yesler Terrace Redevelopment under the Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted as: (NEW) or (MODIFIED).

Required/Proposed Mitigation Measures

The displacement of existing community service providers onsite would require SHA to comply with the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (URA). The URA applies to projects with federal funding, such as Yesler Terrace, that involve the displacement of organizations/businesses. Specifically, requirements of the URA include:

- Relocation advisory services;
- A minimum 90 days written notice to vacate prior to requiring possession; and,
- Reimbursement for moving and reestablishment expenses.

- During the construction process, in accordance with the tenant relocation plan, Yesler Terrace residents would be linked with service providers in areas to which they relocate in order to ensure continuity of services during the redevelopment of the site (see **FEIS Section 3.16, Socioeconomics**, for additional information on the tenant relocation plan).
- (NEW) SHA will use the recommendations contained in the *Yesler Terrace Redevelopment Social Infrastructure Report* (January, 2011) to help guide the negotiation of service partnerships and the allocation of neighborhood services space at the redeveloped site.
- (NEW) The Steam Plant could be retained and adaptively reused for onsite relocation of some existing community service programs/providers based on the Yesler Terrace site.

3.15.6.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and the additional mitigation identified in this FEIS, no significant unavoidable adverse community service-related impacts would be expected with the Preferred Alternative, including redevelopment of the East of 12th Sector.

3.16 SOCIOECONOMICS

The following section describes the existing socioeconomic conditions including community cohesion and public well being, population, housing and employment on and in the vicinity of the site, and compares how the Preferred Alternative could affect conditions on the site and in the site vicinity to those impacts analyzed under DEIS Alternatives 1-4 in DEIS Section 3.16.

3.16.1 Affected Environment

DEIS Site

In DEIS Section 3.16.1, the affected environment at the DEIS Site (NW, NE, SE, SW and East of Boren Sectors) is described, including the existing housing, population and employment conditions. The existing conditions on the DEIS Site and in the site vicinity have generally remained the same as presented in the DEIS; therefore, no additional descriptions of existing conditions are warranted.

East of 12th Sector

Land uses in the vicinity of the East of 12th Sector primarily include 1 to 5 story low-rise multi-family residential uses. Existing uses in the area include the Langston Hughes Performing Arts Center, Bailey-Gatzert Elementary School, Horiuchi Park, a neighborhood P-patch, and neighborhood retail, such as dining, grocery, and auto repair services. Washington Hall, a former performing arts center and City of Seattle landmark adjacent to this sector, is currently being renovated and will likely be used as a performance space upon completion.

Housing

The East of 12th Sector does not presently contain active housing uses. One apartment building is located within the sector (the Baldwin Apartments), but as discussed in **FEIS Section 2.2.2**, this building is presently vacant due to maintenance issues.

Population

There is currently no residential population within the East of 12th Sector.

Employment

There are two employers based within the East of 12th Sector; the Urban League of Metropolitan Seattle (Urban League) and the King County Archives. Urban League is a community based non-profit organization that aims to empower African Americans, people of color and disadvantaged individuals to become self-sufficient. This organization employs approximately 21 individuals within the Urban League building. The King County Archives is the repository of county government records. Approximately 11 individuals are employed in this facility.

3.16.2 Impacts

DEIS Site

Approval of the Proposed Action and redevelopment under the Preferred Alternative on the DEIS Site would create a range of office, lodging, neighborhood commercial and neighborhood service uses onsite and would add additional space for employment and residential uses in the First Hill and Central Area neighborhoods in the City of Seattle. These uses would be within the range evaluated in the DEIS, as noted in **FEIS Section 2.5** and **FEIS Section 3.8**.

FEIS Table 3.16-1 provides a summary of assumed population, employment and housing levels under the Preferred Alternative on the DEIS Site, and a comparison to the levels identified for the DEIS Alternatives 1-4. As indicated, the population, housing and employment under the Preferred Alternative on the DEIS Site is within the range identified for the DEIS Alternatives. Specifically, the Preferred Alternative is between Alternatives 2 and 3 in terms of population, similar to Alternative 3 in terms of housing units, and slightly less than Alternative 2 in terms of employment.

Population rates (person per household) for the Preferred Alternative were estimated based on the same assumptions used in the DEIS for Alternatives 1-4 (see **FEIS Appendix L** for details). Employment refers to the number of jobs that could be accommodated at the site based on the land use assumptions made for each alternative, using the same ratio of square foot of building space per employee as was assumed in the DEIS.

**Table 3.16-1
COMPARISON OF POPULATION, HOUSING AND EMPLOYMENT IMPACT SUMMARY FOR
DEIS ALTERNATIVES 1-4 AND PREFERRED ALTERNATIVE (DEIS SITE)**

	Preferred Alternative (DEIS Site)	Alt. 1	Alt. 1A	Alt. 2	Alt. 3	Alt. 4	No Action
West of Boren							
Population	7,323	4,779	4,779	6,362	7,773	2,253	1,231
Housing Units	4,500	2,747	2,747	3,747	4,697	1,219	521 (515**)
Employment*	3,266	2,810	1,480	3,513	4,216	133	142
East of Boren							
Population	475	449	449	453	542	542	--
Housing Units	250	253	253	253	304	304	40 (32**)
Employment	15	17	17	17	30	17	9
Project Totals							
Population	7,799	5,228	5,228	6,815	8,315	2,795	1,231
Housing Units	4,750	3,000	3,000	4,000	5,000	1,523	561 (547**)
Employment	3,291	2,837	1,507	3,540	4,256	160	151

Source: CollinsWoerman, 2010, 2011.

* The Employment number shown for the West of Boren Sectors does not include 10 employees based in the Yesler Community Center. The Employment number shown for the Project Totals does include the Yesler Community Center employees.

**The numbers in parentheses represent housing units that would be used for housing purposes. As mentioned in the DEIS Section 3.16.1, 6 units in the West of Boren Sector are used as offices by SHA, and 3 units are offline due to maintenance issues. It is assumed the office units would not be rehabilitated for housing, but the units that are currently offline due to maintenance would be used for housing once repaired. In the East of Boren Sector, it is assumed that 8 units would continue to be used for non-housing purposes.

As indicated by **FEIS Table 3.16-2**, below, approximately 34 percent of the overall housing provided under the Preferred Alternative on the DEIS Site would be low income housing, as compared to 43-49 percent under DEIS Alternatives 1-3 and approximately 37 percent under DEIS Alternative 4.

Similar to the assumptions in DEIS Section 3.16.2, it is assumed that a portion of the low income housing units would be provided by either a for-profit or non-profit housing developer. Development of this portion of the low income housing units would depend on market conditions. Conditions on the provision of these units would be addressed in purchase and sale agreements.

**Table 3.16-2
HOUSING UNIT TYPE ALLOCATIONS**

	Preferred Alternative (DEIS Site)	Alternative 1 & 1A	Alternative 2	Alternative 3	Alternative 4	No Action Alternative
Extremely Low income (at or below 30% of AMI)	491	561	561	561	561	561
Very Low income (at or below 50% of AMI)	250	239	335	335	0	0
Low income (at or below 80% of AMI)	856	660	950	1,231	0	0
Market Rate	3,153	1,540	2,154	2,873	962	0
Total Units	4,750	3,000	4,000	5,000	1,523	561

Source: CollinsWoerman, 2010, 2011.

Construction Impacts

Direct Impacts

Future redevelopment of the DEIS Site assumed under the Preferred Alternative would consist of the same primary construction-related activities as were described in DEIS Section 3.16.2, including: 1) demolition of existing buildings and demolition of some existing utilities and paved areas; 2) construction of new site infrastructure, including primary roadways, utilities and open space/parks; and 3) construction of new buildings and associated parking.

Construction activities under the Preferred Alternative would result in new temporary construction employment opportunities during the approximately 20-year site buildout. Based on the assumed buildout period to 2030, construction would occur on a periodic basis over an extended period of time. These jobs would be discontinued once redevelopment of the site is completed.

Residential Displacement and Community Cohesion. Construction impacts on residential displacement and community cohesion on the DEIS Site would be generally similar to those described in Section 3.16.2 of the DEIS. That is, redevelopment under the Preferred Alternative would result in the demolition of all existing residential structures, and construction of a new mixed use, mixed-income community over the long-term. Many residents of the DEIS Site would be required to relocate to accommodate demolition and construction activities, and relocated residents would incur the inconvenience associated with relocating from their homes and finding comparably affordable housing. Daycares that are operated by some residents within their homes could be temporarily displaced, or could move directly from existing housing to new onsite housing. Any residents that are temporarily relocated offsite may or may not have space to allow such businesses to remain open. Consequently it is possible that income generated by such businesses could be temporarily disrupted or eliminated as a result of temporary displacement.

Under the Preferred Alternative, one-to-one replacement of all existing extremely low income housing units is assumed to occur onsite (including within the new East of 12th Sector), and all residents would be offered relocation assistance as described in Section 3.16.2 of the DEIS including compliance with the federal Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (URA).¹

Community cohesion (which is defined as maintaining connections within the community for this analysis) could be temporarily impacted generally as described in DEIS Section 3.16.2 for Alternatives 1-3, except for the following changed circumstance. Although no specific sequence of development has been established at this time, under the Preferred Alternative it is likely that the East of Boren Sector and possibly the East of 12th Sector would be developed first to provide some early replacement housing for existing residents while demolition and construction occur in the West of Boren Sectors. In total, it is estimated that up to 140 units could be made available within these sectors for early replacement housing for existing extremely low income tenants, including 70 units in the East of Boren Sector and 70 units in the East of 12th Sector. Temporary and/or permanent relocation within the site boundary could be expected to alleviate disruptions to existing residents and community bonds.

Indirect Impacts

Indirect construction impacts to surrounding businesses would be within the range identified in Section 3.16.2 of the DEIS for Alternatives 1-3. During periods of high construction activity, surrounding businesses (i.e. restaurants, retail stores to the south and east) could experience indirect impacts to revenues from construction traffic, rerouting of traffic, utilities service disruptions, and limited access. These impacts would be on a periodic and extended basis, and would be regulated by the City of Seattle Municipal Code, as mitigated by other methods including business promotion and marketing, highlighting access points, and signage. Conversely, due to the increased numbers of construction workers in the area, it is also possible that some businesses (restaurants, retail, services, etc.) could experience an increase in business during the ongoing construction phases.

Operation/Direct Impacts

Community Cohesion and Public Well Being

The Preferred Alternative could impact community cohesion on the DEIS Site through changes in the existing demographics in a manner similar to that described in Section 3.16.2 of the DEIS. Public well being would be expected to be enhanced generally as described for DEIS Alternatives 2 and 3 in DEIS Section 3.16.2.

Housing

The number of residential units on the DEIS Site under the Preferred Alternative would increase from 561 to 4,750 under the Preferred Alternative. Density would increase from roughly 15.6

¹ If SHA identifies other potential sites for replacement units in the immediate neighborhood in response to being unable to complete an acquisition/agreement with King County or the Urban League for the respective sites, it would undertake supplemental environmental review in order to determine potential impacts, if any. However, in accordance with the Guiding Principles, no sites outside of the immediate neighborhood would be considered. See **FEIS Chapter 2** for additional information.

dwelling units/acre to 245 dwelling units/acre. Roughly 56 percent of this housing is assumed to be located in mid-rise buildings and the remaining is assumed to be within high-rise buildings. **FEIS Table 3.16-3** summarizes the proposed housing mix and affordability of units to be developed on the DEIS Site under the Preferred Alternative. As indicated, approximately 66 percent (3,153 units) of the new units would be market rate and the remaining 34 percent would provide a mix of low income housing, ranging from extremely low income to low income.

**Table 3.16-3
PREFERRED ALTERNATIVE – HOUSING UNIT TYPE ALLOCATIONS ON DEIS SITE**

	NW Sector	NE Sector	SE Sector	SW Sector	West of Boren Subtotal	East of Boren	DEIS Site Total
Extremely Low Income	140	71	140	70	421	70	491
Very Low Income	70	35	70	35	210	40	250
Low Income	234	137	156	235	762	94	856
Market Rate	1,009	545	609	944	3,107	46	3,153
Total Units	1,453	788	975	1,284	4,500	250	4,750

Source: CollinsWoerman, 2011.

Population

The permanent, residential population on the DEIS Site (including the East and West of Boren Sectors) could be expected to increase from 1,231 residents currently (in 512 occupied units in the West of Boren Sectors) to approximately 7,799 residents (in 4,750 units throughout the DEIS Site, including the East of Boren Sector). An increase in higher-income households and the introduction of market rate housing would occur. The number of units available onsite to low income households would increase.

Changes in the age, gender, ethnicity and income levels of the site population could be expected to be similar in nature to those discussed in DEIS Section 3.16.2 for Alternatives 1-3. That is, the availability and ratios of market rate and low income housing would likely change the population characteristics in several ways. The percentage of residents aged 17 years and younger (currently 39 percent at Yesler Terrace) would likely decrease, the ratios of women onsite could decrease to reflect more balanced ratios between men and women, and the ethnic makeup of the site could shift, although the precise extent of change in racial and ethnic diversity onsite cannot be determined. The introduction of market rate housing to the Yesler Terrace site would also have the effect of economically diversifying the community.

Employment

Redevelopment on the DEIS Site under the Preferred Alternative would increase employment capacity on the site by providing space for jobs related to office, lodging, neighborhood commercial and neighborhood services uses. **FEIS Table 3.16-4** shows potential employment by 2030 and identifies the number of jobs that could be accommodated based on ratios of square foot of building space per employee, consistent with the land use assumptions made for

the Preferred Alternative. Overall, development of the Preferred Alternative could result in approximately 3,291 jobs on the DEIS Site by 2030. Similar to the DEIS Alternatives, it is assumed that office uses (other than small offices in neighborhood commercial areas) would be located only in the NW Sector of the site (see **FEIS Figure 2-7**).

It is possible that a portion of the office development space (SF) could be devoted to lodging uses, similar to DEIS Alternatives 1, 2 and 3. It is assumed that lodging uses would generate less employment than office uses.

**Table 3.16-4
PREFERRED ALTERNATIVE – DEIS SITE PROJECT EMPLOYMENT PROJECTIONS**

Type of Use	Total SF	SF/Employee	Total Employees
West of Boren			
-Office	899,691	300	2,999
-Neighborhood Commercial	75,247	600	125
-Neighborhood Services*	42,590	300	142
TOTAL			3,266
East of Boren			
-Office	0	300	0
-Neighborhood Commercial	9,000	600	15
-Neighborhood Services	0	300	0
Total			15
DEIS Site Totals – Including West and East of Boren			
-Office	899,691	300	2,999
-Neighborhood Commercial	84,247	600	140
-Neighborhood Services	42,590	300	142
Existing Yesler Comm. Center	22,000		10
TOTAL			3,291

Source: CollinsWoerman, 2011.

*Does not include existing 22,000 SF Yesler Community Center, and 10 existing employees

Redevelopment under the Preferred Alternative would provide a broader mix of employment uses than currently exists onsite, generally as described in DEIS Section 3.16.2 for Alternatives 1-3. Overall, development of the Preferred Alternative could result in approximately 3,266 jobs within the West of Boren Sectors, resulting in a net gain of 3,134 new jobs.² Although the total job capacity of the site would not be expected to be fulfilled until buildout in 2030, this number of jobs would exceed the 2024 targeted employment growth (2,000) new jobs identified for the First Hill Urban Center Village in the City’s Comprehensive Plan.

Within the East of Boren Sector, development of the Preferred Alternative could result in approximately 15 jobs by full buildout, resulting in a net gain of 6 new jobs.³ This number of new jobs would make only nominal contributions to the 2024 targeted employment growth (1,200 new jobs) identified for the 12th Avenue Urban Center Village.

As noted in DEIS Section 3.16.2, it is not possible to identify specific businesses that could locate to the Yesler Terrace site, and it cannot be determined how many of the jobs would be

² 3,266 jobs minus 132 existing jobs = 3,134.

³ 15 jobs minus 9 existing jobs = 6 net new jobs.

net new jobs to the City of Seattle. As well, the mix of employment on the Yesler Terrace site is assumed to include a range of job types and scales, generally as described in the DEIS for Alternatives 1-3.

Continuation of Existing Employment Opportunities

It is assumed that existing jobs and organizations onsite would be temporarily or permanently displaced, generally as described in DEIS Section 3.16.2 for Alternatives 1-3, except that the Steam Plant would be retained and adaptively reused for neighborhood services uses, which could allow some existing neighborhood service providers to move directly into the building without having to leave the site. See **FEIS Section 3.15.6**, for further information.

Also, similar to DEIS Alternatives 1-4, it is assumed that a portion of the low income housing units within the redeveloped site would be configured to meet the requirements for licensed in-home daycare businesses.

Indirect Impacts

Indirect impacts on the DEIS Site under the Preferred Alternative would be within the range identified in DEIS Section 3.16.2 for Alternatives 1-3. That is, redevelopment under the Preferred Alternative would result in a mixed income residential community together with office, lodging, neighborhood commercial and neighborhood services job opportunities. These changes would result in increased density and an economically diversified population, which could result in increased spending for goods and services within the area surrounding the site, as well as within the Yesler Terrace site itself. Due to the limited scope of proposed neighborhood commercial uses and the internalization of these uses, no significant unavoidable adverse impacts on nearby businesses are anticipated to occur as a result of the Yesler Terrace redevelopment.

As detailed for DEIS Alternatives 1-3, the Preferred Alternative could contribute to economic development in the surrounding area, including building renovation/expansion, new construction and business start-ups over time. Redevelopment under the Preferred Alternative could also have an effect on adjacent and nearby real estate. Residential and commercial properties could appear more desirable, resulting in an increase in demand for housing and other uses in the site vicinity. This could also result in increases in property values and rental rates and taxes over the long term. Such could potentially decrease affordability for some residents and businesses, causing them to relocate. However, it is also important to note that such impacts could also occur for reasons independent of the proposed Yesler Terrace redevelopment. Refer to the Cumulative Impacts discussion below, for additional information.

East of 12th Sector

Construction Impacts

Direct Impacts

Under the Preferred Alternative, construction impacts in the East of 12th Sector would generally be less intense and shorter in duration than the impacts assumed for the DEIS Site (West and East of Boren Sectors) as described earlier in this section. Construction activity within the East

of 12th Sector would consist of the renovation and rehabilitation of two existing buildings (Baldwin Apartments and Urban League building), demolition of the King County Archive facility, and construction of new buildings at this location. It is assumed that the King County Archives and Urban League would relocate outside of the neighborhood to comparable space or facilities, and that relocation would not permanently affect these agencies/organizations ability to store records and/or provide services. New site infrastructure and associated parking would also be developed.

Construction activities under this alternative would also result in new temporary construction employment opportunities during the buildout of this sector, which is estimated to take approximately five years.

Unlike the DEIS Site, no residential displacement or community cohesion impacts would result from construction activities, because there is no existing residential population within the East of 12th Sector that would be affected by redevelopment.

Indirect Impacts

During periods of high construction activity, surrounding businesses (i.e. commercial and retail stores to the west) could experience indirect impacts to revenues from construction traffic, rerouting of traffic, utilities service disruptions, and limited access. These impacts would be on a periodic basis, and would be regulated by the City of Seattle Municipal Code, as mitigated by other methods including business promotion and marketing, highlighting access points, and signage. Conversely, due to the increased numbers of construction workers in the area, it is also possible that some businesses (restaurants, retail, services, etc.) could experience an increase in business during the ongoing construction phases.

Operational/Direct Impacts

Community Cohesion and Public Well Being

The Preferred Alternative would introduce a mixed income residential community on the East of 12th Sector (see **FEIS Table 3.16-5**). This would serve to facilitate additional residential uses into the neighborhood, making it more balanced overall in terms of land use and allowing greater utilization of transportation investments, such as the First Hill Streetcar. Increased residential uses in this sector would also increase activity between businesses, services, and institutions in the vicinity that operate during daytime hours; residential uses typically exhibit activity outside of business hours.

For this analysis, as in DEIS Section 3.16.2, public well being is generally defined as maintaining a reasonable quality of life, including an environment that offers amenities such as walkability, aesthetic quality, access to open space, social connections, etc. The redevelopment proposed within the East of 12th Sector under the Preferred Alternative is intended to achieve the same quality of character and design as would be provided on the DEIS Site. Although this sector is not physically connected to the DEIS Site (East and West of Boren Sectors), it is located only one-half block to the east of the East of Boren Sector (see **FEIS Figure 2-4** for reference). Residents of the East of 12th Sector would be within walking distance of the DEIS Site, and all of the amenities contained within this larger site area, as referenced above. As well, the East of 12th Sector would contain some neighborhood commercial space, which could provide residents with access to additional amenities within close proximity to their

homes and could provide spaces for social networking opportunities. Existing amenities in the area include the Langston Hughes Performing Arts Center, Bailey-Gatzert Elementary School, Horiuchi Park, a neighborhood P-Patch (Squire Park), and neighborhood retail, such as dining, grocery, and auto repair services. Washington Hall, a former performing arts center and City of Seattle landmark, is currently being renovated and will likely be used as a performance space upon completion.

It should be acknowledged that at present, pedestrians within this Sector need to cross two busy roads (12th Avenue and Boren Avenue) in order to reach the central area of the DEIS Site, where primary amenities would be located, such as the Yesler Community Center and Commons Park. However, as part of the project, SHA will coordinate with the First Hill Streetcar project to improve the crosswalks and overall pedestrian environment at the Boren Avenue/Yesler Way intersection (see **FEIS Section 3.13, Transportation**, for additional information), as well as along the major arterials, including E Yesler Way and 12th Avenue. Alternatively, residents in the East of 12th Sector could access the central part of the DEIS Site (Yesler and Broadway) via the streetcar from a stop at 14th Avenue and S Washington Street. Also, although residents in this sector would be farther from the central area of the Yesler Terrace site, they would be closer to facilities such as the Bailey-Gatzert Elementary School, the school's playground and playfields, and the Squire Park P-Patch located on 14th Avenue and E Fir Street.

Elements of the new community established in the East of 12th Sector could include mixed income, mixed use housing, additional retail services, improved pedestrian and vehicular access, and the provision of semi-private open space that would promote both pedestrian orientation and public safety.

Since the development of the federal HOPE VI program for redevelopment of public housing communities, HUD policy has been focused on de-concentration of poverty by dispersing extremely low income units beyond the original community's boundaries. Consistent with this policy, Yesler Terrace replacement units would be incorporated into the larger neighborhood, with the addition of the East of 12th Sector, as a means of achieving this goal of dispersion.

Housing

The total number of residential units on the East of 12th Sector would increase from 0 to 250 under the Preferred Alternative. Density would be roughly 110 dwelling units/acre. All housing in this sector would be in mid-rise buildings (King County Archive site) and low-rise buildings (existing Baldwin Apartments and Urban League building).

FEIS Table 3.16-5 summarizes the proposed housing mix and affordability of units to be developed under the Preferred Alternative within this sector. As demonstrated, the majority of housing units would be low income (82 percent) which includes all units at or below 80 percent of the AMI, and the remaining 46 units (18 percent) would be market rate housing. Approximately 200 of these units would be new and approximately 50 units would be provided through rehabilitation of the existing Baldwin Apartments building and Urban League building.

**Table 3.16-5
PREFERRED ALTERNATIVE
HOUSING UNIT TYPE ALLOCATIONS
EAST OF 12TH SECTOR**

	Preferred Alternative (East of 12 th Sector)
Extremely Low income (at or below 30% of AMI)	70
Very Low income (at or below 50% of AMI)	40
Low income (at or below 80% of AMI)	94
Market Rate	46
Total Units	250

Source: CollinsWoerman, 2011.

The total number of new housing units provided in the East of 12th Sector (250 units) would contribute to meeting the 2024 growth target of 700 new households identified for the 12th Avenue Urban Center Village in the City's Comprehensive Plan.

Population

The permanent residential population with the East of 12th Sector could be expected to increase from 0 residents currently to approximately 475 residents (in 250 units). The general population characteristics/trends of this population could be expected to be reflective of those described and assumed for the DEIS Site in Section 3.16.2 of the DEIS, due to the introduction of market rate housing and additional levels of low income housing that would be provided in this area.

Employment

As indicated by **FEIS Table 3.16-6**, approximately 4,000 SF of neighborhood commercial space would be provided within the East of 12th Sector. Overall, redevelopment under the Preferred Alternative would reduce employment within the East of 12th Sector to approximately 7 employees from the 32 employees based in the Urban League building and the King County Archive facility. The existing employers based onsite would likely relocate outside of the neighborhood. Employment within the sector would shift from community services and public sector employment to neighborhood commercial businesses.

**Table 3.16-6
PREFERRED ALTERNATIVE – PROJECT EMPLOYMENT PROJECTIONS – EAST OF 12TH
SECTOR**

Type of Use	Total SF	SF/Employee	Total Employees
-Office	0	300	0
-Neighborhood Commercial	4,000	600	7
-Neighborhood Services	0	300	0

Source: CollinsWoerman, 2011.

As noted in the DEIS, it is not possible to identify specific businesses that could locate to the Yesler Terrace site; thus it cannot be determined how many of the jobs would be net new jobs to the City of Seattle.

It is assumed that a portion of the low income housing units within this sector would be configured to meet the requirements for licensed in-home daycare businesses.

Indirect Impacts

Redevelopment within the East of 12th Sector would result in a mixed income residential community together with space for approximately 7 jobs. These changes would result in less employment and increased residential density, and would establish an economically diverse population within an area that is presently used for office and archival/storage uses. The introduction of residents to the area could result in increased spending for goods and services within the area surrounding the site, such as along 12th Avenue and in Little Saigon, as well as within the larger DEIS Site itself. Residents of the market rate housing would likely have higher levels of disposable income than residents of low income housing.

The proposed redevelopment would reconnect the King County Archive property to the rest of the sector and surrounding neighborhood. Presently, this facility is fenced off from the surrounding community, creating a break in the otherwise fairly open surrounding land use pattern. This reconnection could be viewed as a benefit to the surrounding community. The proposed redevelopment would also improve the aesthetic character of the sector by providing landscaping and rehabilitating the vacant Baldwin Apartments building.

Similar to the DEIS Site redevelopment, together, these sector improvements could have an effect on real estate located adjacent and nearby. Residential and commercial properties could appear more desirable, resulting in an increase in demand for housing and other uses in the site vicinity. This however, could also result in an increase in property values and rental rates and taxes over the long term. This could potentially decrease affordability for some residents and businesses, causing them to relocate. However, it is also important to note that such impacts could also occur for reasons independent of the proposed Yesler Terrace redevelopment. See the Cumulative Impacts discussion, below, for more information.

FEIS Site/Conclusion

Redevelopment under the Preferred Alternative on the DEIS Site and East of 12th Sector would result in temporary construction impacts and an increase in population, housing and employment on the site. Construction impacts (i.e. temporary displacement and disruption to

community cohesion) to the existing residential population could be less, due to the use of the East of 12th Sector for some early replacement housing.

As demonstrated by **FEIS Table 3.16-7**, below, the total projected population, housing and employment levels under the Preferred Alternative would be within the range evaluated in the DEIS. The overall housing density of the site would be 231 housing units per acre, which is similar to DEIS Alternative 2, which had a housing density of 227 housing units per acre. Overall, the Preferred Alternative is similar/comparable to DEIS Alternative 3 in terms of total population and housing unit levels and comparable to DEIS Alternative 2 in terms of employment.

**Table 3.16-7
COMPARISON OF POPULATION, HOUSING AND EMPLOYMENT IMPACT SUMMARY FOR
PREFERRED ALTERNATIVE AND DEIS ALTERNATIVES 1-4 (DEIS SITE)**

	Preferred Alternative (Total Site)	Alternative 1	Alternative 1A	Alternative 2	Alternative 3	Alternative 4	No Action
Population	8,274	5,228	5,228	6,815	8,315	2,795	1,231
Housing Units	5,000	3,000	3,000	4,000	5,000	1,523	561 (547**)
Employment	3,298	2,837	1,507	3,540	4,256	160	151

Source: CollinsWoerman, 2010, 2011.

* The Employment number shown for the Project Totals includes the 10 Yesler Community Center employees.

Cumulative Impacts

Redevelopment of the Yesler Terrace site under the Preferred Alternative, along with planned and potential development in the site area, would add to the cumulative population, employment and housing growth in the City of Seattle, and the First Hill neighborhood in particular, generally as described in the DEIS for Alternatives 1-4.

Redevelopment can sometimes result in changes in adjacent and nearby areas in the form of the displacement of businesses, low income individuals, and/or the services that support them due to increased property values and/or rents. As noted in the DEIS, while such indirect and cumulative impacts of proposed redevelopment are possible, their occurrence would also be dependent on other conditions, such as favorable market/economic conditions, local plans and zoning, political support and other broad development trends that are already in progress. Neighborhoods to the west of I-5 (such as Chinatown/International District and Japantown) would be expected to be more insulated from potential impacts due to the barrier caused by the I-5 corridor. With respect to the Little Saigon Neighborhood directly to the south of the site, other broad changes in development trends are expected to occur over time. The following discussion updates the analysis of potential for impacts to this neighborhood relative to redevelopment of Yesler Terrace under the Preferred Alternative.

The Yesler Terrace redevelopment could potentially affect small businesses in Little Saigon either by increasing demand for the businesses, or by drawing demand away from the businesses. In the first scenario, a larger residential population at Yesler Terrace, along with a broader mix of income groups, improved pedestrian access, and proximity to enhanced public transportation, could all increase the likelihood that there could be additional retail demand on

the businesses in Little Saigon. While this increased demand could produce positive cumulative impacts for some businesses, the increased market demand could also potentially result in increased property values and/or rents for the small businesses.

Analysis of the magnitude of these potential indirect impacts on Little Saigon businesses included further review of the EIS issued by the City of Seattle in 2008 for the *Livable South Downtown Plan* (South Downtown EIS).⁴ As part of the South Downtown EIS, the City commissioned a three-part study to analyze the potential vulnerability of small businesses in Little Saigon from the proposed rezone in Little Saigon (and surrounding neighborhoods), as well as the then-pending “Dearborn Street” development project, located at the south end of Little Saigon. The rezone analyzed in the South Downtown EIS would have allowed for significant height and density increases in South Downtown, including in the Little Saigon neighborhood. In addition, the Dearborn Street project was expected to include a 650,000 SF shopping center and 550 residential units.⁵

The South Downtown EIS economic impact analysis identified a variety of low to high probability potential adverse impacts on local businesses from the proposed rezone and the Dearborn Street project. However, only one significant unavoidable adverse impact was identified: the “inconvenience to and eventual displacement of production, distribution and repair businesses” along portions of several streets at the south end of Little Saigon.⁶ This impact was expected to occur because the rezone, and the Dearborn Street project, would open this industrial area to residential uses, impeding truck traffic and leading to land use incompatibility.⁷ As to other potential impacts to Little Saigon businesses, the South Downtown EIS concluded that there are many factors that could contribute to transformation of the area over time, and the rezone and Dearborn Street project, while part of the overall changes in development trends, would have only a modest role in contributing to these impacts.⁸

The South Downtown EIS analysis is informative to analysis of potential impacts on Little Saigon businesses from the Yesler Terrace redevelopment. The proposed South Downtown rezone would have directly affected the development capacity in the Little Saigon neighborhood itself, and the Dearborn Street project would have resulted in additional retail uses, on a massive scale, directly in the neighborhood. Even so, only one significant unavoidable adverse impact to Little Saigon businesses was identified in the South Downtown EIS, and that impact was particular to the co-location of residential uses with existing industrial uses on the same streets, an impact not pertinent to the Yesler Terrace project.

The Yesler Terrace site is not part of the Little Saigon neighborhood, but rather is located north of, and topographically uphill from, Little Saigon. The scope of neighborhood commercial uses proposed for Yesler Terrace would be on a much smaller scale than those retail uses considered for the Dearborn Street project (88,000 SF under the Yesler Terrace Preferred Alternative v. 650,000 SF for the Dearborn Street project).⁹ Whereas the Dearborn Street

⁴ The *Livable South Downtown Plan* and the South Downtown EIS are referenced in the Yesler Terrace Redevelopment DEIS. See, e.g., DEIS at p. 3.8-52, 3.16-34. Further review of the South Downtown EIS has been done for preparation of this FEIS.

⁵ South Downtown FEIS, at 3-65; South Downtown FEIS Appendix C-3, at 3. Since the time of the South Downtown EIS, plans for the Dearborn Street project have been abandoned.

⁶ South Downtown FEIS, at 3-72.

⁷ South Downtown FEIS, at 3-63-64.

⁸ South Downtown FEIS, at 3-65, 3-66.

⁹ The Dearborn Street project was a proposed shopping center and 500-unit housing development project that was a component of the *Livable South Downtown* proposal (located at South Dearborn Street and Rainier Avenue South).

project was to be anchored by a mass merchandiser, hardware chain, and supermarket, Yesler Terrace will be a mixed use community, with small, neighborhood-based retail uses focused primarily on serving the anticipated 5,000 new units at Yesler Terrace. This concept of the retail uses being internal to the community is reflected in overall site planning; neighborhood-serving commercial uses are expected to be primarily located in the center of the site, near the Commons Park and transit stops.

Also, as was discussed in the DEIS, and as further described in the South Downtown EIS, many factors could influence the economic viability of Little Saigon businesses over the long-term buildout period anticipated for redevelopment, such as local plans and zoning, overall market/economic conditions, availability of other neighborhood amenities, political support, other legal and governmental regulations, and other broad development trends. As such, any attempt to quantify the potential long-term impacts to these businesses would be speculative and would not be meaningful. Redevelopment of Yesler Terrace would likely have only a modest role in contributing to any potential impacts (positive or negative) to Little Saigon. Such would be the case because of the factors described above (i.e. the location of Yesler Terrace relative to Little Saigon, the limited scope of proposed neighborhood commercial uses and the internalization of these uses); therefore, no significant unavoidable adverse impacts on the Little Saigon businesses are anticipated to occur as a result of the Yesler Terrace redevelopment. Nevertheless, several possible mitigation measures have been incorporated into **FEIS Section 3.13.3**, below, in order to further reduce the potential for any negative impacts to Little Saigon from the proposed redevelopment.

3.16.3 Mitigation Measures

The Preferred Alternative would create capacity for a range of uses at the Yesler Terrace site and would increase population, employment and housing potential in the area. This growth would occur in an area that is close to downtown and is targeted to accommodate residential and employment growth as one of the City's designated urban village areas, per the 2005 *Comprehensive Plan*. For further discussion of the relationship of the EIS alternatives to the City's *Comprehensive Plan*, refer to **FEIS Section 3.9, Relationship to Plans, Policies and Regulations**. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted below as (NEW) or (MODIFIED).

Required/Proposed Mitigation

Increases in employment, population and housing would occur gradually within the site over the 20-year buildout period. No significant adverse impacts to community cohesion, public well being, population, employment and housing would be expected to result from the Preferred Alternative and as a result, no other mitigation measures are identified for these elements.

Regulatory Compliance - Residential Displacement

SHA would comply with the Uniform Relocation Act (URA), which provides benefits for persons or organizations involuntarily displaced as a result of federally funded projects.¹⁰

¹⁰ 49 CFR Part 24.

Tenant Relocation Plan – Temporary Relocation

The following measures are intended to address temporary relocation of residents during the construction process. All residents living at Yesler Terrace at the time of relocation who maintain their eligibility for low income housing would have the option of returning to the redeveloped Yesler Terrace site as new units become available.

Relocation Involvement

- SHA would provide for extensive involvement of residents in relocation planning and would disseminate and communicate information about the timing of and resident choices related to relocation. These involvement and communication efforts would likely include the following:
 - Community-wide relocation planning meetings to inform the community about relocation and solicit feedback on an effective approach;
 - Relocation surveys to assist with the development of relocation options and procedures that conform to the priorities and preferences of residents;
 - (MODIFIED) Language-based telephone information service to provide information and allow for resident feedback (anonymous, if desired) on meetings and upcoming surveys or other activities;
 - Website that includes regular updates on the progress of the project and answers to frequently asked questions;
 - Articles in the newspaper that is distributed to SHA residents by Neighborhood House (The Voice) to share information on relocation benefits, options, Section 8 rules, and development progress; and regular relocation orientation meetings to explain relocation benefits and housing options (Meetings would be interpreted into the primary languages spoken in the Yesler Terrace community).

Relocation Options

- As required by the URA, residents would be offered a range of relocation assistance options. The URA applies to projects with federal funding, such as Yesler Terrace, that involve the displacement of people from their homes. Specifically, requirements of the URA include:
 - Provide a minimum 90 days written notice prior to relocation;
 - Provide reimbursement for moving expenses; and,
 - Provide payments for the added cost of renting comparable replacement housing.
- Some SHA tenants would be able to temporarily relocate to on-site units that would not be removed until later phases of demolition, and since construction would be phased, some residents would be able to move directly from their existing unit to a redeveloped unit, without having to leave the site.

SHA would provide the following relocation options to residents depending upon the availability of various resources, such a rental assistance vouchers, etc.:

- Relocation to another SHA-owned public housing development or to other SHA-owned property, where space is available. Residents who plan to return to the newly

redeveloped Yesler Terrace community would have priority to be relocated to existing SHA housing.

- Tenant-based (Section 8) Housing Vouchers could be provided. These vouchers are for renting housing within privately-owned apartments or homes. At this time it is not known if or how many Vouchers may be available for Yesler Terrace residents.
- SHA would pay the difference (if any) between what tenants paid at Yesler Terrace for their unit and utilities versus any increase in a comparable unit, for up to 42 months or in a lump sum amount if the resident so chooses.

Relocation Assistance

- In conjunction with placing residents in comparable assisted housing situations, SHA would also provide a package of relocations benefits for Yesler Terrace residents to prepare and assist residents with the actual task of moving. Regardless of the type of relocation which residents receive, an SHA relocation team would assist residents with their moves, reimburse the resident for the cost of the move, and/or provide a fixed moving expense and relocation allowance. Eligible tenants (i.e. elderly or disabled) could request assistance with packing and unpacking. SHA would provide the following specific assistance:
 - Link residents with service providers in areas to which they relocate in order to ensure continuity of services;
 - Provide transportation or transportation assistance (bus tokens, taxi scripts etc.) and accompany residents to visit potential units;
 - Assist residents with applications for relocation benefits and/or rental applications;
 - Coordinate with moving companies;
 - Assist with the transfer of utility accounts;
 - Pay for the cost of utility disconnections and reconnections; and,
 - Pay for storage of personal property, if necessary.

The proposed moving assistance provisions described above would meet the cost allowance and payment requirements of the URA.

- SHA would notify residents 18 months in advance of planned demolition and relocation activity. This early notification exceeds federal requirements by six months. SHA staff would also provide one-on-one counseling to residents who would be relocated in order to help them identify and understand options for relocation assistance, including the overall package of benefits that they would receive. Residents would have at minimum of 6 to 8 weeks from the initial counseling session to determine which benefit package they prefer. However, this timeframe will not prevent residents from choosing a different benefit option if they so choose prior to receiving benefits.

Permanent Tenant Relocation

Residents may choose to permanently move from Yesler Terrace. Residents who do not wish to return to the redeveloped community may elect to receive a lump sum payment in compensation for their displacement, in order to make their own housing arrangements.

Other Possible Mitigation Measures

In addition to compliance with the URA and the implementation of the above identified temporary relocation measures, some of the inconveniences associated with tenant relocation could be further reduced by the following mitigation measure:

- (NEW) The East of Boren Sector and possibly the East of 12th Sector could be redeveloped first in order to provide some early replacement housing for current residents of Yesler Terrace.

The following possible mitigation measures lessen any potential adverse impacts of the proposed redevelopment on existing business uses in the Little Saigon neighborhood:

- (NEW) The land use code provisions for Yesler Terrace that would be adopted by the City of Seattle could include limitations on inclusion of “big box” retail uses (i.e. single uses over 25,000 SF) onsite.
- (NEW) Bulletin boards with advertisements for Little Saigon retailers could be placed in community gathering areas.

3.16.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and restated in this FEIS, no significant unavoidable adverse socioeconomic-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.17 ENVIRONMENTAL JUSTICE

The following section compares the probable significant impacts from the Preferred Alternative on the Yesler Terrace site with those analyzed under the DEIS Alternatives 1-4 (as summarized in Chapter 3.17 of the DEIS) related to environmental justice. Any changes in impacts and mitigation measures are identified. This section is also based on the *Air Quality Technical Report Addendum (FEIS Appendix C)* and the *Noise Technical Report Addendum (FEIS Appendix G)* prepared by ENVIRON International Corporation, and the *Environmental Health Technical Report Addendum, Yesler Terrace Redevelopment Project* prepared by Landau Associates (**FEIS Appendix F**).

Background

Refer to pages 3.17-1 through 3.17-2 in Section 3.17 of the DEIS for the definitions and regulations relating to environmental justice. The regulations and definitions have remained the same as presented in the DEIS; therefore, no additional descriptions are warranted.

3.17.1 Affected Environment

DEIS Site

Under the Preferred Alternative, the Affected Environment at the DEIS site (including the population and income of the current residents, and the residents of the site vicinity) would be generally as described in DEIS Section 3.17.1.

Both the site and site vicinity contain significantly higher percentages of minorities as compared to the overall percentages in the City of Seattle, according to 2000 U.S. Census data. As noted in the DEIS, in 2000, the City's population was roughly 30 percent minority, while approximately 83 percent of Yesler Terrace residents and 51 percent of the residents in the site vicinity were minorities. Residents of the site and site vicinity also had substantially lower household incomes as compared to the City of Seattle's median household income of \$45,736 (2000 Census) and the 2000 Seattle-Bellevue Metropolitan Statistical Area (MSA) Area Median Income (AMI) of \$60,500. In comparison, for the year 2000, the median household income for Yesler Terrace residents was \$8,736, and was \$17,158 for residents in the site vicinity.

East of 12th Sector

At present, there is no residential population living within the East of 12th Sector. The site vicinity is defined as the Census Tracts in which the site is located: the East of 12th Sector is located within Tract 86. This Census tract is included in the site vicinity evaluation for the DEIS Site (which included Tracts 85, 86 and 91). Therefore, the site vicinity is as described for the DEIS Site.

3.17.2 Impacts

DEIS Site

Construction

Site

Site preparation and redevelopment activities under the Preferred Alternative would be similar to those described in the DEIS for Alternatives 1-4, and such activities could result in periodic and intermittent impacts to the health of the population in immediately adjacent areas to the redevelopment activities, both on and offsite.

As stated in the DEIS, during construction, noise from demolition and construction activities has the potential to affect nearby populations; construction would be subject to City of Seattle noise limits, and noise mitigation measures could be implemented to reduce impacts. Construction activities could also affect air quality due to emissions from construction-related sources and equipment and dust from construction activities including grading, sloping and filling. Some construction phases would also cause odors, particularly during paving operations using tar and asphalt. Overall, with implementation of the controls required for the various aspects of construction activities and consistent use of best management practices, no significant impacts would be expected. Thus, no disproportionate adverse impacts to minority or low income populations would be anticipated.

Residents would be relocated from existing residential buildings prior to any hazardous materials abatement and would not be exposed to contaminants during remediation activities, as remediation activities would be conducted in compliance with local, state, and federal law designed to minimize health impacts of remediation activities.

Site Vicinity

Construction impacts within the vicinity of the DEIS Site would be generally as described in Section 3.16.2 of the DEIS for Alternatives 1-4. Construction could result in impacts to immediately adjacent populations; however, these activities would be periodic and intermittent in nature. All construction activity would be required to comply with the City of Seattle regulations to control noise and air/quality emissions during construction. Compliance with these regulations would be expected to mitigate potentially adverse impacts from construction within the vicinity and no disproportionate adverse impacts would be expected.

Operational/Direct Impacts

Site

Redevelopment of the DEIS Site under the Preferred Alternative would result in a mixed-income, mixed use community, as noted for the DEIS redevelopment alternatives. The overall DEIS Site would have approximately 64 percent market rate units, and 36 percent low income units (with the latter including all units at or below 80 percent of the AMI). On each of the East of Boren and East of 12th Sectors, looked at in isolation and without reference to surrounding

development, there would be approximately 18 percent market rate units, and 82 percent low income units (with the latter including all units at or below 80 percent of the AMI).

Redevelopment of the DEIS Site under the Preferred Alternative would eliminate site-related health-hazards which are associated with Yesler Terrace's aging buildings and infrastructure, generally as described in DEIS Section 3.17.2 for Alternatives 1-4. Specifically, demolition and redevelopment under the Preferred Alternative would eliminate mold problems and a rodent infestation, and would improve sewer and water infrastructure problems. Sidewalks and planters would be improved or built to meet current City of Seattle design standards for required width.¹ Existing hazards related to lead-based paint, asbestos and lead contaminated soils would also be eliminated. See **FEIS Section 3.6** for additional information.

Under the Preferred Alternative, the Steam Plant would be retained and adaptively reused for neighborhood services uses. Residual material within the building's smokestack and the stack itself may contain potentially hazardous materials. Testing of the residual material and the smokestack and removal and remediation of any hazardous materials identified within the smokestack would be performed prior to any rehabilitation activities that would affect the smokestack. Proper characterization of any hazardous materials identified within the smokestack would be conducted to select an appropriate offsite disposal site. See **FEIS Section 3.6, Environmental Health**, for additional information.

With respect to noise conditions on the site, no significant noise impacts are expected as a result of redevelopment under the Preferred Alternative (i.e. due to increased traffic on area roadways or due to heating, venting and air-conditioning and mechanical equipment associated with new buildings). However, as discussed in **FEIS Section 3.7, Noise**, the site suitability analysis indicates that portions of the site adjacent to I-5 have sound levels classified as "unacceptable" under Department of Housing and Urban Development (HUD) noise criteria, thus requiring that special noise attenuation measures be implemented in these locations, and also requiring City of Seattle Human Services Department (HSD) approval of a noise waiver on behalf of HUD. As well, to the extent feasible, outdoor use areas, where quiet conditions are required for optimal use, would need to be located away from areas with high noise levels. With implementation of such measures to control the interior sound environment within residential buildings, no significant noise impacts would be anticipated. Therefore, no disproportionate impacts to low-income or minority populations would be expected. See **FEIS Section 3.7, Noise**, for additional information.

With respect to air quality conditions on the site, no significant air quality impacts are expected as a result of redevelopment, similar to DEIS Alternatives 1-4. However, the site suitability analysis indicates that certain toxic air pollutants associated with roadways in the vicinity of the site (I-5) would exceed health-based standards to the degree that there is a potentially elevated health risk in long-term residency near busy roads. See **FEIS Section 3.2, Air Quality**, for additional information. These conditions would not be expected to result in a disproportionately high and adverse impact to low income or minority populations under the Preferred Alternative,

¹ Separate from the EIS, SHA commissioned a Renovation Cost Analysis report for Yesler Terrace which was completed on November 19, 2010. The report included cost studies, a hazardous materials assessment, a demolition assessment, a building structural assessment, a building mechanical and plumbing assessment, and a site work assessment. Per this analysis, many of the units exhibit significant deterioration of both interior and exterior elements, including siding failures, mold, and water damage, as well as code compliance issues, such as lack of ventilation and compliance with the Fair Housing Act. This report is available at: <http://www.seattlehousing.org/redevelopment/yesler-terrace/>.

due to the anticipated distribution throughout the site of low income and market rate housing. That is, low income housing and market rate housing would be provided in all sectors of the site; refer to **FEIS Table 2-5** and **FEIS Section 3.17.2** for the site's housing unit distribution according to income level.

Site Vicinity

Operational impacts to the DEIS site vicinity would be expected to be generally as described in DEIS Section 3.17.2. That is, development of a new mixed-use, mixed income community would be anticipated to improve the character of the site and neighborhood, resulting in positive impacts in the immediate site vicinity.

East of 12th Sector

Construction

Site

As mentioned above, no residents currently live within this sector, and therefore no disproportionate adverse impacts to minority or low income residents would be expected to occur as a result of construction activities.

Site Vicinity

Construction activities could result in impacts to immediately adjacent populations similar to those discussed for the DEIS Site above (i.e. public health), including the residential uses immediately adjacent to this sector (i.e. two single family homes, a 3-unit townhome, and the SHA's 30-unit Ritz Apartment building). However, these activities would be periodic and intermittent in nature. All construction activity would be required to comply with the City of Seattle regulations to control noise and air/quality emissions during construction. Compliance with these regulations would be expected to mitigate potentially adverse impacts from construction within the vicinity and no disproportionate adverse impacts would be expected.

Operation

Site

Redevelopment of the East of 12th Sector would result in the establishment of a mixed-income, mixed use community in this area of the site, and would eliminate building-related health hazards which are associated with the existing buildings located within the sector. Also, renovation of the Baldwin Apartments building and the Urban League building would be conducted after a hazardous building materials survey is completed to identify the presence of any such materials (e.g., asbestos-containing building materials [ACBM] or lead-based paint [LBP]) and remove or stabilize them prior to remodeling activities. In addition, ACBM or LBP abatement records for the King County Archives property, if available, would be reviewed prior to the demolition of the warehouses. A hazardous building materials survey would be completed before demolition if no abatement records are available. If it is determined there is any ACBM or LBP remaining at the King County Archives site, removal or stabilization would

occur prior to demolition. Refer to **FEIS Section 3.6, Environmental Health**, for additional information.

Unlike other portions of the DEIS Site, the site suitability analysis indicates that noise conditions in the East of 12th Sector are within the HUD "acceptable" range. Air quality conditions in the East of 12th Sector are essentially be the same as those described in DEIS Section 3.2.1 for the DEIS Site. That is, air quality generally complies with applicable health standards most of the time, but the area is subject to somewhat elevated levels of some air contaminants due to the numerous transportation sources in the vicinity. Existing and future annual average concentrations of diesel particulate matter are about the same in the East of 12th Sector as across the DEIS Site, in spite of the increased distance from I-5. On the other hand, short-term (e.g., 1-hour) concentrations of pollutants from transportation sources such as NO₂ are lower in the East of 12th Sector compared with the portions of the site near I-5, due to the sectors increased distance from I-5. Refer to **FEIS Section 3.2, Air Quality**, for additional information.

Site Vicinity

Development of a new mixed income community within this sector would be anticipated to improve certain aspects of the character of the area (i.e, the vacant Baldwin Apartments would be renovated and occupied), resulting in positive impacts in the immediate site vicinity. The redeveloped sector would provide enhanced connections to the surrounding neighborhood by reconnecting the King County Archive building site to the block. Also, the increased residential population could provide an increased customer base for businesses in surrounding areas.

FEIS Site/Conclusion

Redevelopment under the Preferred Alternative on the DEIS Site and East of 12th Sector would not be expected to result in disproportionate adverse impacts to minority or low income populations on the site or in the site vicinity, with implementation of appropriate mitigation measures, as identified below. Remedial measures implemented prior to or during construction activities on the FEIS Site are expected to mitigate potential adverse impacts within contaminated areas, including exposure of future site users to hazardous substances in soil, groundwater, and/or air. Overall, redevelopment under the Preferred Alternative would result in the elimination of many of the existing site and building-related health hazards. Also, existing streets, utilities and other infrastructure would be repaired and/or reconfigured. This would represent an improvement over existing conditions wherein such hazards and deficient infrastructure could be considered to disproportionately affect the existing low income population. Interior adverse noise conditions could be mitigated with the use of special building materials and techniques to reduce the transmission of noise from outside to inside spaces. To the extent feasible, outdoor use areas, where quiet conditions are required for optimal use, would be located away from areas with high noise levels, or would be shielded by buildings.

Cumulative Impacts

Cumulative impacts to environmental justice-related issues resulting from the Preferred Alternative would be within the range identified in the DEIS.

3.17.3 Mitigation Measures

The following required/proposed mitigation measures would address potential environmental justice impacts of the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are the same as those identified in the DEIS unless otherwise noted as: (NEW).

Required/Proposed Mitigation Measures

Construction

- All construction activities would be required to comply with City of Seattle Municipal Code regulations as related to air quality and noise.
- The areas of the site undergoing construction would be secured and non-accessible after hours to prevent the creation of an attractive nuisance which could result in safety/public health impacts to the residential population on-site.
- Abatement, remediation, and disposal of any hazardous materials on site would occur in accord with local, state, and federal regulations prior to start of construction or demolition activities on site.
- (NEW) Special building materials and techniques would be employed to reduce the transmission of noise from outside to inside spaces for all residential buildings exposed to sound levels greater than 65 dBA Ldn. Effectively controlling exterior-to-interior sound level transmission would also require careful attention to detail during installation of noise-reducing building components. Refer to **FEIS Section 3.7.3** for further details.

Other Possible Mitigation Measures

- (NEW) Place outdoor use areas (where quiet conditions are required for optimal use) both away from the perimeter of the site and in locations that are "shielded" by buildings (i.e. where buildings are located between the exterior use area and major roadways).
- (NEW) Buildings placed along the western boundary of Yesler Terrace could, to the extent feasible, be oriented to be parallel with I-5 in order to shield the site's interior open spaces from noise.

3.17.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified above, no significant unavoidable adverse environmental justice-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.

3.18 WIND ANALYSIS

The following section compares the potential for wind flow changes on and around the Harborview Medical Center heliport under the Preferred Alternative to those analyzed under DEIS Alternatives 1-4 in the DEIS and identifies any new or increased significant impacts and/or mitigation.

3.18.1 Affected Environment

DEIS Site

Under the Preferred Alternative, the Affected Environment at the DEIS Site (including the site's adjacency to the Harborview Medical Center heliport) would be generally as described in the DEIS in Section 3.18.1.

Harborview maintains a heliport with three helipads for medical emergencies that is located directly to the north of the Yesler Terrace DEIS Site. Harborview has two 500-foot wide approach and departure flight paths – from the west and the south – for helicopter access to the heliport. A portion of the Yesler Terrace site lies beneath part of the heliport's 500-foot southern flight path (see **FEIS Figure 3.18-1**, which is the same as DEIS Figure 3.9-1). . During the development of the DEIS, a wider, approximately 691-foot southern flight path that lined up with the westernmost building line of the new Harborview additions was also recommended by the company that provides air transport/medical services to Harborview (AirMethods). The existing low-rise buildings on the Yesler Terrace site would not affect wind conditions for the heliport in any significant manner.

East of 12th Sector

The East of 12th Sector is not within or beneath the heliport's southern flight path.

3.18.2 Impacts

The DEIS evaluated potential wind impacts to the Harborview Medical Center emergency helicopter flight path under the capacity model of DEIS Alternative 3, which represented the highest density alternative, with the tallest assumed potential building heights for the capacity model. The analysis evaluated wind flow impacts from the building configurations outside or below the 500-foot wide flight path, as well as the building configurations outside or below the wider (691-foot wide) flight path (which was the basis of the DEIS Alternative 3 capacity model analyzed in other DEIS sections).

Heliport Wind Assessment

Under the Preferred Alternative, the capacity modeled building heights in the NW Sector closest to the helipad are the same as DEIS Alternative 3 (240 feet for office/hotel buildings) and the high-rise office building in the northwest corner of the NW Sector closest to the helipad has been designed in the same configuration as the DEIS Alternative 3 capacity model development scenario. As with the DEIS Alternatives, the building layout for the Preferred Alternative has been developed so that potential building locations and height of potential structures of the site

would be outside or below the wider 691-foot southern glide path. Wind impacts under the Preferred Alternative would therefore be generally as described in the DEIS for Alternative 3, and summarized below.

The wind simulations completed for DEIS Alternative 3 indicated that a minimal change in winds would occur in the vicinity of the heliport with either of the two potential building configurations (outside or below a 500-foot flight path or a 691-foot flight path) when winds are from the prevailing southerly direction. Due to the height of the proposed development, which would create a larger wake region than the existing, low buildings, some local change in wind flow patterns were noted, primarily to the north of the development and locally to the west. According to the simulations, new buildings outside or below the wider flight path would have less effect on wind flow near the helipad than the new buildings outside the existing flight path, due to the shape of the building farthest to the northwest, which is adjacent to the heliport and well exposed to the prevailing southerly winds. The shape of this building under DEIS Alternative 3 (outside the wider flight path) aligns with the Harborview buildings east of the heliport; the Preferred Alternative incorporates a similar building footprint and alignment in that location. Based on the building configuration and associated height of structures under the Preferred Alternative, which is outside/below the wider flight path, no significant impacts are anticipated.

Pedestrian Wind Assessment

As noted in the DEIS, taller high-rise buildings can affect the wind environment for pedestrians and a simple graphical comparison of the wind conditions under DEIS Alternative 3 relative to those that currently exist was completed for the area surrounding the helipad (see DEIS Appendix H, which shows increased wind speeds along Alder Street). As noted above, the building configurations and heights near the heliport under the Preferred Alternative are similar to DEIS Alternative 3; therefore the pedestrian wind conditions under the Preferred Alternative would therefore be generally as described and graphically depicted in the DEIS for Alternative 3.

A detailed, quantitative pedestrian comfort wind assessment can be conducted at the time of building design to determine possible wind-related impacts relative to the comfort and safety of pedestrians using open spaces on or adjacent to high-rise buildings. Please refer to the DEIS, pages 3.18-2 - 3.18-3 for the pedestrian wind comfort criteria used in typical assessments.

Siting and design criteria for high-rise buildings, as well as the use of certain architectural devices, could be evaluated as part of the building design and permit process and implemented, if applicable, to minimize wind impacts to pedestrians and open space areas on the site. Refer to the Mitigation Measures detailed below for further information.

The East of 12th Sector will not contain any high-rise buildings; therefore, no wind impacts to pedestrians are anticipated in this sector.

3.18.3 Mitigation Measures

The following required/proposed and other possible mitigation measures would address potential wind impacts resulting from the Yesler Terrace Redevelopment Preferred Alternative. All mitigation measures listed below are assumed to be the same as those identified in the DEIS unless otherwise noted below as (NEW).

Required/Proposed Mitigation Measures

- The building layout and associated height of structures at the site would be below the wider southern glide path.

Other Possible Mitigation Measures

The following measures could be evaluated at the building design and permit stage of high-rise buildings on the Yesler Terrace site and implemented, if applicable, to reduce potential ground-level pedestrian wind impacts resulting from high-rise buildings:

- (NEW) Architectural devices such as screens, terraces, overhangs and horizontal fixed awnings at the lower levels of high-rise buildings over sidewalks and other pedestrian areas could be used to deflect and minimize downdrafts created by tall building facades, and to reduce wind speeds around the base building.
- (NEW) High-rise building designs could be selected that incorporate an appropriate scale of the base building and the step back of middle (shaft) portion of the building to minimize downdrafts.
- (NEW) Upper level building setbacks for high-rise buildings could be used to break up direct downdrafts coming from upper levels of building facades.
- (NEW) High-rise buildings that are adjacent to open spaces could be located on the prevalent windward side of the open spaces, so down drafts created by building facades are not directed into open spaces.
- (NEW) Close proximity of high-rise buildings adjacent to open spaces could be minimized, to avoid funneling and intensifying wind impacts to open spaces.
- (NEW) Appropriate height, spacing and orientation of high-rise buildings could be employed to minimize wind funneled between two adjacent buildings, which can accelerate wind speeds and cause a wind canyon effect.

3.18.4 Significant Unavoidable Adverse Impacts

With implementation of the required/proposed mitigation measures identified in the DEIS and included in this FEIS, no significant unavoidable adverse wind-related impacts would be expected with the Preferred Alternative, including redevelopment in the East of 12th Sector.



Chapter 4 - UPDATES to the DEIS ANALYSIS

CHAPTER 4

Updates to the DEIS Analysis

This chapter of the FEIS contains major changes and clarifications to the information and analysis of the DEIS Alternatives provided in the *Yesler Terrace Redevelopment Draft Environmental Impact Statement (EIS)* issued in October 2010. The updated analyses of the DEIS Alternatives 1-4 was either conducted since the issuance of the DEIS and/or responds to specific comments received during the DEIS public comment period. Where applicable, these revisions have been incorporated into the analysis of the Preferred Alternative in **FEIS Chapter 3**. Each section of new analyses identifies whether this information supersedes or supplements the analysis provided in the DEIS. The identifiers used in this chapter refer to the DEIS (chapters, tables, figures and appendices) in which the original analyses was provided, unless otherwise noted.

This chapter does not reanalyze DEIS Alternatives 1-4 with the inclusion of the East of 12th Sector. The East of 12th Sector is analyzed as part of the Preferred Alternative within **FEIS Chapter 3**.

This chapter also does not include minor edits, such as small errors or corrections; those are identified in **FEIS Chapter 7, Errata**.

DEIS Chapter 3.1, Earth

No updates to the DEIS Analysis in Chapter 3.1, Earth, are required.

DEIS Chapter 3.2, Air Quality

No updates to the DEIS Analysis in Chapter 3.2, Air Quality, are required.

DEIS Chapter 3.3, Water Resources

In DEIS Chapter 3.3.2, Water Resources, a description of the permanent stormwater control system that would be provided for the Yesler Terrace Redevelopment is provided. The analysis assumed the incorporation of Green Stormwater Infrastructure (GSI) features to the Maximum Extent Feasible (MEF). In response to DEIS comments, additional details about the potential GSI features assumed under DEIS Alternatives 1-4 is provided herein. DEIS Section 3.3.2 is hereby amended to include the information provided in this section. Where appropriate, this information has also been incorporated into the analysis of the Preferred Alternative provided in **FEIS Section 3.3**.

Green Stormwater Infrastructure

For the purposes of the stormwater analysis in the DEIS and this FEIS, green roofs, bioretention cells, bioretention planters and permeable pavement are assumed as the Green Stormwater Infrastructure (GSI) facilities. Rainwater harvesting was not considered as a GSI strategy in the DEIS/FEIS, analyses, but was explored as an option in another report titled, "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics, dated December 12,

2010. That report discusses the environmental and regulatory impacts of using rainwater harvesting as a GSI strategy. The Sustainable District Study states on page 46 “that in addition to the central water reuse system, collected rain water or stormwater may also provide an efficient partial source for irrigation demands, on a decentralized basis.” If rainwater harvesting is selected as a GSI strategy during the design phase, the quantity or sizing of other GSI facilities could be decreased. Permeable pavement surfaces have also been excluded from the DEIS/FEIS analyses, because the infiltration properties of the site soils are not currently known. For the DEIS/FEIS, the infiltration rate was conservatively assumed to be 0 in/hr. GSI can be implemented even with no infiltration in native soils. As soil conditions and proximity to critical areas permit, porous pavement surface could be selected during the design phase as a GSI strategy to reduce effective impervious area.

Bioretention cells are depressions for the retention/detention of stormwater with gently sloping sides. Bioretention cells could be used in site locations where proposed grades would slope at less than 5 percent. Bioretention planters are similar to bioretention cells, but with vertical sides. Bioretention planters could be used on steeper terrain and in locations where horizontal space is limited onsite. Permeable pavement is designed to retain/detain stormwater in the pavement sub-base. Permeable pavement could be used on private access roads, driveways and surface parking areas where proposed grades would slope at less than 5 percent. Depending on infiltration rates determined during design and the proximity of GSI facilities to critical areas (i.e. steep slopes) and building foundations, some GSI facilities could require an impermeable liner. Lined permeable pavements would require an under-drain and a flow control structure to limit the peak discharge. Lined bioretention facilities would require an under-drain, but the under-drain flow rate would be controlled by the infiltration rate of the engineered bioretention soil in the facility. The preliminary stormwater modeling discussed in DEIS Appendix F indicated that it is feasible to control the entire site’s stormwater using comprehensive GSI facilities, as described above. By using GSI, the peak stormwater discharge to the combined sewer system under Alternatives 1 – 4 is shown to decrease from existing conditions.

The proposed system of public open space, both within the public right-of-ways and on private property that makes up the Yesler Terrace site would provide opportunities to use GSI in many creative ways. For instance, beyond the amount of GSI required to provide flow control, bioretention cells and planters could be designed in conjunction with piped conveyance to provide an open stormwater conveyance system. An open stormwater conveyance system would provide benefits, such as public education, surface maintenance and less underground infrastructure. However, an open stormwater conveyance system could increase public exposure to stormwater pollutants and would require additional coordination with the Seattle Public Utilities for maintenance agreements.

The GSI system for the Yesler Terrace redevelopment is broken into two basins, east and west. The GSI systems in both basins’ would work together to both detain and convey stormwater generally south and east or west, respectively, across the site. The GSI facilities would be used on both private and public properties.

DEIS Chapter 3.4, Plants and Animals

Additional information not available at the time the DEIS was issued warrants updates to analysis provided in the DEIS Section, 3.4, Plants and Animals. Impacts to exceptional trees, valuable trees and the existing tree canopy under DEIS Alternatives 1-4 have been updated to reflect new grading plans that were not available at the time of the analysis in the DEIS.

In response to DEIS comments, an analysis of the projected tree canopy at buildout under the DEIS Alternatives 1-4 was also completed and is provided herein.

DEIS Section 3.4.2 is hereby amended to include the information provided in this section. Where appropriate, this information has also been incorporated into the analysis of the Preferred Alternative provided in **FEIS Section 3.4.2**.

Exceptional Trees

The estimated exceptional tree impacts data in DEIS Table 3.4-4 for the DEIS Alternatives 1-4 has been revised from what was presented in the DEIS. Grading plans were not available at the time of the analysis of the DEIS, and impacts to exceptional trees were determined based on horizontal extent of impacts to root zones. The analysis completed for this FEIS included grading plans, which allowed for evaluation of both horizontal and vertical impacts to root zones. DEIS Table 3.4-4 is hereby replaced with the following table:

**DEIS Table 3.4-4
YESLER TERRACE ESTIMATED EXCEPTIONAL TREE IMPACTS
UNDER EIS ALTERNATIVES**

Type of Tree	Existing Conditions	1 and 1A		2		3		4	
		Retain	Remove	Retain	Remove	Retain	Remove	Retain	Remove
Exceptional Trees	22	5	17	6	16	4	18	4	18

Source: Landau Associates, 2011.

The detailed data regarding exceptional tree impacts under the DEIS Alternatives is provided in **FEIS Appendix D**.

This updated information is also used in the analysis of the Preferred Alternative in **FEIS Section 3.4, Plants and Animals**.

Valuable Trees

The estimated valuable tree impacts data in DEIS Table 3.4-5 for the DEIS Alternatives 1-4 has been revised from what was presented in the DEIS. Grading plans were not available at the time of the analysis of the DEIS, and impacts to valuable trees were determined based on horizontal extent of impacts to root zones. The analysis completed for this FEIS is based on grading plans, which allows for evaluation of both horizontal and vertical impacts to root zones. DEIS Table 3.4-5 is hereby replaced with the following table:

**DEIS Table 3.4-5
YESLER TERRACE ESTIMATED VALUABLE TREE IMPACTS
UNDER EIS ALTERNATIVES**

Type of Tree	Existing Conditions	1 and 1A		2		3		4	
		Retain	Remove	Retain	Remove	Retain	Remove	Retain	Remove
Valuable Trees	105	32	73	19	86	25	80	29	76

Source: Landau Associates, 2011.

The detailed data regarding valuable tree impacts under the DEIS Alternatives is provided in **FEIS Appendix D**.

This updated information is also used in the analysis of the Preferred Alternative in **FEIS Section 3.4, Plants and Animals**.

Tree Canopy

The estimated existing tree canopy impacts data in DEIS Table 3.4-6 for the DEIS Alternatives 1-4 has been revised from what was presented in the DEIS. Changes to this table are a result of a more thorough analysis of the existing vegetation and potential grading activities associated with proposed redevelopment designs.

**DEIS Table 3.4-6
REMAINING TREE CANOPY AREA BY ALTERNATIVE (SF)**

Sector	No Action ¹	1 & 1A ²	2 ²	3 ²	4 ²
NW	122,566	13,538	11,540	11,540	9,239
NE	68,410	6,688	9,735	10,648	11,971
SE	67,703	5,172	4,653	4,996	8,365
SW	95,606	13,685	9,599	9,801	9,923
EOB	20,215	0	0	0	0
Total	374,500	39,083	35,527	36,985	39,498
Coverage of Total Project Area³	23.5%	2.5%	2.2%	2.3%	2.5%

Source: Landau Associates, 2011.

¹ Canopy coverage is based on all existing trees within the project area, regardless of their condition. However, under the No Action Alternative, approximately 283 of 410 of the trees (70 percent) could be removed over time to ensure the health and safety to the public, as they are hazardous or unhealthy. Removal of these hazardous or unhealthy trees, could reduce the overall tree canopy coverage to 106,140 SF or 6.2 percent.

² Remaining canopy coverage for the Preferred and DEIS Alternatives 1-4 only includes existing valuable and exceptional trees as hazardous or unhealthy trees would be assumed to be removed as part of redevelopment.

³ This analysis assumes a DEIS Site area of 1,590,743.

The detailed data regarding tree canopy impacts under the DEIS Alternatives is provided in **FEIS Appendix D**.

This updated information is also used in the analysis of the Preferred Alternative in **FEIS Section 3.4, Plants and Animals**.

Projected Tree Canopy

Based on comments received during the DEIS comment period, a new tree canopy analysis has been performed for this FEIS which calculates the projected amount of tree canopy coverage assumed after buildout is completed (25 years).

This table shows the projected amount of tree canopy that would be assumed to occur on the DEIS Site for each of the DEIS Alternatives 1-4, 25 years after full buildout of the redevelopment. The estimated canopy cover includes the existing tree canopy that would remain and additional street trees or other trees planted onsite as part of the redevelopment, including trees required to be planted as mitigation for tree removal. The following table is hereby incorporated into DEIS Section 3.4 as Table 3.4-7 (NEW).

**DEIS Table 3.4-7
PROJECTED TREE CANOPY AREA
UNDER THE DEIS ALTERNATIVES 1-4
(SQUARE FEET)**

Sector	DEIS Alternatives				
	No Action	1 and 1A	2	3	4
NW	232,633	106,475	106,673	110,079	98,417
NE	129,843	42,805	54,864	57,878	56,360
SE	128,502	52,476	51,360	49,265	61,284
SW	181,463	112,704	102,348	100,583	100,654
EOB	38,368	12,600	12,605	12,153	12,151
Total	710,809	327,060	327,850	329,958	328,866
Coverage of Total Project Area¹	44.7%	20.6%	20.6%	20.7%	20.7%

Source: Landau Associates, 2011.

¹ This analysis assumes a DEIS Site area of 1,590,743.

The methodology used to perform the projected tree canopy analysis is detailed in **FEIS Appendix D**.

This data was incorporated in the analysis of the plants impacts of the Preferred Alternative in **FEIS Section 3.4.2**.

DEIS Chapter 3.5, Climate Change, Greenhouse Gas Emissions and Energy

The methodology employed for the DEIS energy analysis calculated energy consumption by multiplying square footage of different uses by simple factors from the Washington energy code. In order to provide a more refined energy analysis for the Preferred Alternative and for comparison to the DEIS Alternatives, and also to respond to DEIS comments, a more detailed energy analysis was completed for the DEIS Alternatives using modeling to simulate the Washington State energy code standards to estimate the requirements for space heating, space cooling, water heating, plug loads and lighting. The following information supersedes the energy analysis provided in DEIS Section 3.5.2, Energy.

Energy

For purposes of providing a worst-case scenario for this FEIS energy analysis, the construction of all-electric building energy systems is assumed. DEIS Table 3.5-2 is hereby amended as follows:

**DEIS Table 3.5-2
ESTIMATED ENERGY USE UNDER
YESLER TERRACE REDEVELOPMENT ALTERNATIVES
(megawatt hours/year)**

Sector	DEIS Alternatives				
	1	1A	2	3	4
Housing ¹	13,658	13,658	17,632	21,967	7,121
Office/Hotel ²	7,694	3,844	9,639	9,862	191
Neighborhood Commercial ²	397	396	549	737	102
Neighborhood Services ²	445	445	422	277	449
Total MWH/Year	22,195	18,343	28,243	32,844	7,863
Average MW	2.53	2.09	3.22	3.75	0.9

Source: Gibson Economics, 2011.

More details regarding the methodology of the energy analysis, key assumptions and detailed conclusions are provided in **FEIS Appendix E**.

This data was incorporated in the analysis of the energy consumption of the Preferred Alternative in **FEIS Section 3.5.2**.

Significant Unavoidable Adverse Impacts

The description of the significant unavoidable adverse impacts for the 3.5, Climate Change, provided on DEIS Page 3.5-10 is hereby updated to read as follows:

“Declaring the impacts of climate change and greenhouse gas emissions significant or not significant implies the ability to measure incremental effects of global climate change. The body of research and adopted regulations necessary to connect individual land uses, development projects, operational activities, etc. with the broader issue of global warming do not currently exist. Scientific research and analysis tools sufficient to determine a numerical threshold of significance have not been established at this time and any conclusions regarding impact significance would be speculative. SHA is considering opportunities to employ sustainable development strategies, when feasible, to reduce greenhouse gas emissions and to reduce the carbon footprint of the Yesler Terrace Redevelopment.

The direct and indirect impacts of energy use of the DEIS Alternatives, including redevelopment of the East of 12th Sector, would not be expected to be significant adverse impacts.

DEIS Chapter 3.6, Environmental Health

No updates to the DEIS Analysis in Chapter 3.6, Environmental Health, are required.

DEIS Chapter 3.7, Noise

As noted in DEIS Section 3.7.2, page 3.7-11, the site suitability analysis indicates that portions of the site adjacent to I-5 have sound levels classified as or “unacceptable” for noise sensitive uses under the Department of Housing and Urban Development’s (HUD) noise criteria. Accordingly, in addition to the preparation of this EIS, the project would require that special noise attenuation measures be implemented in these locations, and the approval of a noise waiver by the City of Seattle Human Services Department (HSD) on behalf of HUD. Additional information is provided below to explain how approval of a noise waiver could occur for those residential portions of the project located in areas of the site that have sound levels classified as “unacceptable” under HUD noise criteria. The following information hereby supplements the discussion of noise impacts in Section 3.7.2 of the DEIS.

Although the HUD regulations permit the NEPA Certifying Officer to approve a project in “unacceptable” noise areas, the regulations do not contain the criteria for such an approval. However, guidance regarding factors important to HUD can be found in another portion of the HUD noise regulations, related to exceptions granted for applicants seeking to have the maximum decibel limit of the “acceptable noise zone” shifted upward from 65 decibels to 70 decibels. 24 CFR 51.105(a). For purposes of that exception, projects are to be evaluated on a case by case basis, and the exception may be approved if certain conditions are met. Those exception criteria served as a useful tool for determining appropriate noise waiver criteria for projects in the unacceptable noise zone. In addition, SHA also consulted with the City of Seattle Human Services Department (HSD), the Responsible Entity for approval of a noise waiver on behalf of HUD.

This consultation resulted in development of the following suggested criteria for HSD approval of a noise waiver on behalf of HUD, for those portions of the project located in areas of the site that have sound levels that would be classified as “unacceptable” under HUD noise criteria:

1. An EIS has been prepared for the project that addresses noise impacts and mitigation measures;
2. The project meets other HUD program goals to provide housing in proximity to employment, public facilities and transportation;
3. The project is in conformance with local goals and policies;
4. The project incorporates appropriate noise attenuation measures in accordance with HUD criteria;
5. Other sites which are not exposed to noise above 65 decibels and which meet program objectives are generally not available; and,
6. The noise levels will not pose a problem for marketability of the residences.

Item 1 is addressed by publication of the DEIS and FEIS. Discussion related to how Alternatives 1-4 address items 2 and 3 is included throughout the DEIS, and is summarized below, along with additional discussion of how the DEIS Alternatives relate to items 4-6.

Housing is in Close Proximity to Employment, Public Facilities and Transportation (Item 2)

Redevelopment of Yesler Terrace under Alternatives 1-3 would increase residential density and would provide a mix of employment-generating uses onsite in a compact, mixed use pattern. The range of potential employment uses, including office/hotel, neighborhood commercial and neighborhood services uses, would contribute to providing a broad spectrum of job types for the residential population. In addition, the Yesler Terrace site is located within walking distance of Downtown Seattle, as well as employment locations and commercial amenities in the First Hill and Central District Neighborhoods.

The mixed use redevelopment, including residential and employment uses, would be integrated with parks and open spaces, allowing employment and residential populations to be located in proximity to outdoor amenities. The open space concept for the redevelopment would be based on providing a variety of public, semi-private and private open space areas of various types and sizes in order to accommodate different uses and user populations.

Finally, the location of the site is conducive to walking and the use of public transit. The new First Hill Streetcar would run through the site. Access to numerous bus routes is possible from many streets on and near the site. The proposal under Alternatives 1-3 would also improve pedestrian circulation throughout the site by creating a system of pedestrian linkages to connect public open spaces, streets and key commercial nodes.

Redevelopment of Yesler Terrace under Alternative 4 would increase residential density, but would not add additional employment uses to the site. However, the open space and pedestrian circulation concept, as well as the proximity of the site to employment (offsite), public facilities and transportation, would be as described for Alternatives 1-3.

Project Conforms to Local Goals and Policies (Item 3)

The City of Seattle's Comprehensive Plan sets forth the City's goals and policies across many elements, including land use, transportation, neighborhood, housing, and economic development. These goals and policies are intended to "guide the development of the City in the context of regional growth management." As part of the City's annual Comprehensive Plan Amendment cycle, in May 2010 the City's Department of Planning and Development proposed a Comprehensive Plan Amendment to establish Master Planned Community sites and policies. The intent was to establish a mechanism in the City's Comprehensive Plan to consider planning for large sites, such as Yesler Terrace, and also to designate Yesler Terrace as a Master Planned Community on the Future Land Use Map in the Plan. A City Council decision on whether to adopt this package of Amendments is anticipated to occur in April 2011. This designation is to be applied to large sites within urban centers, where development will result in a mix of uses, cohesive urban design, appropriate urban density, and significant public benefits, including affordable housing, sustainable development, and publicly accessible open space. Refer to **Section 3.9, Relationship to Plans, Policies and Regulations**, for additional information.

As detailed in Section 2.4 of the DEIS, the purpose of the Yesler Terrace redevelopment proposal is to redevelop the site into a mixed-income, mixed use community that provides housing (including additional low-income housing), office, and retail uses, as well as parks and open space, enhanced landscaping, improved streets and pedestrian and bike amenities. Alternatives 1-3 are consistent with, and further the objectives of, the City's goals and policies

as set forth in the City's Comprehensive Plan. Refer to **Section 3.9, Relationship to Plans, Policies and Regulations**, for additional information.

The redevelopment concept proposed under Alternative 4 would be consistent with the original Multi-family Residential land use designation on the City of Seattle *Future Land Use Map*.

Project Incorporates Appropriate Noise Attenuation Measures (Item 4)

Careful consideration has been given to the development of noise mitigation measures for the project. Analysis of potential noise attenuation was done in accordance with HUD guidelines, which establish the following prioritization for attenuation measures: (i) can the noise impacts be eliminated altogether by utilizing a different arrangement of uses on the site? (ii) can the sound levels in exterior and interior environments be improved by use of barriers or berms, or by modifications to the site design?, and (iii) can the interior sound levels be improved by incorporation of acoustical construction measures into the building design?¹

In analyzing potential noise mitigation measures for Alternatives 1-4, the first consideration was whether the noise impacts for residential uses could be eliminated altogether. This involved examination of the arrangement of uses on the site, i.e. whether high-rise office buildings could be distributed along the portions of the site adjacent to I-5 and Boren Avenue in order to buffer interior residential uses. In addition, as presented in Section 3.7.2, Noise Barrier Mitigation Analysis, noise barriers, such as sound walls and berms, were studied as potential noise mitigation strategies for portions of the site adjacent to I-5. However, such barriers, even if several stories tall, would not be sufficient to reduce noise levels to 65 dBA throughout the site. Also, due to topographic conditions, installation of such barriers along the southern half of the western site boundary would provide virtually no noise reduction at all. Thus, although analyzed and considered, these devices are not viable mitigation measure options.

Because few mitigation measures are feasible for reducing exterior noise levels to less than 65 dBA Ldn, buildings subjected to exterior levels above 65 dBA Ldn would require acoustical design and construction techniques and materials intended to reduce interior sound levels to 45 dBA Ldn or less. The specific techniques and materials required would vary depending on the noise exposure of the building. However, for any buildings in the very high noise zones (i.e., above 75 dBA Ldn), extensive and unique methods could be required. With proper construction materials, techniques, and installation, it is anticipated that interior noise levels could be effectively mitigated for residential uses.

Other, Quieter Sites Were Not Available or Feasible (Item 5)

As part of its planning for the redevelopment of Yesler Terrace, SHA considered whether there are other available sites on which it would be practical or desirable to build similar housing. However, SHA determined that such an approach would not be feasible due to the inability to find a similarly-located site that could provide the same range of benefits to the residents, in terms of proximity to jobs, services, public transportation facilities, and educational opportunities. Therefore, the focus has been on redeveloping the Yesler Terrace site.

¹ See The Noise Guidebook, HUD (1985) at p. 21; see also HUD Handbook 1390.2, *Environmental Assessment Guide for Housing Projects* (1985), at p. 3-5.

Low Impact Upon Marketability (Item 6)

As a result of proper noise attenuation, indoor noise levels within residential buildings are not expected to pose a problem for marketability. Though the presence of I-5 does present a challenge in the western/southwestern portion of the site, this area also possesses marketing advantages in the form of significant southern exposure opportunities and uninterrupted views of Puget Sound's Elliot Bay, the Olympic Mountain Range, and the Cascade Mountain Range. Thus, the marketability of units is not expected to be adversely affected by noise levels.

DEIS Chapter 3.8, Land Use

No updates to the DEIS Analysis in Chapter 3.8, Land Use, are required.

DEIS Chapter 3.9, Plans, Policies and Regulations

No updates to the DEIS Analysis in Chapter 3.9, Plans, Policies and Regulations are required.

DEIS Chapter 3.10, Aesthetics, Light, Glare and Shadows

In response to DEIS comments, updated viewshed and height/bulk/scale analyses of the DEIS Alternatives 1-4 have been completed.

Viewshed

The viewshed analysis provided in DEIS Section 3.10.1.2 has been updated based on comments received during the DEIS comment period. Where mountains were referenced in the text, but not necessarily discernable in the photographs, a line representing the mountains has been drawn into the background. Updated figures and discussions of mountain views are provided below for the DEIS viewshed simulations, which hereby supersede the visual simulations and figures provided in DEIS Section 3.10.1.2. The mountain depictions have also been incorporated into the relevant visual simulations completed for the Preferred Alternative in **FEIS Section 3.10.1.2**.

As well, **FEIS Figure 3.10-22 (NEW)**, Viewpoint 18, is a new visual simulation which was prepared for the DEIS Alternatives in response to comments received during the DEIS comment period. The analysis for this additional viewpoint is hereby incorporated into the viewshed analysis for DEIS Section 3.10.1.2.

No updated figures or discussion are provided for the following viewpoints, where no mountain views are visible:

- Kobe Terrace Park (DEIS Figure 3.10-8, Viewpoint 13)
- Dr Jose Rizal Park (DEIS Figure 3.10-9, Viewpoint 11)
- Pacific Medical Center/U.S. Public Health Service Hospital (DEIS Figure 3.10-10, Viewpoint 10)
- Alder Street/Terry Avenue – Harborview Fire Station (DEIS Figure 3.10-11, Viewpoint 5)
- Yesler Community Center Gymnasium (DEIS Figure 3.10-12, Viewpoint 16)
- I-5 (DEIS Figure 3.10-13, Viewpoint 12)
- E Yesler Way/12th Avenue, Looking West (DEIS Figure 3.10-15, Viewpoint 8))

- 10th Avenue/Yesler Way, Looking East (DEIS Figure 3.10-16, Viewpoint 17)
- Boren Place (DEIS Figure 3.10-17, Viewpoint 3)
- Horiuchi Park (DEIS Figure 3.10-18, Viewpoint 7)
- Edwin T Pratt Park (DEIS Figure 3.10-19, Viewpoint 9)
- Broadway and Alder Street (DEIS Figure 3.10-21, Viewpoint 6)
- Broadway/E. Yesler Way (DEIS Figure 3.10-22, Viewpoint 15)

Refer to **FEIS Figure 3.10-1** in **FEIS Section 3.10**, for the updated viewpoint location map.

Belvedere Park (Figure 3.10-6, Viewpoint 1)

Under existing conditions, views of the Cascade Mountains and Mt. Rainier are available to the east. As demonstrated in the visual simulations, portions of the Cascade Mountains to the east of the Downtown skyline would be partially obscured under DEIS Alternatives 1-3, under both the capacity model development scenario and the maximum zoning height. This would represent a continuation of the level of visual blockage which occurs with the existing Downtown skyline to the east and would not be considered significant.

Harborview Viewpoint (Figure 3.10-7, Viewpoint 4)

Under existing conditions, views of the Cascade Mountains and Mt. Rainier are available to the southeast. As demonstrated in the visual simulations, the view of the mountains would be mostly eliminated by the new buildings under Alternatives 1-4, except for a portion of the view to the west of the buildings, under both the capacity model development scenario and the maximum zoning height.

E Yesler Way/West of 8th Avenue, Looking West (Figure 3.10-14, Viewpoint 14)

Under existing conditions, views of the Olympic Mountains are available to the west, primarily to the east of the Smith Tower. As demonstrated in the visual simulations, views of the Olympic Mountains would continue to be available as described under existing conditions for Alternatives 1, 1A and 4. Under Alternatives 2 and 3, additional views of the Olympic Mountains to the northwest (i.e. to the west of the Fifth and Yesler Office Building) would be possible.

9th Avenue and Jefferson Street, Looking Southeast (Figure 3.10-20, Viewpoint 2)

Under the existing conditions, views of Mt. Rainier are visible to the southeast. As demonstrated in the visual simulations, views of Mt. Rainier would be mostly eliminated under Alternatives 1 and 1A, and would be partially obscured under Alternatives 2 and 3. Views of Mt. Rainier would remain similar to under existing conditions under Alternative 4.

I-5 Southbound (Figure 3.10-23 (NEW), Viewpoint 18)

Viewpoint 18 is a new viewpoint incorporated into the analysis for the DEIS Alternatives 1-4 in response to comments received during the DEIS comment period. The current view traveling southbound on I-5 is of the highway corridor in the foreground with the I-5 retaining wall and trees to the east. In the background to the west, the Pacific Medical Center building is visible, which is a City of Seattle Landmark building. The view of the site from this location on I-5 is



Existing



Alternative 1



Alternative 1A



Alternative 2



Alternative 3



Alternative 4

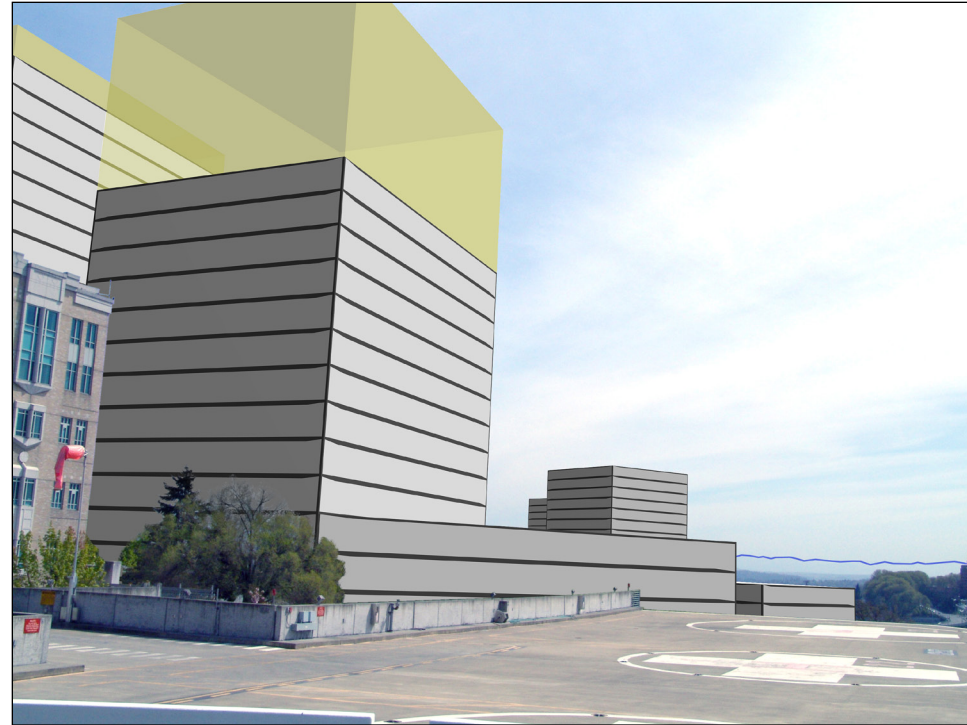
All simulations by **THE PORTICO GROUP**



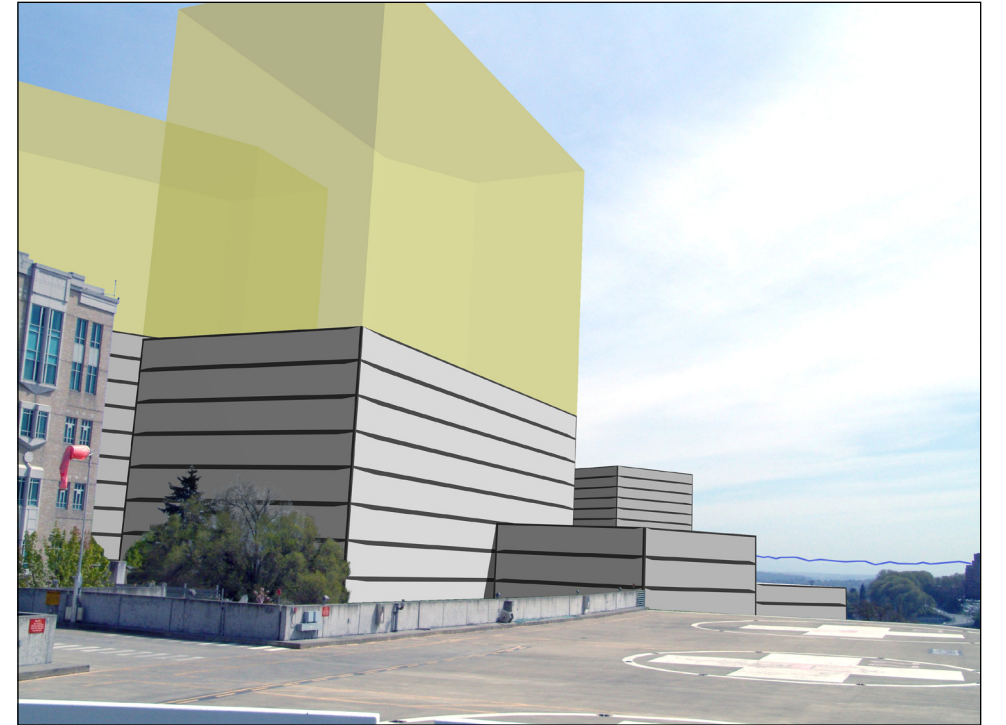
Figure 3.10-^{*}
Visual Simulations
Belvedere Viewpoint (Viewpoint 1)



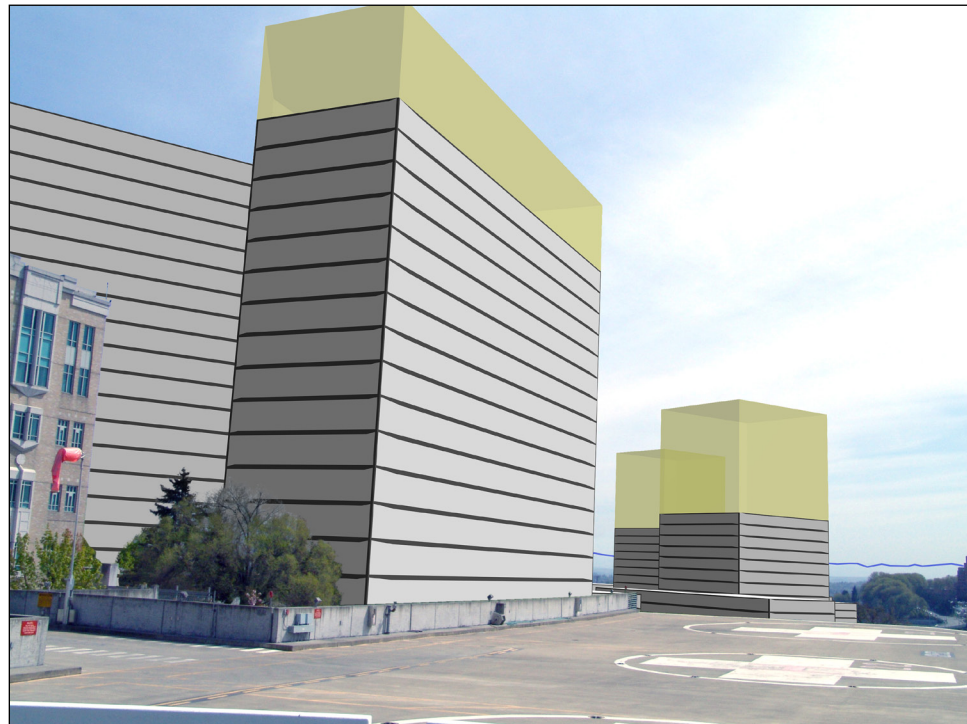
Existing



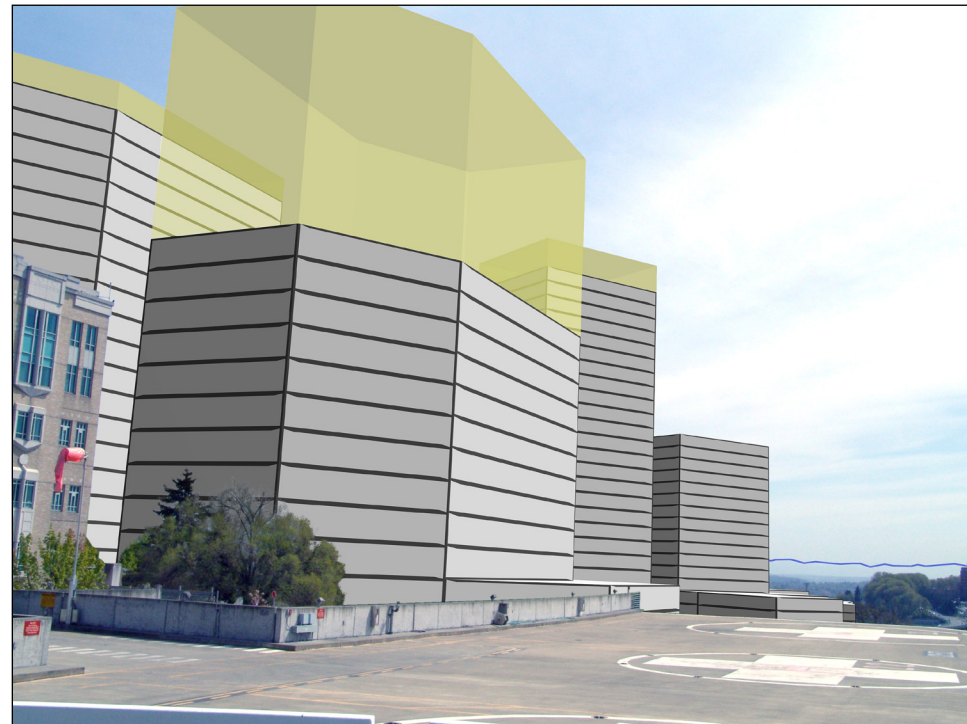
Alternative 1



Alternative 1A



Alternative 2



Alternative 3



Alternative 4

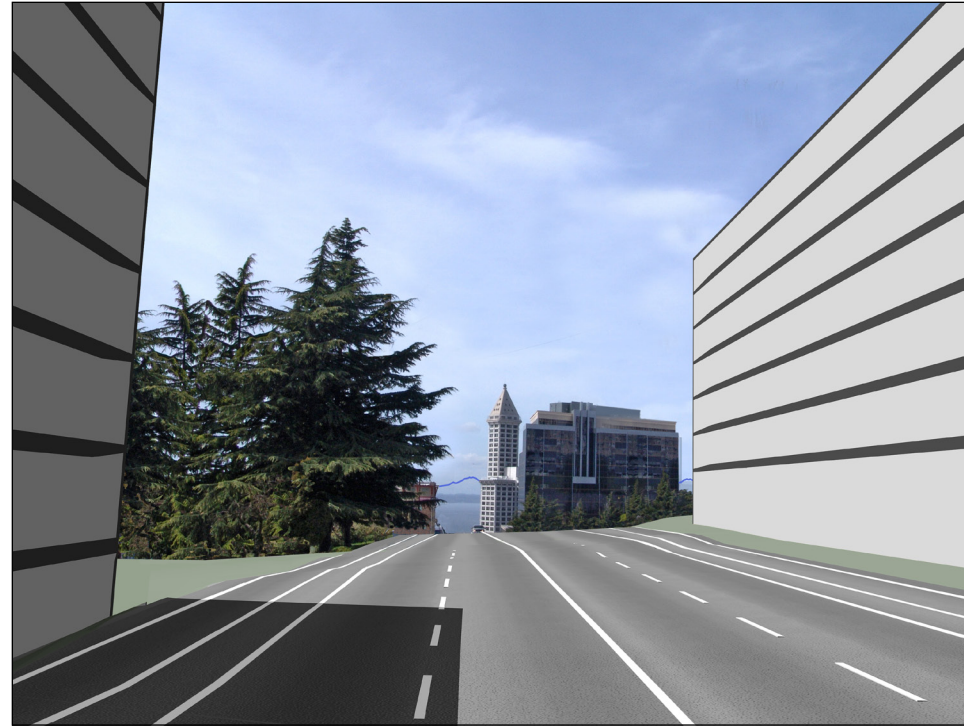
All simulations by **THE PORTICO GROUP**



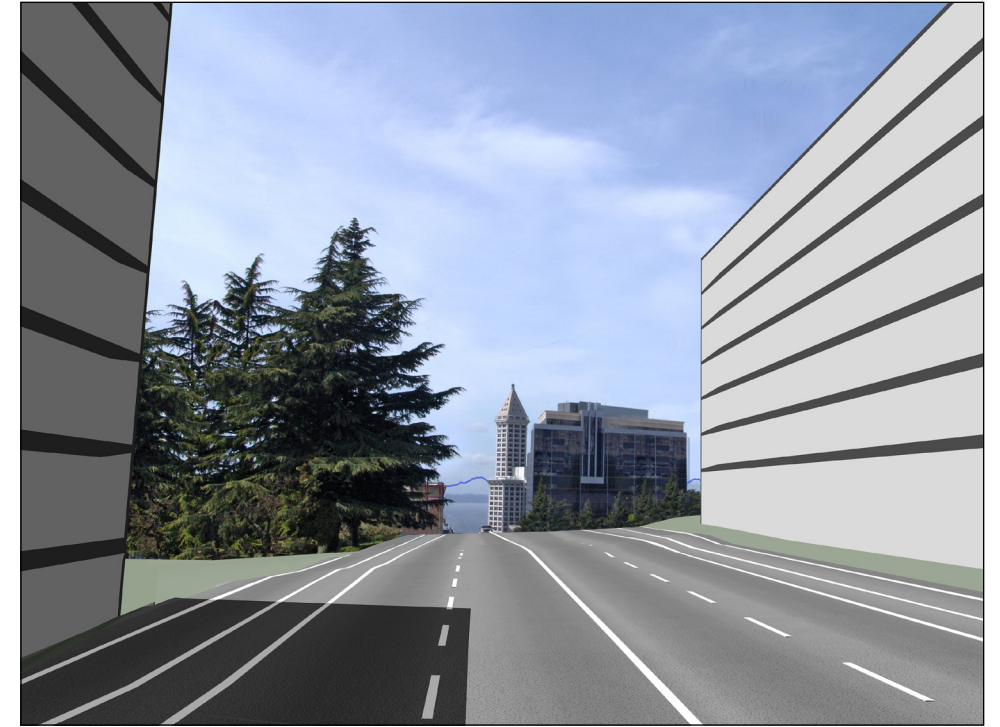
Figure 3.10-+
Visual Simulations
Harborview Viewpoint (Viewpoint 4)



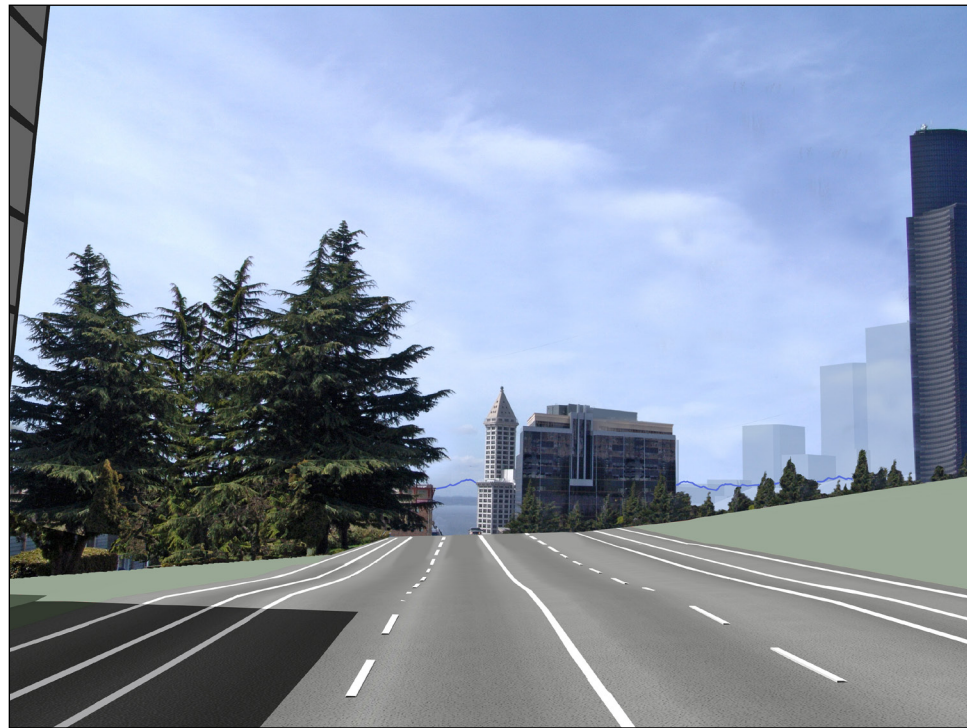
Existing



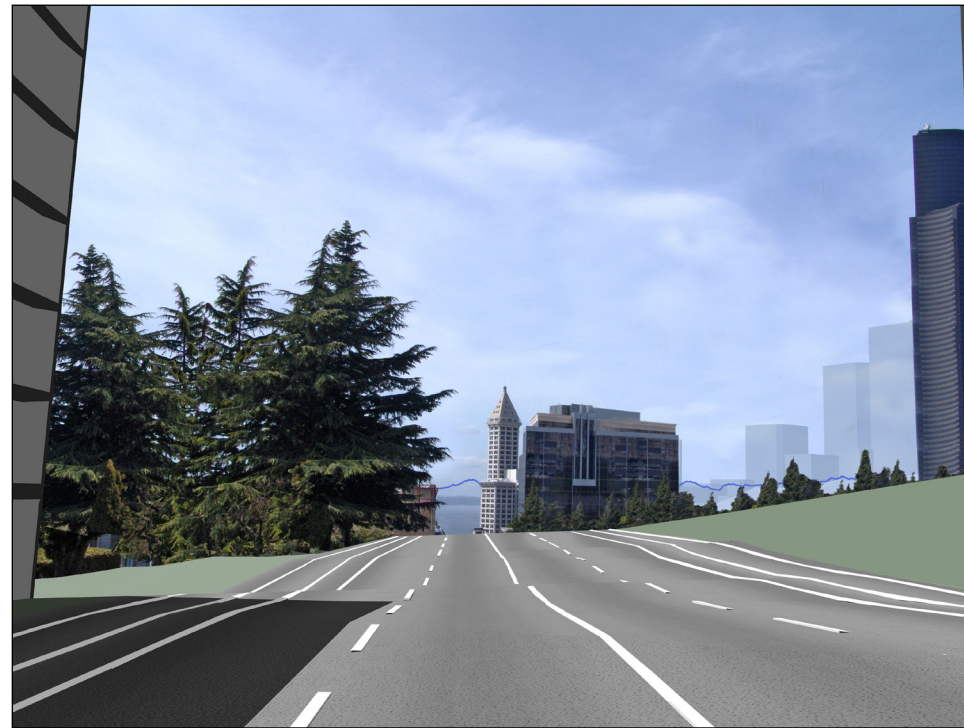
Alternative 1



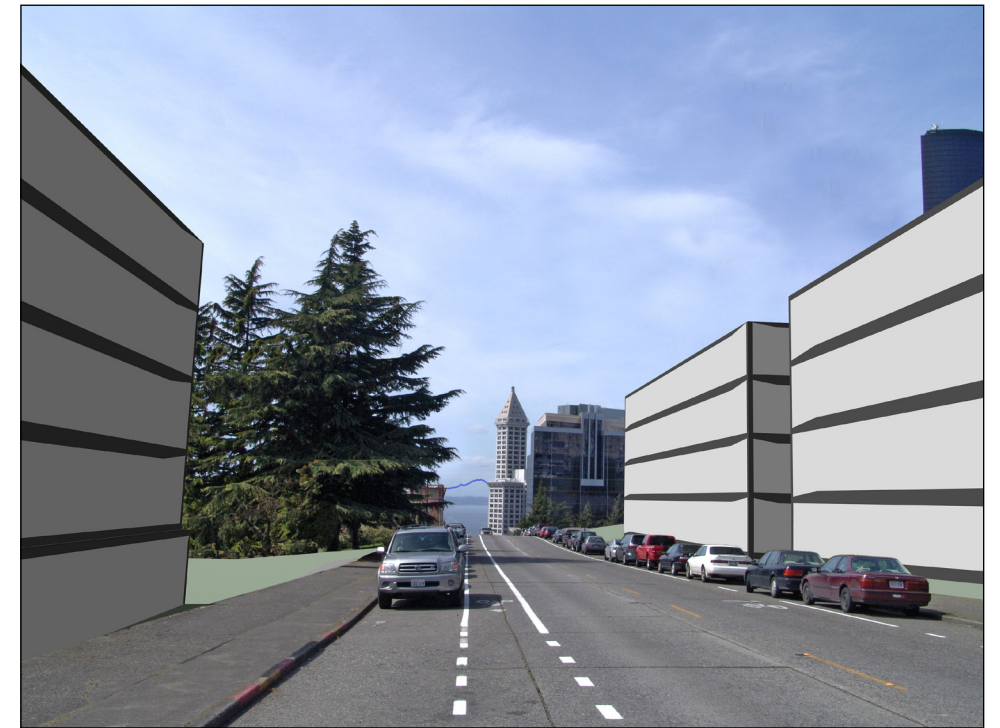
Alternative 1A



Alternative 2



Alternative 3



Alternative 4

All simulations by THE PORTICO GROUP



Figure 3.10-1(
Visual Simulations
E. Yesler Way/west of 8th Avenue, Looking West (Viewpoint 14)



Existing



Alternative 1



Alternative 1A



Alternative 2



Alternative 3



Alternative 4

All simulations by THE PORTICO GROUP



Figure 3.10-8
Visual Simulations
9th Avenue and Jefferson Street, Looking Southeast (Viewpoint 2)



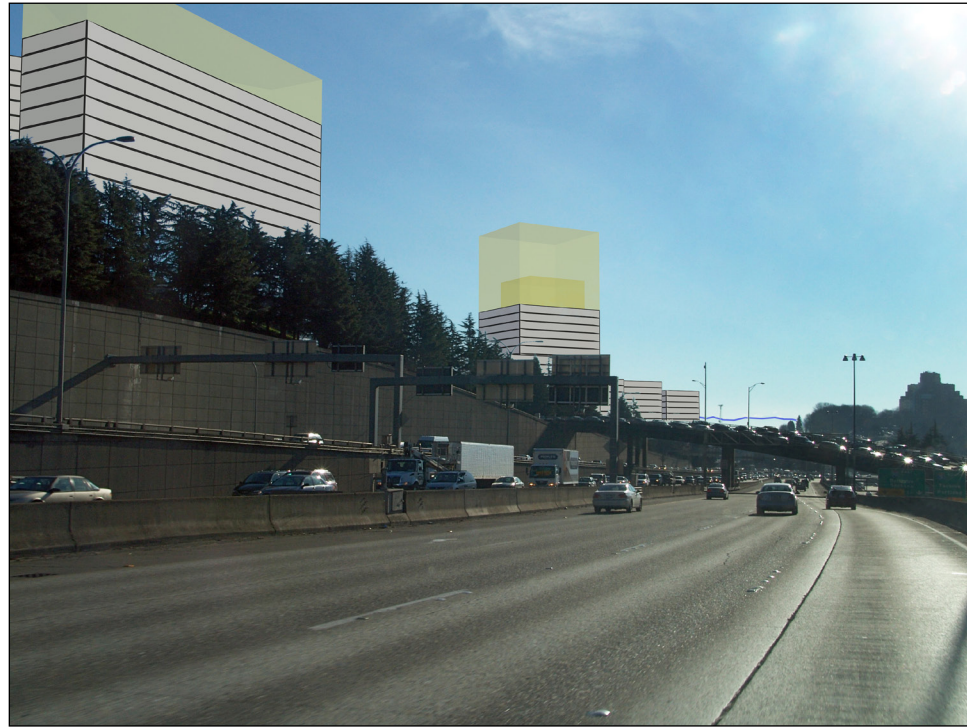
Existing



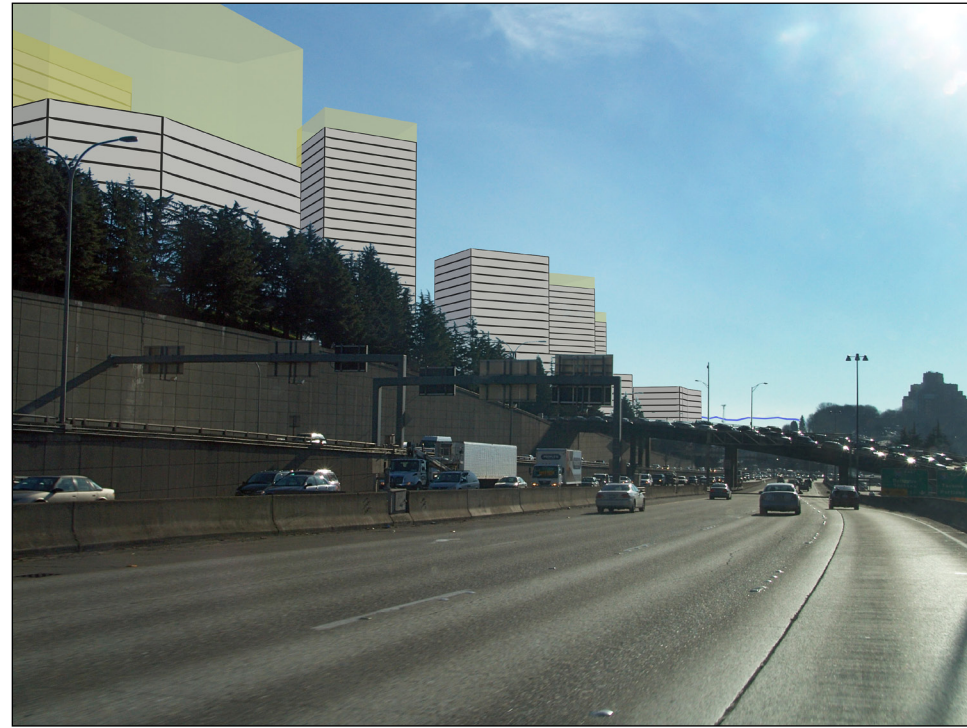
Alternative 1



Alternative 1A



Alternative 2



Alternative 3



Alternative 4

All simulations by THE PORTICO GROUP



Figure 3.10-8' fB9K 1
Visual Simulations
I-5 Southbound (Viewpoint 18)

primarily of trees on the site's western slope; no existing buildings are visible. No mountains are visible from this viewpoint.

Under Alternative 1, the redeveloped view of the site under the capacity model development scenario would prominently feature portions of two new high-rise buildings, with several other buildings barely visible in the background. The overall visual character from this viewpoint would change to a more urban development with larger, taller buildings on the east side of I-5. The buildings would further vertically define the I-5 corridor at this location. Views to the west of I-5, which include the Pacific Medical Center building, would remain as described under existing conditions. Under the maximum zoning height, the redeveloped view of the site would be similar to the capacity model, except that one high-rise building in the foreground would be taller. The overall visual character would remain similar to that described for the capacity model.

Under Alternative 1A, the redeveloped view of the site under the capacity model development scenario would be similar to Alternative 1, except that the building in the foreground would be shorter and wider. The overall visual character from this viewpoint would change generally as described for Alternative 1. Under the maximum zoning height, the redeveloped view of the site would be similar to the capacity model, except that the building in the foreground would be taller. Changes to the overall visual character from this viewpoint would be similar to that described for the capacity model.

Under Alternative 2, the redeveloped view of the site under the capacity model development scenario would be similar to Alternative 1, except that two additional mid-rise buildings would be visible further in the distance. The overall visual character from the viewpoint would change as described for Alternative 1. Under the maximum zoning height, the redeveloped view of the site would be similar to the capacity model, except that two of the visible high-rise buildings would be taller.

Under Alternative 3, the redeveloped view of the site under the capacity model development scenario would feature portions of five new high-rise buildings. A more continuous building mass would be established in the mid-field view, and the visual density of buildings would be greater than described for Alternatives 1-2. The overall visual character from this viewpoint would change to a more urban development with larger, taller buildings on the east side of I-5. The buildings would further vertically define the I-5 corridor at this location. Views to the west of I-5, which include the Pacific Medical Center building, would remain as described under the existing conditions. Under the maximum zoning height, the redeveloped view of the site would be similar to the capacity model, except that two high-rise building in the foreground would be taller. The overall visual character would remain similar to that described for the capacity model.

Under Alternative 4, the view of the site would remain as described under existing conditions. No new buildings would be visible and no changes to the existing character of the viewpoint would occur.

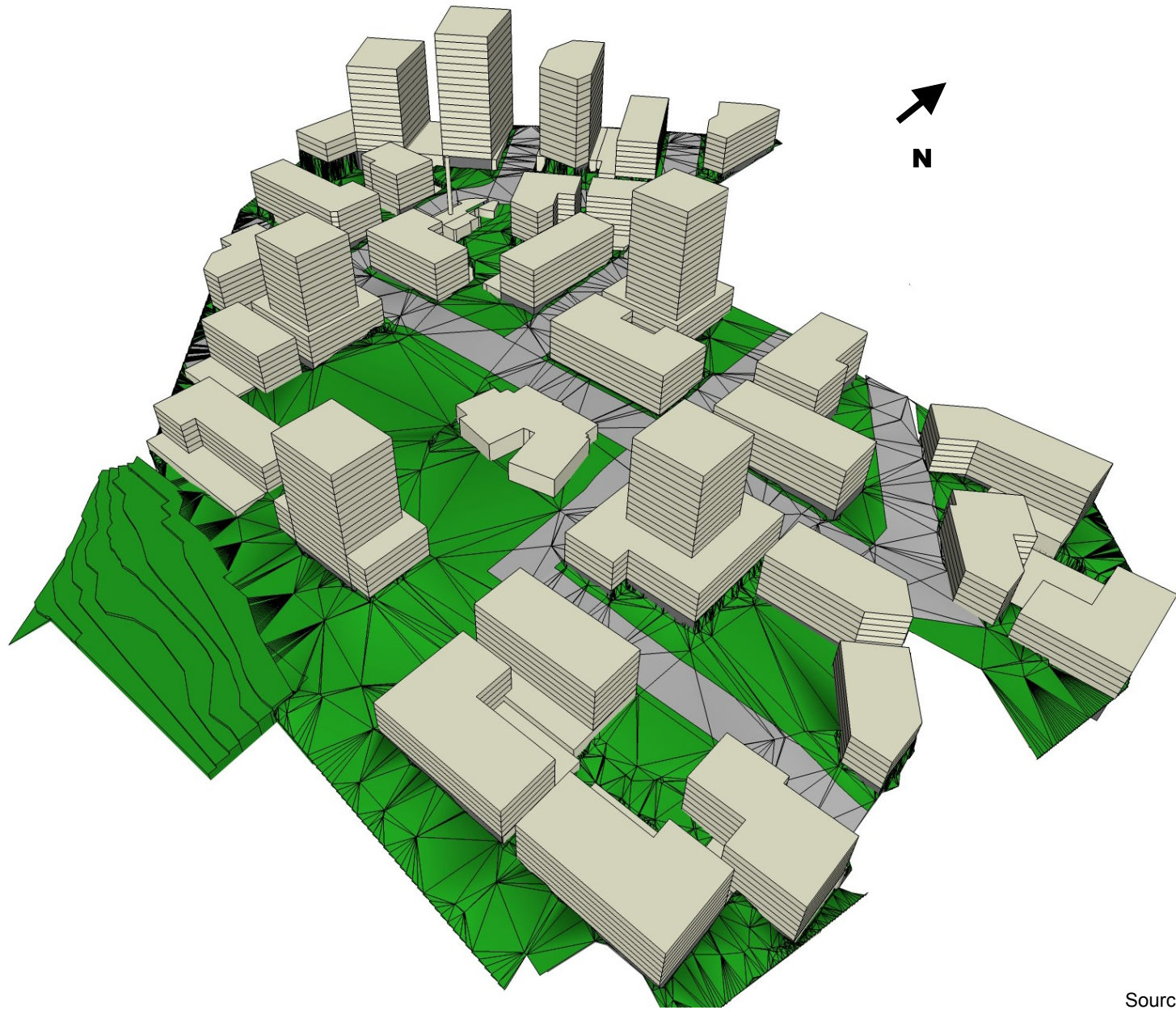
Height Bulk and Scale

In response to comments received on the DEIS, three dimensional simulations were prepared for Alternatives 1-4 to demonstrate the density, bulk and scale of the proposed redevelopment.

A three dimensional simulation is also incorporated into the analysis of the Preferred Alternative in **FEIS Section 3.10.1.2**.

On page 3.10-44 of the DEIS, the following text and figures are hereby incorporated into the Height, Bulk and Scale discussion:

Figures 3.10-24 (NEW) to Figure 3.10-28 (NEW) depict three dimensional simulations of Yesler Terrace under the capacity model development scenarios for Alternatives 1-4. These drawings are provided to demonstrate the density, bulk and scale of the proposed redevelopment in a three dimensional view. As shown, under Alternatives 1-3, high-rise buildings would be distributed throughout the site, with the greatest density and building heights in the NW Sector. Alternative 3 (**Figure 3.10-27 (NEW)**) would have the greatest density and building heights, and Alternatives 1 and 1A (**Figure 3.10-24 (NEW)** and **Figure 3.10-25 (NEW)**) would have lower density and building heights. **Figure 3.10-28 (NEW)**, Alternative 4, shows the site under the lowest density alternative, with low-rise buildings distributed throughout the site.

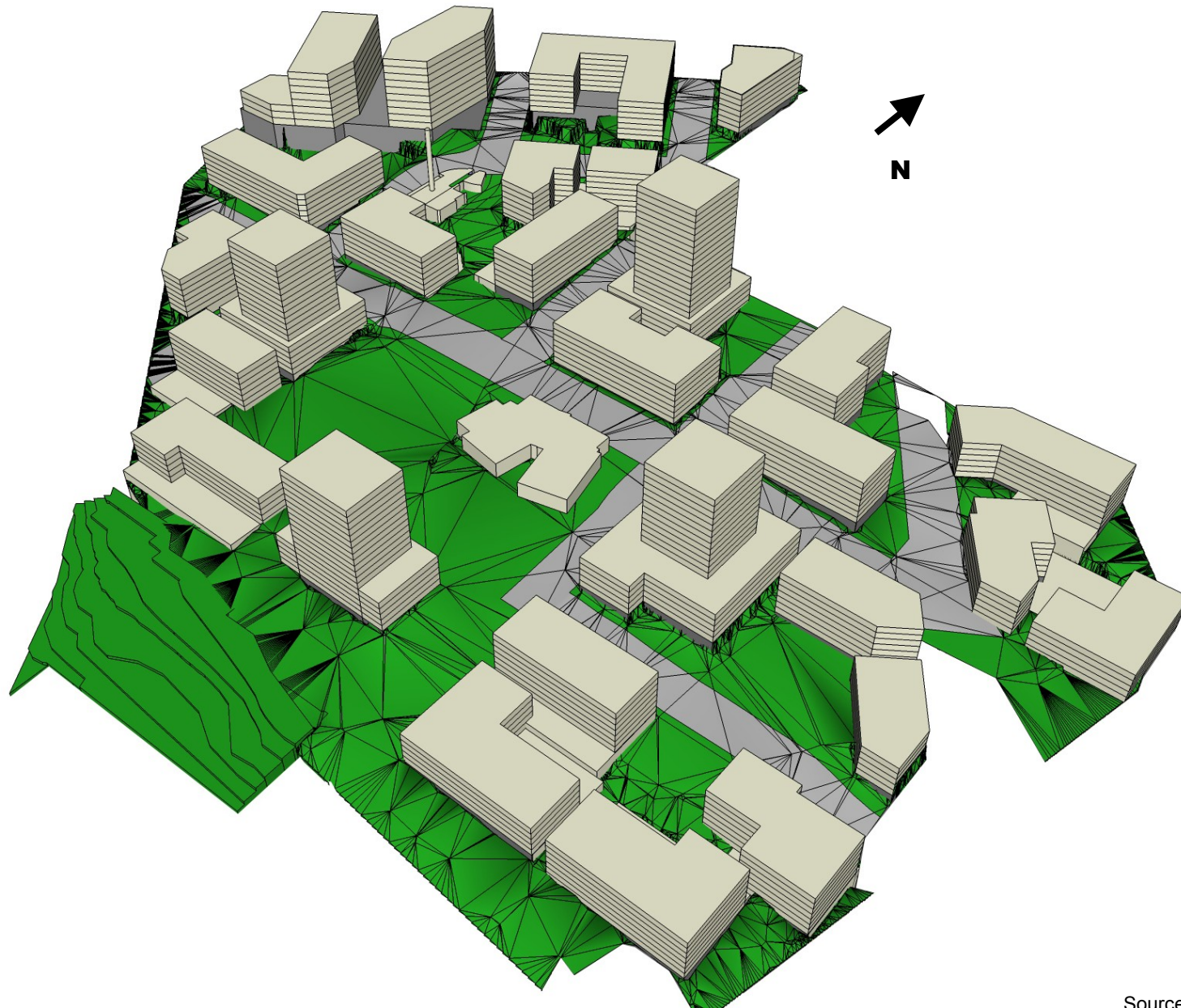


Source: CollinsWoerman, 2011



Figure 3.10-24 (NEW)
Alternative 1 - 3D Model

Yesler Terrace
Redevelopment EIS

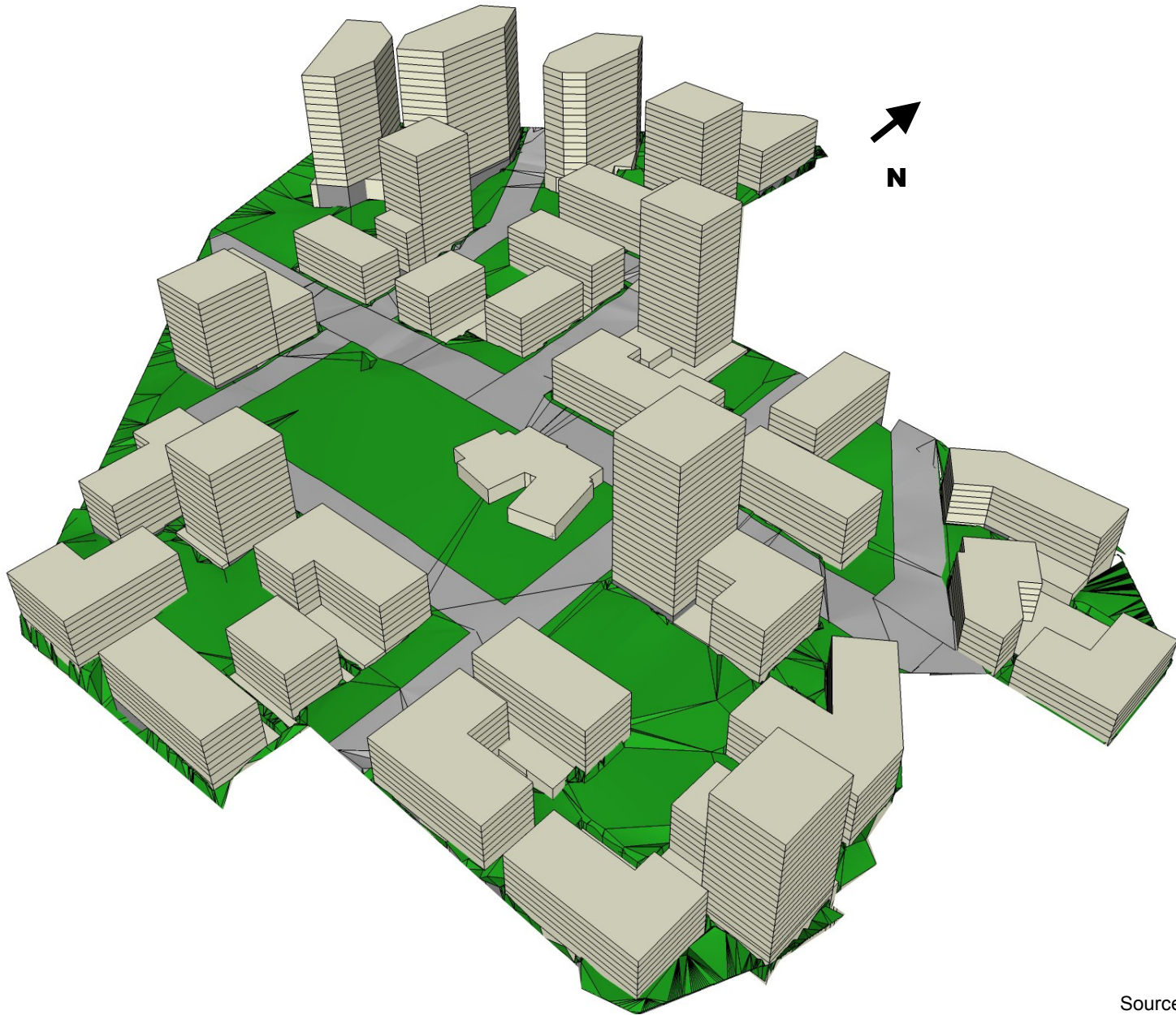


Source: CollinsWoerman, 2011



Figure 3.10-25 (NEW)
Alternative 1A - 3D Model

Yesler Terrace
Redevelopment EIS

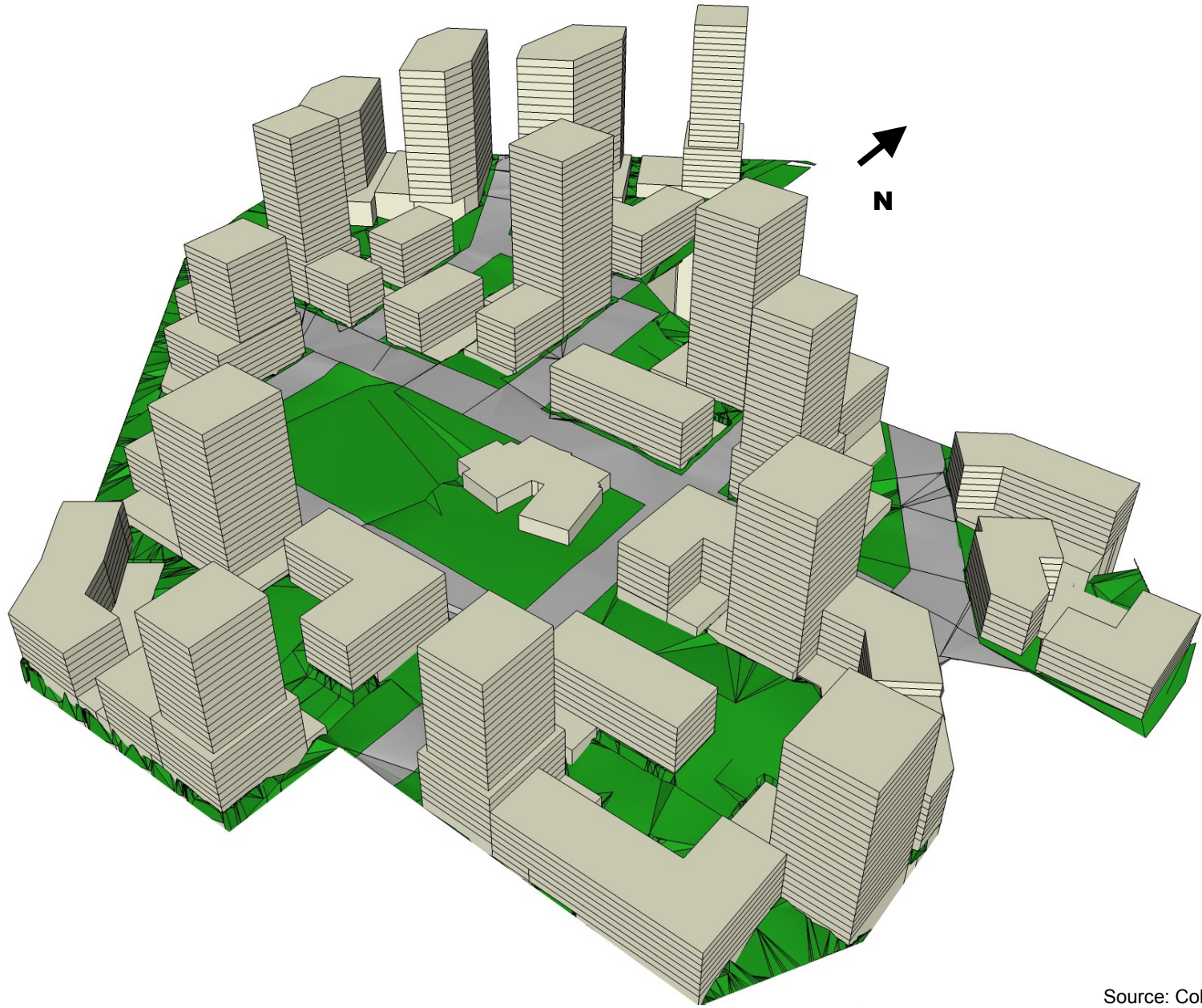


Source: CollinsWoerman, 2011



Figure 3.10-26 (NEW)
Alternative 2 - 3D Model

Yesler Terrace
Redevelopment EIS

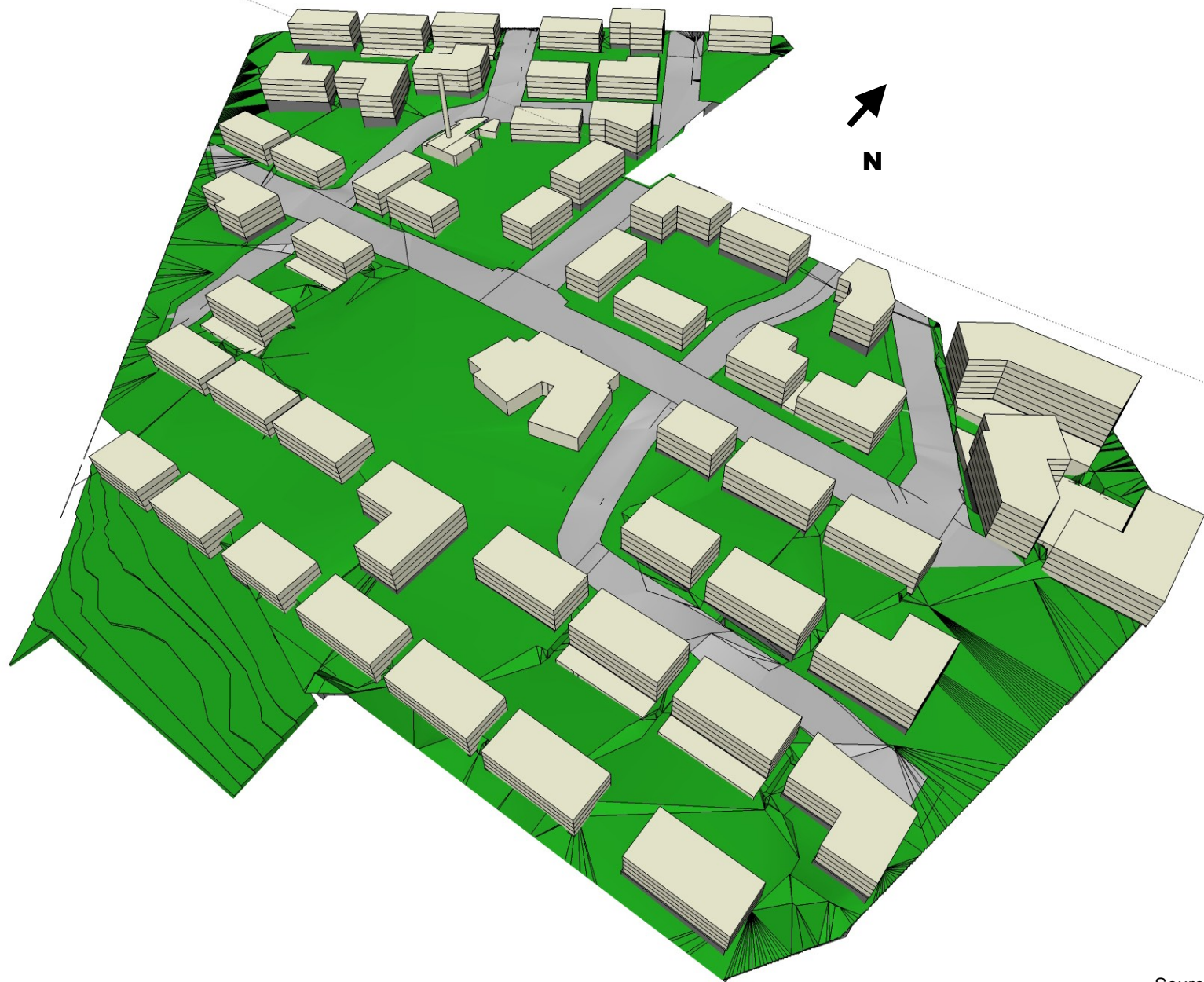


Source: CollinsWoerman, 2011



Figure 3.10-27 (NEW)
Alternative 3 - 3D Model

Yesler Terrace
Redevelopment EIS



Source: CollinsWoerman, 2011



EA | BLUMEN



Figure 3.10-28 (NEW)
Alternative 4 - 3D Model

Yesler Terrace
Redevelopment EIS

DEIS Chapter 3.11, Historic Resources

No updates to the DEIS Analysis in Chapter 3.11, Historic Resources, are required.

DEIS Chapter 3.12, Cultural Resources

No updates to the DEIS Analysis in Chapter 3.12, Cultural Resources, are required.

DEIS Chapter 3.13, Transportation

This section presents additional transportation analysis for the DEIS Alternatives based on comments received during the DEIS comment period. The information includes additional interpretation and summary of impact information provided in the DEIS, as well as some additional potential mitigation measures that could be considered to avoid or reduce potential impacts.

Roadway System

In Section 3.13.1 of the DEIS, the *Year 2030 No Action Levels of Service* are described. In response to comments, the summary discussion describing 2030 No Action level of service (LOS) results presented in Table 3.13-1 of the DEIS has been modified to also describe intersections projected to operate at LOS E, and to provide additional information about intersections expected to improve in the future compared to existing conditions. The following text hereby supersedes the *Year 2030 No Action Levels of Service* discussion contained in Section 3.13.1 on pages 3.13-10 to 3.13-11 of the DEIS, following the first paragraph.

Year 2030 No Action Levels of Service

The following study area intersections are projected to operate at LOS E or LOS F by 2030 due to the growth in traffic volumes, without the proposed redevelopment of Yesler Terrace:

- **Broadway/E Madison Street** – Growth in traffic volumes is expected to degrade PM peak hour operations from existing LOS C to LOS E.
- **12th Avenue S/E Cherry Street** – Growth in traffic volumes is expected to degrade PM peak hour operations from existing LOS D to LOS F.
- **Rainier Avenue S/S Dearborn Street** – Growth in traffic volumes is expected to degrade both AM and PM peak hour operations from existing LOS D to LOS F.
- **7th Avenue/Cherry Street** – Growth in traffic volumes is expected to degrade PM peak hour operations from existing LOS D to LOS F.
- **6th Avenue/James Street** – This intersection currently operates at LOS F during the PM peak hour, and growth in traffic through 2030 is expected to further increase delay.
- **9th Avenue/Cherry Street** – This unsignalized intersection currently has stop signs on the eastbound and westbound approaches (Cherry Street). These stop-controlled

movements currently operate at LOS F during the PM peak hour, and growth in traffic through 2030 is expected to further increase delay.

- **6th Avenue/Yesler Way** – This all-way stop-controlled intersection currently operates at LOS F during the AM peak hour. Growth in traffic through 2030 is expected to further increase delay during the AM peak hour, and also is expected to degrade PM peak hour operations from existing LOS E to LOS F.

In addition, operations at the following three intersections are projected to improve by 2030 under the No Action scenario:

- **Broadway/E James Street** – This intersection currently operates at LOS E during the PM peak hour. Minor shifts in traffic patterns projected to occur by 2030 are expected to improve operations to LOS D.
- **14th Avenue S/Rainier Avenue S/S Jackson Street** – This intersection currently operates at LOS E during both the AM and PM peak hours. However, the Streetcar project would prohibit southbound movements from 14th Avenue S, which is expected to improve 2030 operations to LOS D during the AM peak hour and LOS C during the PM peak hour.
- **4th Avenue S/S Jackson Street** – This intersection currently operates at LOS F during the PM peak hour, and operations are influenced by the close spacing to the adjacent intersection at the 2nd Avenue Extension. However, the Streetcar project would prohibit eastbound left turn movements from S Jackson Street, which is expected to improve operations to LOS C.

Roadway System

In Section 3.13.2 of the DEIS, individual tables were provided for the different trip types: vehicle, transit and pedestrian/bicycle trips. In response to comments, a summary table was developed to provide the percentage breakdown of these trip types for each of the DEIS Alternatives. The following table, **Table 3.13-5a**, and preceding text is hereby inserted into the Future Travel Demand section of the DEIS on page 3.13-19 after Table 3.13-5.

Future Travel Demand

Table 3.13-5a summarizes the daily project trips and the percent mode of travel for each alternative. The percentage of person trips made by vehicle would range from about 42 percent for the No Action condition up to 48 percent for Alternative 4.

In DEIS Section 3.13.2, a summary describing 2030 level of service for the DEIS Alternatives is presented for Table 3.13-8. In response to DEIS comments, this analysis was modified to also describe intersections projected to operate at LOS E. The following text hereby replaces the Level of Service discussion contained on page 3.13-27 in Section 3.13.2 of the DEIS, following the first paragraph.

Level of Service

The City of Seattle does not have adopted intersection level of service standards; however, project-related intersection delay that causes an intersection to operate at LOS E or F, or increases delay at an intersection that is projected to operate at LOS E or F without the project, may be considered a significant adverse impact. Many of the intersections to which the Yesler Terrace project would add project trips are already expected to operate at LOS E or F in the year 2030 without the project. The additional project traffic would add delay and potentially exacerbate congestion at these locations. The following intersections are projected to operate at LOS E or LOS F without or with the project under 2030 conditions:

Signalized

- **Broadway/E Madison Street (#3)** – LOS E during the PM peak hour
- **12th Avenue S/E Cherry Street (#6)** – LOS F during the PM peak hour
- **Rainier Avenue S/S Dearborn Street (#19)** – LOS F during AM and PM peak hours
- **7th Avenue/Cherry Street (#21)** – LOS F during the PM peak hour
- **6th Avenue/James Street (#33)** – LOS F during the PM peak hour

Unsignalized

- **9th Avenue/Cherry Street (#22)** – LOS F during the PM peak hour
- **6th Avenue/Yesler Way (#34)** – LOS F during AM and PM peak hours

Traffic projected to result from the proposed project is expected to additionally degrade level of service to LOS E or LOS F at the following intersections:

Signalized

- **Broadway/E James Street (#7)** – AM peak hour LOS E under Alternative 3; PM peak hour LOS E under Alternatives 1, 1a and 4; PM peak hour LOS F under Alternatives 2 and 3.
- **12th Avenue/E Yesler Way (#11)** – AM peak hour LOS E under Alternatives 2 and 3; PM peak hour LOS E under Alternatives 1, 1a, 2, 3, and 4.
- **12th Avenue S/S Jackson Street (#15)** – AM peak hour LOS E under Alternative 3.
- **Boren Avenue/James Street (#25)** – AM peak hour LOS E under Alternatives 2 and 3.
- **Broadway/Boren Avenue (#29)** – PM peak hour LOS E under Alternatives 1, 1a and 3.
- **6th Avenue/James Street (#33)** – AM peak hour LOS E under Alternative 3.

Unsignalized

- **9th Avenue/Cherry Street (#22)** – AM peak hour LOS E under Alternatives 1 and 1a; AM peak hour LOS F under Alternatives 2 and 3.
- **9th Avenue/Jefferson Street (#26)** – PM peak hour LOS E under Alternative 2; PM peak hour LOS F under Alternative 3.
- **9th Avenue/Alder Street (#28)** – AM and PM peak hour LOS F under Alternatives 1, 1a, 2 and 3.
- **8th Avenue/Yesler Way (#31)** – AM peak hour LOS F under Alternatives 1, 1a, 2 and 3; PM peak hour LOS F under Alternatives 1, 2 and 3.

**Table 3.13-5a
PERSON TRIP SUMMARY BY MODE – DEIS ALTERNATIVES**

Mode	No Action		Alternative 1		Alternative 1a		Alternative 2		Alternative 3		Alternative 4	
	Daily Trips ¹	Percent	Daily Trips ¹	Percent of Total	Daily Trips ¹	Percent of Total	Daily Trips ¹	Percent of Total	Daily Trips ¹	Percent of Total	Daily Trips ¹	Percent of Total
Non-Motorized ²	1,690	35%	7,450	26%	6,880	29%	9,780	26%	12,570	27%	3,220	32%
Transit	1,100	23%	8,490	30%	5,910	25%	10,750	29%	13,000	28%	2,050	20%
Person Trip by Vehicle ³	1,980	42%	12,650	44%	10,950	46%	16,560	45%	20,440	45%	4,880	48%
Total	4,770		28,590		23,740		37,090		46,010		10,150	

Source: Heffron Transportation, January 2011

1. Total projected daily trips
2. Includes walk, bike, and internal trips
3. Vehicle trips are lower than person trips by vehicle, and are estimated by applying average vehicle occupancies of 1.2 persons per vehicle for retail, residential, and office trips, and 1.5 persons per vehicle for neighborhood service trips.

Construction Traffic Impacts

The following text hereby replaces the Construction Traffic Impacts discussion contained on page 3.13-43 in Section 3.13.2 of the DEIS, In response to DEIS comments, the text is modified to include the following language clarifying that potential construction traffic impacts could occur to both vehicular and non-motorized traffic.

Construction impacts would occur in stages until redevelopment of Yesler Terrace is complete, and could include increases in construction-related traffic, as well as temporary closures (full or partial) of street lanes or sidewalks adjacent to construction activities. The most noticeable construction-related traffic impacts are likely to occur during demolition of existing uses and major earthwork stages. Other major impacts could occur during large concrete pours when a continuous supply of concrete could be trucked to the site. Other materials, such as steel, lumber, and other building supplies are expected to be trucked to the site as needed, but would not typically arrive in fleet shipments like those required for earthwork and concrete. Construction employees would also generate traffic and parking demand, but this volume would be much less than the site would generate when occupied at buildout.

Prior to commencing construction, SHA and/or its prime contractor(s) would prepare a Construction Management Plan. This plan would include information related to truck haul routes, staging areas, sidewalk and street detours, and employee parking. Details that should be included in the plan are described below under Mitigation Measures.

Project Impacts – East of Boren Sector Only

Section 3.13.2 of the DEIS analyzes the potential impacts of redevelopment of the East of Boren Sector. In response to DEIS comments, additional information has been provided to explain a finding of no significant adverse impacts relative to site access, safety, transit, non-motorized, parking, freight, or site access/circulation, as a result of redevelopment of the East of Boren Sector. The following information is hereby incorporated into Section 3.13.2 of the DEIS to supplement this section.

Site Access Impacts

The East of Boren Sector is assumed to be accessed via one driveway on 12th Avenue, which would operate at LOS C during both the AM and PM peak hours. If an additional access point were provided, the operations at each driveway would be better than assumed.

Safety Impacts

As redevelopment of the East of Boren Sector would be expected to increase vehicle traffic under Alternatives 1-4, this also increases the potential for vehicle conflicts and the probability for vehicle collisions in the study area. However, under each alternative, new traffic generated by this sector at the one high collision location (6th Avenue/James Street) would be far less than 1 percent of total entering traffic during the peak hours, and is not expected to have a significant effect on operations. Similar to the West of Boren Sectors, design within this sector would incorporate measures to maintain adequate sight lines between motorists and pedestrians, and minimize conflicts through traffic calming. Thus, traffic generated by the East of Boren Sector would not be expected to result in significant adverse safety impacts under any of the alternatives.

Transit Impacts

Total new daily transit trips projected for the alternatives range from approximately 100 trips under Alternative 4 to 1,100 under Alternative 3. **Table 3.13-13a** below summarizes the portion of these trips that are projected to be generated by the East of Boren Sector under Alternatives 1-4. As shown, the projected new daily trips range from 190 to 258, with 14 to 19 occurring during the PM peak hour. When distributed among the streetcar and the Metro transit routes that would serve the site (using the distribution procedures described in the DEIS), zero to six additional trips are projected on each route during the PM peak hour, which would be the hour with the highest expected use. The existing transit routes have capacity to accommodate this increase in demand. Thus, no adverse impacts to transit are expected for the East of Boren Sector under Alternatives 1-4.

**Table 3.13-13a
TRANSIT TRIP ASSIGNMENT TO AND FROM YESLER TERRACE REDEVELOPMENT –
EAST OF BOREN SECTOR ONLY**

Route	Alternative 1		Alternative 1a		Alternative 2		Alternative 3		Alternative 4	
	Daily	PM Peak	Daily	PM Peak	Daily	PM Peak	Daily	PM Peak	Daily	PM Peak
27	57	4	63	5	61	4	79	6	81	6
60	12	1	10	1	12	1	15	1	6	1
9	13	1	11	1	14	1	17	1	2	0
Streetcar	52	4	44	4	53	4	68	5	20	1
Walk to Other	57	4	63	5	61	4	79	6	81	6
Total	191	14	191	16	201	14	258	19	190	14

Source: *Heffron Transportation, Inc., January 2011.*

Note: These values reflect the net increase in transit trips compared to the No Action condition.

Non-Motorized Impacts

Total new daily non-motorized trips (pedestrian, bicycle, internal, and walking to transit) projected for the total site including the West of Boren and East of Boren Sectors range from approximately 2,500 trips under Alternative 4 to 22,000 under Alternative 3. **Table 3.13-13b** below summarizes the portion of non-motorized trips that are projected to be generated by the East of Boren Sector under Alternatives 1-4. As shown, the projected new daily trips range from 780 to 1,230, with 60 to 100 occurring during the PM peak hour.

The rate of pedestrian flow generated by this sector would be far lower than the highest intensity flow (1,000 pedestrian trips per hour) projected for the Alternatives cumulatively, which analysis indicates would be well accommodated by the proposed 6-foot sidewalks, allowing projected pedestrian activity to operate at LOS A. Thus, LOS A is also expected for pedestrian demand generated by the East of Boren Sector under Alternatives 1-4, and no adverse impacts are expected.

**Table 3.13-13b
ESTIMATED NON-MOTORIZED TRIPS TO AND FROM YESLER TERRACE
REDEVELOPMENT – EAST OF BOREN SECTOR ONLY**

	Alternative 1		Alternative 1a		Alternative 2		Alternative 3		Alternative 4	
	Daily	PM Peak	Daily	PM Peak	Daily	PM Peak	Daily	PM Peak	Daily	PM Peak
Non-Motorized Trips	780	64	780	66	810	65	1,230	100	790	60

Source: Heffron Transportation, Inc., January 2011.

Note: These values reflect the net increase in non-motorized trips compared to the No Action condition.

Non-motorized trips include pedestrian, bicycle, internal, and walking to/from transit.

Freight Impacts

Proposed land use in the East of Boren Sector under Alternatives 1-4 consist of residential development with from 253 to 304 residential units under; and between 10,000 SF and 18,000 SF of neighborhood commercial space. Truck traffic would primarily consist of waste pick-up, small package delivery (UPS or other freight haulers) and resident moving. Truck loading areas or “back-of-house” truck access may be needed for garbage and recycling pick-up. Other truck delivery or residential move in/move out could be accommodated on internal access drives or adjacent streets as needed. Thus, no adverse freight impacts would be expected for redevelopment of the East of Boren Sector under Alternatives 1-4.

Parking Impacts

Based on the average ratio of 0.85 parking stalls per unit, the 253 to 304 residential units proposed in the East of Boren Sector under Alternatives 1-4 would generate a demand of 215 to 258 parking spaces. Expected parking demand would be accommodated on-site, determined individually for the buildings. Thus, no adverse parking impacts would be expected for redevelopment of the East of Boren Sector under Alternatives 1-4.

Mitigation Measures

Section 3.13.3 of the DEIS described required/proposed and other possible mitigation measures to mitigate the transportation-related impacts of the proposed redevelopment. The following Mitigation Measures section hereby modifies Section 3.13.3 of the DEIS, as noted below.

Required/Proposed Mitigation Measures

Mitigation of Construction Impacts

The following DEIS construction traffic mitigation discussion has been modified to clarify that the construction management plan would include and communicate any detours needed to address sidewalk or bus stop closures, and potential construction employee commute trip reduction measures. The following Mitigation of Construction Impacts subsection hereby replaces said subsection in Section 3.13.3 of the DEIS.

Construction impacts would occur in stages until all development at Yesler Terrace is complete. Prior to commencing construction of the West of Boren Sectors, SHA and/or its prime

contractor(s) would prepare a *Construction Management Plan*. This plan would document the following:

- Truck haul routes to and from the site.
- Peak hour restrictions for construction truck traffic and how those restrictions would be communicated and enforced.
- Truck staging areas (e.g., locations where empty or full dump trucks would wait or stage prior to loading or unloading.)
- Construction employee parking areas.
- Measures to reduce construction worker trips such as rideshare, shuttles, carpool, transit passes or related programs.
- Road or lane closures that may be needed during utility construction or relocation, roadway construction, or building construction. If any arterial street is affected by a partial or full closure, the contractor should also prepare a Maintenance of Traffic Plan detailing temporary traffic control, channelization, and signage measures.
- Mechanism for notifying community if road or lane closures would be required.
- Sidewalk, bike lane, and/or bus stop closures and relocations. If any sidewalk or bike facility is affected by a partial or full closure, the contractor should also prepare a plan detailing temporary pedestrian detour and signage measures.
- Mechanism for notifying community if sidewalk, bike lane, or bus stop closures would be required.

Other elements or details may be required in the *Construction Management Plan* to satisfy street use permit requirements of the City of Seattle. SHA and the contractor would incorporate other City requirements into an overall plan, if applicable.

Off Site Roadway Improvements

The following potential mitigation measures have been identified to address projected LOS E intersections in addition to those described in the DEIS:

- 12th Avenue/Yesler Way – Change signal timing to provide slightly longer north-south phase to account for lane change due to the streetcar.
- 9th Avenue/Jefferson Street – Two mitigation options are possible: widening the northbound approach to the intersection to provide a right turn lane (which may require removing an existing pedestrian curb bulb) or signaling the intersection in its existing configuration.

No mitigation has been proposed at the following three intersections where changes in lane configuration and/or signal phasing have been proposed to accommodate the First Hill Streetcar. Additional changes in intersection configuration are not physically possible without acquiring additional right of way and significantly affecting adjacent development:

- Broadway/E Madison Street
- Broadway/E James Street
- Broadway/Boren Avenue

In addition, no mitigation has been proposed at the following two intersections that are projected to operate at LOS E during the AM peak hour under one or two of the DEIS alternatives. Additional changes in intersection configuration are not physically possible without acquiring additional right of way and significantly affecting adjacent development:

- 12th Avenue S/S Jackson Street (Alternative 3 only)
- Boren Avenue/James Street (Alternatives 2 and 3 only)

Transportation and Parking Management Plans

The following three potential elements that could be included in a Transportation Management Plan (TMP) for office buildings have been identified, in addition to those already identified in the DEIS:

- Install pedestrian way finding signs.
- Require tenant to offer transit pass subsidy to employees who work at the site.
- Support bike sharing program if one is formed for the site area.

Significant Unavoidable Adverse Impacts

Section 3.13.4 of the DEIS described significant unavoidable adverse transportation-related impacts, i.e. locations projected to operate at LOS F under 2030 'with project' conditions where mitigation was not feasible. In response to comments, this section has been updated to also include intersections projected to operate at LOS E under 2030 'with project' conditions. The following text is hereby incorporated into the DEIS to replace Section 3.13.4 of the DEIS:

The following locations are projected to operate at LOS E or LOS F under 2030 'with project' conditions, where mitigation is not feasible without acquiring additional right of way and significantly affecting adjacent development:

- Broadway/E Madison Street (PM peak hour LOS E, all alternatives)
- Broadway/E James Street (AM or PM peak hour LOS E or F, all alternatives)
- Broadway/Boren Avenue (PM peak hour LOS E, Alternatives 1, 1a, and 3)
- 12th Avenue S/S Jackson Street (AM peak hour LOS E, Alternative 3)
- Boren Avenue/James Street (AM peak hour LOS E, Alternatives 2 and 3)

For the three intersections located along Broadway, changes in lane configuration and/or signal phasing have been proposed to accommodate the First Hill Streetcar. Additional changes in intersection configuration are not physically possible within the available right of way at these locations.

DEIS Chapter 3.14, Utilities

From October 2010 through January 6, 2011, additional combined sewer monitoring was performed in support of this FEIS analysis to supplement the preliminary analysis performed by Seattle Public Utilities (SPU) in July 2009. The results of this analysis are provided herein and supplement the information provided in DEIS Section 3.14.2.

As noted on page 13 of the *October 2010 DEIS Utilities Technical Report* by SvR in DEIS Appendix O, a preliminary analysis was performed by SPU on July 15, 2009, to evaluate the capacity of the City of Seattle combined sewer system downstream of Yesler Terrace Development. It was also noted that a hydraulic analysis of the drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Development Project. In October 2010, SHA started monitoring flows in six existing combined sewer maintenance holes to obtain actual flow data for on and off-site flows in order to begin the process of the hydraulic analysis.

The combined sewer monitoring results from October 2010 through January 6, 2011 indicate that actual peak combined sewer flow rates are less than those estimated by the preliminary analysis performed by SPU and used for the capacity analysis as described on page 29 of the *DEIS Utilities Technical Report*. The daily flow data was reviewed and combined sewer flows from dry days (no rainfall events) were used to establish sanitary sewer flows. Flow data was used from December 12th and 13th 2010 when there were large storm event. Using the City of Seattle Rain Gage #25 located at James Street and 23rd Ave, it was determined the December 12th and 13th storm event was approximately a 25 year storm event, 3.2 inches within 24 hours. Taking the sanitary sewer flows and adding the 25 year storm event, a combined sewer flow was established for the off-site flows entering the Yesler Terrace Development Project.

The result of this analysis is that actual peak flow rates are about 20 percent to 60 percent less than the peak flows used for the capacity analysis for maintenance structures located at Broadway Avenue and E Fir Street, maintenance structure south of 9th Avenue and Spruce Street, and maintenance structure south of Alder Street along the west property line. One reason for the reduction in the flow rates is the preliminary analysis accounted for future build out of the upstream basin (per the zoning code). A hydraulic model will be developed after six months of flow monitoring data is completed to account for backwater effects or the possibility of additional capacity due to surcharging. The pipe capacity analysis utilized a simple flow routing model and with using the flow monitoring data, the existing 8-inch combined sewer pipe south of 9th Avenue and Spruce Street, and the 12-inch combined sewer pipe in E Yesler Way east of Broadway Avenue, are at their capacity with the existing flows.

See revised Figure 3.2-1 Yesler Terrace DEIS Alternative 1, 1A, and 4 Public Sanitary Sewer System and Figure 3.2-2 Yesler Terrace DEIS Alternative 2 and 3 Public Sanitary Sewer System (in **FEIS Appendix K**) for updated combined sewer pipe sizes based on the new analysis.

DEIS Chapter 3.15, Public Services

No updates to the DEIS Analysis in Chapter 3.15, Public Services, are required.

DEIS Chapter 3.16, Socioeconomics

No updates to the DEIS Analysis in Chapter 3.16, Socioeconomics, are required.

DEIS Chapter 3.17, Environmental Justice

No updates to the DEIS Analysis in Chapter 3.17, Environmental Justice, are required.

DEIS Chapter 3.18, Wind

No updates to the DEIS Analysis in Chapter 3.18, Wind, are required.



Chapter 5 - KEY TOPICS

CHAPTER 5 KEY TOPICS

Consistent with SEPA and NEPA requirements, a public comment period was provided for the October 2010 Draft EIS (DEIS). During the public comment period, a total of 43 comment letters were received; 2 comment letters were received after the comment period closed. All of the comments received, as well as responses to comments pertinent to the EIS, are provided in **FEIS Chapter 6**.

A number of comments were received that identified common subjects; these have been termed “key topic areas”. Rather than reiterating a similar response to each comment that shares a common theme, this chapter of the FEIS identifies the key topic areas and provides a detailed discussion in response to each Key Topic area. Responses to specific comments provided in **FEIS Chapter 6** which pertain to these topic areas refer back to the discussion that is contained in this section.

The following key topics are discussed in this chapter of the FEIS:

- 5.1 - Replacement of Existing Units and Tenant Relocation
- 5.2 - Parking and Traffic
- 5.3 - Potential Indirect Land Use Impacts to Little Saigon

5.1 Replacement of Existing Units and Tenant Relocation

As stated in Chapter 2 of the DEIS and **FEIS Chapter 2**, SHA is proposing redevelopment of Yesler Terrace, a public housing community located on First Hill in Seattle. Yesler Terrace currently contains 561 public housing units, with approximately 1,231 residents. Redevelopment is proposed in order to create a mixed-income, mixed use community that better serves existing and future residents. In order to accommodate redevelopment and achieve the objectives of the proposal, demolition and replacement of all existing residential units on the DEIS Site would be required. Some comments received during the DEIS comment review period questioned why Yesler Terrace needed to be redeveloped or if modernization of the existing units would be possible. A number of comments emphasized the desire to have the existing 561 extremely low income units replaced onsite, and expressed concerns about the impacts of temporary relocation to existing tenants. Following are responses to these questions, comments and concerns.

Why is redevelopment of Yesler Terrace necessary?

Nearly 70-years old, Yesler Terrace’s private water and sewer systems and other key infrastructure systems are failing. And while functional, many of its 561 low income housing units need extensive maintenance. Separate from the EIS, SHA commissioned a Renovation Cost Analysis report for Yesler Terrace which was completed on November 19, 2010. The report included cost studies, a hazardous materials assessment, a demolition assessment, a building structural assessment, a building mechanical and plumbing assessment, and a site work assessment. Per this analysis, many of the units exhibit significant deterioration of both interior and exterior elements, including siding failures, mold, and water damage, as well as

code compliance issues, such as lack of ventilation and compliance with the Fair Housing Act. This report is available at www.seattlehousing.org/redevelopment/yesler-terrace/ . This report indicates that modernization of the existing units is not a sustainable approach for the long-term needs of its residents or the surrounding community.

Ensure onsite replacement of existing extremely low income residential units.

The DEIS analysis indicated that a one-for-one replacement of all 561 existing extremely low income units would occur onsite. Refer to DEIS Section 3.16.2 for details on the anticipated distribution of these units throughout the five sectors (West of Boren and East of Boren), together with the additional types of low income and market rate housing that would be provided onsite. The DEIS also noted that redevelopment of the site would result in the temporary displacement of existing SHA residents. However, because the proposed site redevelopment would occur in phases, over an extended period of time, the entire site population would not be displaced simultaneously. Also, as construction of new housing was completed, the DEIS noted that some residents could potentially move directly from their existing housing into new housing without having to leave the site. Existing SHA residents would be offered relocation assistance in accord with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (URA), and a tenant relocation plan to address the temporary relocation of residents during the redevelopment process would be implemented. Refer to DEIS Section 3.16.3 for details of the tenant relocation plan.

Since issuance of the DEIS, further analysis has determined that provision of replacement housing for the existing 561 onsite housing units would be facilitated by expanding the proposed site area. For purposes of the FEIS analysis, the 2.3-acre East of 12th Sector was added to the FEIS Site boundary (see **FEIS Figure 2-4** for an illustration of the FEIS sector boundaries).

The FEIS assumes that under the Preferred Alternative, up to 70 extremely low income replacement units would be located within the new East of 12th Sector. The remaining 491 extremely low income housing units would be located in the West of Boren Sectors (421 units) and East of Boren Sector (70 units). Therefore, all 561 extremely low income housing units would be replaced within the expanded site boundary that includes the East of 12th Sector.

If SHA were to be unsuccessful in negotiating a partnership/purchase with King County and/or the Urban League of Metropolitan Seattle for the redevelopment of the East of 12th Sector, the units proposed for these properties could be accommodated within the DEIS Site. DEIS Alternative 3 analyzed the impacts for providing all 5,000 units within the DEIS Site; therefore, if these properties are not available, then the impact of providing those units (that were originally allocated to the East of 12th Sector under the Preferred Alternative) within the DEIS Site has already been analyzed under DEIS Alternative 3.

If SHA identifies other potential sites for replacement units in the immediate neighborhood¹ in response to being unable to complete an acquisition/agreement with King County or the Urban League for the respective sites, it would undertake supplemental environmental review in order to determine potential impacts, if any. However, in accordance with the Guiding Principles, no sites outside of the immediate neighborhood would be considered.

¹ The immediate neighborhood would be bounded by Alder Street and Remington Court to the north, 14th Avenue to the east, Jackson Street to the south, and Interstate 5 to the west.

Increase the overall amount of low income housing provided on the site.

In addition to the replacement of the 561 existing extremely low income units, the Preferred Alternative also includes an additional 290 very low income units and 950 low income units. Therefore, approximately 36 percent of the overall housing units at Yesler Terrace would be affordable (income-restricted) housing units under the Preferred Alternative (1,801 units out of 5,000 overall units). All of the 1,801 low income units would be income-restricted.

Minimize multiple moves for all tenants.

One of the Guiding Principles of the Yesler Terrace redevelopment project includes minimizing the impacts of displacement for residents during the redevelopment process.² To this end, an additional phasing priority has been added to the Development Phasing Criteria outlined in DEIS Section 2.8.6: “Maximize onsite relocations to minimize disruption to existing tenants.” This addition is reflected in **FEIS Chapter 7, Errata**. Further, although no specific sequence of development has been detailed at this time, under the Preferred Alternative it is likely that the East of Boren Sector, and possibly the East of 12th Sector would be redeveloped first, as discussed in **FEIS Chapter 2** and **FEIS Section 3.16.2**. Up to 140 extremely low income units could be located within these sectors (70 within each sector). When the replacement housing in the East of Boren Sector is complete, then demolition and redevelopment could begin in phases within the West of Boren Sectors. Implementation of this phasing schedule could reduce the potential scope of temporary offsite relocation of existing residents. Replacement of the remaining 421 units within the West of Boren Sectors would occur onsite as phased redevelopment occurs over the build-out period; however, it is possible that some residents would still need to temporarily relocate offsite. Overall, temporary and/or permanent relocation within the site boundary would be expected to alleviate disruptions to existing residents.

Provide more detail on plans for tenant relocation and relocation assistance.

SHA is committed to minimizing extended delays between demolition of public housing and redevelopment, and this statement has been added to the Development Phasing Criteria, as reflected in FEIS Chapter 7, Errata. Also, as noted in DEIS Section 3.16 and restated in **FEIS Section 3.16**, any necessary temporary tenant relocation would be conducted in compliance with the federal Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1970 (URA). All residents who are living at Yesler Terrace at the time of relocation who remain in good standing would have the option of returning to the redeveloped Yesler site as new units become available. A temporary tenant relocation plan would be implemented to address the temporary relocation of residents during the construction process. This plan would address relocation involvement issues, relocation options and relocation assistance. Specific relocation options would be dependent upon the availability of various SHA resources, such as rental assistance vouchers, etc, but could include: a) relocation to another SHA-owned public housing development or to other SHA-owned property, where space is available; b) the provision of tenant-based (Section 8) Housing Vouchers; and, c) payment by SHA of the difference (if any) between what tenants paid at Yesler Terrace for their unit and utilities versus any increase in a comparable unit, for up to 42 months or in a lump sum amount. SHA would also provide a

² See <http://www.seattlehousing.org/redevelopment/yesler-terrace/principles/> or DEIS Appendix A for the Yesler Terrace Guiding Principles

package of relocations benefits to prepare and assist residents with the actual task of moving. See DEIS and **FEIS Section 3.16.3** for further details on the tenant relocation plan.

5.2 Parking and Traffic

Many comments were received on the DEIS that relate to transportation and parking. The primary themes of comments and questions are summarized below, followed by discussion and brief responses. See **FEIS Chapter 6** for specific comments and responses.

How will roadways operate with the redevelopment in place?

The Preferred Alternative would generate fewer vehicle trips than had previously been evaluated for Alternative 3 in the DEIS; thus, the level of service impacts of the Preferred Alternative are within the range of impacts analyzed in the DEIS.

The City of Seattle considers project-related intersection delay that causes an intersection to operate at LOS E or F at the peak hour, or increases delay at an intersection that is projected to operate at LOS E or F without the project, to be a significant adverse impact. Of the 36 study area intersections, seven intersections are projected to operate at LOS E or F at the peak hour (either AM or PM) under 2030 conditions with or without Yesler Terrace being redeveloped. Under the Preferred Alternative seven additional intersections are projected to result in degrading to LOS E or F operations without mitigation. However, roadway improvement projects that would improve future roadway operations to LOS D or better have been identified as mitigation for all but four intersections out of 14. Three of the four intersections are located along Broadway, where the City is proposing changes as part of the First Hill Streetcar project, and the fourth is at the intersection of Boren Avenue and James Street. Further improvements to mitigate the impacts of the proposed Yesler Terrace project are not feasible at these intersections within the available right of way.

Will there be enough transit to support the redevelopment?

The number of transit trips generated by the Preferred Alternative is very similar to the transit trips projected to be generated by DEIS Alternative 2; thus, the impacts of the Preferred Alternative are within the range of impacts analyzed in the DEIS. The DEIS analysis provides detailed analysis of existing and projected future transit service in the study area; it provides recommendations for how transit service may be modified to adequately accommodate future transit demand of the proposed project, based upon projected future conditions. Currently over 1,100 bus trips provide service within one-quarter mile of the site each weekday; most of the bus routes provide all day and late night service, as well as frequent peak period service. The future First Hill Streetcar is scheduled to be constructed and operating by 2013. However, it is recognized that actual transit modifications and improvements would need to evolve as overall transit demand and supply evolves. King County Metro has reviewed the DEIS and expressed strong support for the transit analysis and recommendations presented (see Letter 1 from King County Metro in **FEIS Chapter 6**). This includes ongoing partnerships with SHA and SDOT to evaluate service needs and pursue funding sources as needed as Yesler Terrace redevelopment progresses and other major transportation projects such as Link Light Rail are completed.

Will an adequate amount of parking be provided, without providing too much?

The Preferred Alternative would target similar parking ratios as defined in the DEIS for non-residential uses (see DEIS Table 3.13-12).

Parking ratios for residential uses have been reduced in the Preferred Alternative in response to comments. In order to assess what amount of parking would be adequate, the residential parking ratios considered in the DEIS were based on the potential demand for different types and sizes of units. The rates were developed using a combination of information from SHA, the project architect, the project's economic consultant, and the traffic consultant. The ratios were developed specifically for the mix of low income and market-rate residential units. The parking ratios used in the DEIS were intended to represent a worst-case parking need for the project so that the maximum impacts of this parking could be analyzed and assessed. The Preferred Alternative would target a lower residential parking ratio of 0.7 stalls per unit, which is a blended average of SHA housing at 0.58 stalls per unit and Market Rate housing at 0.75 stalls per unit. Based on the square footages assumed under the Preferred Alternative, approximately 5,100 parking spaces would be provided. Implementation of Transportation Management Plans and parking management strategies have also been recommended as mitigation in order to reduce overall vehicle and parking demand, and encourage the use of alternative modes. See **FEIS Section 3.13.3, Transportation**, for details.

Will traffic conditions be safe for pedestrians, bicyclists, and motorists during project construction and after the redevelopment is completed?

The DEIS identifies measures to maintain safety conditions for motorized and non-motorized traffic, both during and after project construction. Certain construction impacts would occur in stages until all redevelopment at Yesler Terrace is complete. These impacts could include temporary closures (full or partial) of street lanes or sidewalks adjacent to construction activities. The most noticeable construction-related traffic impacts are likely to occur during demolition of existing uses and major earthwork stages. As described in the DEIS, prior to commencing construction of the project, SHA and/or its prime contractor(s) would prepare a *Construction Management Plan*. This plan would identify truck haul routes to and from the site; peak hour restrictions for construction truck traffic; truck staging areas; off-street construction employee parking areas; measures to reduce construction worker trips such as rideshare, shuttles, carpool, or transit passes; road or lane closures that may be needed during portions of construction; sidewalk, bike lane, and/or bus stop closures, relocations, and signage plans; and mechanisms for notifying the community if roadway, sidewalk, bike lane, or bus stop closures would be required. Other elements or details may be required to satisfy street use permit requirements of the City of Seattle, and would be incorporated into the *Construction Management Plan* as needed.

As the Yesler Terrace redevelopment would be expected to increase vehicle traffic, the potential for vehicle conflicts and probability for vehicle collisions would also increase in the study area. However, new traffic generated by the project at the one high collision location identified in the DEIS (6th Avenue/James Street) would represent 1.2 percent to 2.3 percent of the total entering traffic during the AM peak hour and 0.9 percent to 2.2 percent of the total entering traffic during the PM peak hour, depending on the development alternative, and is not expected to have significant effects on operations. The DEIS also describes measures that would be incorporated into site design to maintain adequate sight lines between motorists and pedestrians, and minimize conflicts through traffic calming.

Extensive pedestrian and bicycle improvements providing safer conditions would be made throughout the Yesler Terrace site, including street frontage improvements as well as connecting paths throughout the site. New connections would also be made to areas beyond Yesler Terrace, including south towards S Main Street. This connection would improve pedestrian access to the International District and key transit routes along S Jackson Street or at the International District and King Street transit stations.

What measures will be implemented to reduce the number of cars generated by the redevelopment?

Measures recommended in the DEIS to reduce vehicle trips and parking demand, as well as encourage the use of alternative modes, include Transportation Management Plans (TMPs) and parking management strategies. Parcels where office uses are to be built could be required to have individual TMPs that are directed at reducing employee commute trips. TMP strategies would seek to reduce single-occupant vehicle (SOV) trips to no more than 20 percent by 2020, as specified in Seattle's Comprehensive Plan for the First Hill/Capitol Hill Urban Center. A menu of TMP strategies that could be implemented is presented in Section 3.13 of the DEIS and the FEIS. In addition, SHA would provide centralized information for low income and market units at Yesler Terrace, which would create additional opportunity to provide information about alternative modes of transportation. Parking management strategies could include, but are not limited to, sharing of office parking on weeknights and weekends with residential and retail uses; unbundling parking from office leases; charging for parking; offering a flex-pass for parking that limits the number of days an employee can park; prohibiting reservation of individual spaces for office parking; and provision for car-sharing programs. Both TMP and parking management programs could include survey and monitoring programs to regularly assess their effectiveness and allow for adjustments as needed. These mitigation measures are provided in detail in DEIS and **FEIS Section 3.13.3, Transportation**.

5.3 Potential Indirect Land Use Impacts to Little Saigon

A number of comments received during the DEIS comment review period expressed concerns regarding the potential for the Yesler Terrace redevelopment to result in impacts to businesses located in the Little Saigon neighborhood, located south of the site. Following are responses to several of these comments and questions.

How will such a large project impact the small business character of Little Saigon? Will small businesses still be able to survive when this site is fully built out? Will this area still be affordable to small businesses?

Consideration has been given to the potential cumulative, indirect impacts that the Yesler Terrace redevelopment project could have upon small businesses in the Little Saigon neighborhood in DEIS and FEIS Section 3.16.

The Yesler Terrace redevelopment could potentially affect small businesses in Little Saigon either by increasing demand on the businesses, or by drawing demand away from the businesses over the long-term. In the first scenario, a larger residential population at Yesler Terrace, along with a broader mix of income groups, improved pedestrian access, and proximity to enhanced public transportation, could all lead to additional retail demand on existing and

future businesses in Little Saigon over time. While this increased demand could produce positive cumulative impacts for some businesses, the increased market demand could also potentially result in increased property values and/or rents for these small businesses in the long-term. In the second scenario, new retail uses on the Yesler Terrace site could potentially compete with businesses in Little Saigon, resulting in decreased demand at certain businesses in Little Saigon.

Analysis of the magnitude of these potential indirect impacts on Little Saigon businesses included further review of the EIS issued by the City of Seattle in 2008 for the *Livable South Downtown Plan* (South Downtown EIS).³ As part of the South Downtown EIS, the City commissioned a three-part study to analyze the potential vulnerability of small businesses in Little Saigon from the proposed area rezone in Little Saigon (and surrounding neighborhoods), as well as the then-pending “Dearborn Street” development project, located at the south end of Little Saigon. The rezone analyzed in the South Downtown EIS would have allowed for significant height and density increases in South Downtown, including in the Little Saigon neighborhood. In addition, the Dearborn Street project was expected to include a 650,000 square foot shopping center and 550 residential units.⁴

The South Downtown EIS economic impact analysis identified a variety of low to high probability potential adverse impacts on local businesses from the proposed area rezone and the Dearborn Street project. However, only one significant unavoidable adverse impact was identified: the “inconvenience to and eventual displacement of production, distribution and repair businesses” along portions of several streets at the south end of Little Saigon.⁵ This impact was expected to occur because the rezone, and the Dearborn Street project, would open up this industrial area to residential uses, impeding truck traffic and leading to land use incompatibility.⁶ As to other potential impacts to Little Saigon businesses, the South Downtown EIS concluded that there are many factors that could contribute to transformation of the area over time, and the rezone and Dearborn Street project, while part of the overall changes in development trends, would have only a modest role in contributing to these impacts.⁷ Therefore, it is probable that increased rents and values would result over the long-term, regardless of what occurs at Yesler Terrace.

The South Downtown EIS analysis is informative to the analysis of potential impacts on Little Saigon businesses from the Yesler Terrace redevelopment. The proposed South Downtown rezone would have directly affected the development capacity in the Little Saigon neighborhood itself, and the Dearborn Street project would have resulted in additional retail uses, on a large scale, directly in the neighborhood. Even so, only one significant unavoidable adverse impact to Little Saigon businesses was identified in the South Downtown EIS, and that impact was particular to the co-location of residential uses with existing industrial uses on the same streets, an impact not pertinent to the Yesler Terrace redevelopment proposal.

The Yesler Terrace site is located north of, and topographically uphill from, Little Saigon. The scope of retail uses proposed for Yesler Terrace would be on a much smaller scale than those

³ The Livable South Downtown Plan and the South Downtown EIS are referenced in the DEIS. See, e.g., DEIS at p. 3.8-52, 3.16-34. Further review of the South Downtown EIS was completed for preparation of this FEIS.

⁴ South Downtown FEIS, pg 3-65; South Downtown FEIS Appendix C-3, pg 3. Since the time of the South Downtown EIS, plans for the Dearborn Street project have been abandoned.

⁵ South Downtown FEIS, pg 3-72.

⁶ South Downtown FEIS, pgs 3-63, 3-64.

⁷ South Downtown FEIS, pgs 3-65, 3-66

considered for the Dearborn Street project (88,000 SF under the Yesler Terrace Preferred Alternative v. 650,000 SF for the Dearborn Street project). Whereas the Dearborn Street project was to be anchored by a mass merchandiser, hardware chain, and supermarket, Yesler Terrace will be a mixed use community, with small, neighborhood-based retail uses focused primarily on serving the anticipated 5,000 new residential units at Yesler Terrace. This concept of the retail uses serving the Yesler Terrace community is reflected in overall site planning; neighborhood-serving commercial uses are expected to be primarily located in the center of the site, near the Commons Park and transit stops.

As discussed in the DEIS, and as further described in the South Downtown EIS, many factors could influence the economic viability of Little Saigon businesses over the long-term buildout period anticipated for the Yesler Terrace redevelopment, such as further potential changes in local plans and zoning, overall market/economic conditions, availability of other neighborhood amenities, political support, other legal and governmental regulations, and other broad development trends. These factors would apply over the long-term, with or without the redevelopment of Yesler Terrace. As such, any attempt to specify or quantify the potential long-term impacts to these businesses would be speculative and would not be meaningful. Redevelopment of Yesler Terrace would likely have only a modest role in contributing to any potential impacts (positive or negative) to Little Saigon. Such would be the case because of the factors described above (i.e. the location of Yesler Terrace relative to Little Saigon, the limited scope of proposed neighborhood commercial uses and the internalization of these uses); therefore, no significant unavoidable adverse impacts on the Little Saigon businesses are anticipated to occur as a result of the Yesler Terrace redevelopment.

Consider mitigation strategies aimed at preserving the ethnic heritage and vibrancy of Little Saigon.

Although no significant adverse impacts are anticipated to occur to Little Saigon as a result of the redevelopment of Yesler Terrace, SHA remains sensitive to the concerns of the business community in Little Saigon, and looks forward to continued communication and cooperation with neighborhood stakeholders. In this regard, SHA has also identified additional possible mitigation strategies related to this topic, including the following:

- The land use code provisions for Yesler Terrace that would be adopted by the City of Seattle could include limitations on inclusion of “big box” retail uses (i.e. single uses over 25,000 SF) onsite.
- Bulletin boards with advertisements for Little Saigon retailers could be placed in community gathering areas.

These potential mitigation measures have been incorporated into the analysis for the Preferred Alternative in **FEIS Section 3.16.3, Socioeconomics**.



Chapter 6 - DEIS COMMENT LETTERS and RESPONSES

CHAPTER 6 COMMENT LETTERS AND RESPONSES

The DEIS was issued on October 19, 2010, with public comments due December 13, 2010. On November 30th, 2010, a public hearing was held to give the public an opportunity to provide verbal comments on the DEIS.

During the DEIS public comment period, 43 written comment letters and e-mail correspondence were received from 10 public agencies, 5 organizations and 28 individuals (Letters 1-43). Two additional comment letters were received after the comment period closed (Letters 44-45). No one spoke at the public hearing held on November 30, 2010.

This chapter of the Final EIS (FEIS) contains comments received on the October 2010 Draft EIS (DEIS) and responses to the comments. Each comment letter is included in this section of the FEIS. Comment letters/numbers are noted in the margins of the letters.

<u>Letter Number</u>	<u>Commenter Name</u>
1	King County METRO
2	Seattle Department of Planning & Development (DPD)
3	Seattle Department of Parks
4	Seattle Department of Neighborhoods
5	Seattle Human Services Department
6	Seattle Office of Housing
7	Seattle Police Department
8	Seattle City Light
9	Seattle Department of Transportation
10	Seattle Public Utilities
11	Interfaith Task Force on Homelessness
12	Neighborhood House
13	Puget Sound SAGE
14	Washington Vietnamese American Chamber of Commerce (WAVA)
15	Yesler Terrace Community Council
16	David Albright
17	Linda Averill
18	John Bailo
19	Jared Behrend
20	Drew Collins
21	Kellen Donahue
22	Joshua Daniel Franklin
23	Jonathan Fuchs
24	Jery Che Fuller
25	Matt Gangemi

- 26 Graham Golbuff
- 27 Brie Gyncild
- 28 Erin Harris
- 29 Alex Hyde-Wright
- 30 Kevin King
- 31 Katie Kuciembe
- 32 Bradley Meacham
- 33 Scott Meyer
- 34 Bruce Nourish
- 35 Kristin O'Donnell
- 36 Blaire Payson
- 37 J. Petrait
- 38 Brian Porter
- 39 Claire Schumacher
- 40 Ted Schumacher
- 41 Andrew Smith
- 42 David Sucher
- 43 Mike Wold

Comment Letters Received After the Closure of the DEIS Comment Period

- 44 EPA
- 45 Harborview Hospital



King County

Department of Transportation

Metro Transit Division

Design and Construction Section

201 S. Jackson Street

KSC-TR-0435

Seattle, WA 98104-3856

December 13, 2010

Stephanie Van Dyke, Development Director

Seattle Housing Authority

120 Sixth Avenue North

P.O. Box 19028

Seattle, WA 98109-1028

Subject: King County Metro Transit Comments on Yesler Terrace Draft EIS

Dear Ms. Van Dyke:

We appreciate the opportunity to comment on the Yesler Terrace Draft Environmental Impact Statement. The information on our transit system is accurately reflected in the document, and the transportation analysis successfully addresses transit issues by evaluating key impacts and identifying appropriate mitigation measures.

1

The Transportation Mitigation Measures section of the SDEIS acknowledges the potential for adversely impacting transit service, stating "Increased ridership from the project could increase loads on Route 27 to unacceptable levels." It also identifies two possible methods for mitigating these impacts: "Increased service on the Route 27 would alleviate the loading. Another idea that has been considered... is to divert the Route 3/4 from James Street to Yesler Way to avoid congestion at the I-5 interchange." (Page 3.13-46).

2

Either of these mitigation measures could mitigate long-term impacts from the project. Of the two, re-routing Route 3 & 4 from James to Yesler street would better serve the interests of the proposed Yesler Terrace redevelopment. This is because the combined 3/4 route (which is partially subsidized by the City of Seattle) has significantly more service frequency and passenger capacity (243 daily including 78 peak period trips compared to Route 27's 68 daily trips of which only 26 are in the peak period). Routes 3 & 4 combined have a 7.5 minute headway, one of the most frequent in Metro's system, resulting in over 4 times the daily passenger capacity. Route 3/4's quiet, zero-emissions, fixed guideway electric trolleys would provide the high quality, visible service that is appropriate for the large scale, mixed-use transit oriented development project proposed for Yesler Terrace.

3

The DEIS states that "Seattle Housing Authority could be a partner with other agencies pursuing funding opportunities, particularly new federal grants in which low income housing and sustainable development increase a project's chance of funding." Metro would welcome the opportunity to partner with SHA in pursuing such funding, possibly in conjunction with other beneficiaries that would benefit from a less-congested trolley route whose support could increase funding competitiveness.

Thank you for the opportunity to comment on this SDEIS, and we look forward to working with you on solutions that mitigate impacts to transit and improve public transportation service to the project.

Sincerely,

Mike Usen, AICP
Senior Environmental Planner

Response to DEIS Letter 1
King County Metro

1. Comment acknowledged.
2. Comment noted. Metro's stated preference for transit mitigation has been incorporated into **FEIS Section 3.13, Transportation**.
3. Comment noted. Metro's stated support for partnering with SHA for funding of transit-oriented solutions has been incorporated into **FEIS Section 3.13, Transportation**.

MEMORANDUM

December 13, 2010

TO: SEPA Responsible Official
Stephanie Van Dyke
Development Director
Seattle Housing Authority
PO Box 19028
120 6th Ave. North
Seattle, WA 98109-1028

NEPA Certifying Officer
Dannette R. Smith
Acting Director
City of Seattle Human Services Department
700 5th Ave., Suite 5800
PO Box 34215
Seattle, WA 98124-4215

FROM: Diane Sugimura, Director
City of Seattle Department of Planning & Development
700 5th Ave., Suite 2000
PO Box 34019
Seattle, WA 98124-4019

SUBJECT: City of Seattle Comments on the Yesler Terrace Redevelopment Draft Environmental Impact Statement

The City of Seattle appreciates the opportunity to comment on the Draft Environmental Impact Statement for the proposed redevelopment of Yesler Terrace.

The following is a compilation of comments from City departments. Seattle Public Utilities will send comments in under separate cover. Contact information is listed for each department and staff are happy to provide additional information or clarification.

Department of Planning & Development

Chapter 1: Summary

- p 1-10. The row on “Plants-Built and Vegetated Area” is confusing. It suggests that Alternatives 1 through 3 would all result in the same built area and vegetated area. Page 3.4-8 explains this by stating that building coverage would be the same in all alternatives, and that the different intensities would be achieved through height, not coverage. But in several places, the alternatives are projected to provide different amounts of open space (public, semi-private, and private). Also, just below this line, tree removal is expected to be greater in the denser alternatives (presumably because buildings will take up more room). Greater clarification and consistency on these points would be helpful. 1
- p 1-10. Given that DEIS indicates that redevelopment could displace up to 12 exceptional trees and reduce overall canopy cover from 22% to 5%, more detailed consideration of alternatives and mitigation is needed – it’s not enough to say that tree removal is not significant because this is a “highly urbanized” site. In particular, careful building placement and good site design could substantially reduce impacts to existing trees, particularly exceptional trees, as well a planting new trees. Further, it would be 2

<p>helpful to have projections of canopy 10-15 years after redevelopment, not just the low point. Between Stormwater Code requirements, new landscaping standards, and site-specific planting opportunities (western slope toward I5, southern slope toward Little Saigon), eventual canopy could be higher than existing conditions, helping to mitigate the loss. SHA’s High Point redevelopment may offer a good model for preservation of exceptional trees.</p>	2 cont
<ul style="list-style-type: none"> • Gardening (individual or P-Patch) should be recognized as part of socioeconomic impacts and/or environmental justice. Between P-Patches and backyard gardens, YT residents have a relatively high rate of gardening, and losing those areas would have social/health/economic impacts. This should be acknowledged more directly. Urban agriculture is addressed as a possible mitigation measure for climate change on p 1-42, but it would be more appropriate to address this in socioeconomics and/or EJ. Full replacement of existing ag area should be strongly considered; some of the available farm plots should follow the P-Patch model, while semi-private rooftop gardens (without the P-Patch waiting lists) could guarantee access for interested very low income residents. In the stormwater section, the DEIS assumes 20-50% green roofs for alternatives 1-3; this could allow a generous amount of rooftop gardening. 	3
<ul style="list-style-type: none"> • p 1-41. Mitigation for removal of exceptional trees needs more than proposing replacement with “one or more new trees.” Should add building placement as a mitigation strategy to reduce tree removal, and should specify that replacement will include trees that reach similar stature at maturity. Recognize that the improved stormwater facilities together with newly planted trees will help offset lost ecological function. 	4
<p>Chapter 2: Description of the Proposal and Alternatives</p>	
<ul style="list-style-type: none"> • p 2-51. Phasing priorities should include “minimize disruption to tenants – maximize on-site relocations.” Also, phasing should include consideration of potential conflicts between aboveground/belowground infrastructure. Underground utilities constrain options for green stormwater infrastructure, so they should be phased and clustered strategically. 	5
<ul style="list-style-type: none"> • p 2-56. It would be helpful to have a description of redevelopment alternatives at the beginning of Chapter 2. 	6
<ul style="list-style-type: none"> • p 2-61. Rainwater harvesting should be included in list of potential GSI facilities. (See more discussion below). 	7
<p>Chapter 3: Affected Environment, Impacts, Alternatives, Mitigation Measures, and Significant Unavoidable Impacts</p>	
<ul style="list-style-type: none"> • p 3.1-12. “There is a potential for additional slope movement in this area of the site, which could be triggered by...an increase in water levels caused by extended rainfall events or changes in drainage conditions...” Unstable slopes and perched groundwater suggest that infiltration opportunities might be limited. This constraint is likely to shape 	8

which GSI practices are widely used (green roofs, trees, rainwater harvesting, lined bioretention?) and which are less used (permeable pavement, bioretention).

- p 3.3-6. “GSI flow control would be provided by bioretention cells, bioretention planters and permeable pavements.” It makes sense that the SvR analysis focused on these practices since they are the standard workhorses of the GSI toolkit, but they may not be adequate or appropriate at Yesler Terrace. The combination of unstable slopes and a perched water table suggest that large-scale infiltration may not be possible; if bioretention cells have to be lined, the flow control benefit is greatly reduced. The text (here and in subsequent alternatives) should give greater emphasis to green roofs, trees, and rainwater harvesting. | 9
cont
- p 3.4-8. “The addition of the new landscaping and trees provided as mitigation for tree removal would increase tree canopy coverage and to support Seattle's 30-year goal of 20 percent coverage for all sites zoned as multi-family residential or 15 percent coverage for all sites zoned commercial/mixed use.” This sentence is not clear; please clarify. The proposal as it’s currently presented suggests a net loss in canopy cover or mitigation of impacts at best – mitigation of canopy loss does not necessarily mean increased canopy coverage. | 10
- p 3.4-10. The table showing huge decreases in tree canopy cover (22% down to 4.3%) doesn’t seem to tell the whole story. SHA should revise table to include expected canopy cover after development and growth of new trees. For housing units, the document focuses on the net gain over time (rather than temporary reduction during construction). A similar approach would be appropriate for trees. | 11
- p 3.4-10. The table showing huge decreases in tree canopy cover (22% down to 4.3%) doesn’t seem to tell the whole story. SHA should revise table to include expected canopy cover after development and growth of new trees. For housing units, the document focuses on the net gain over time (rather than temporary reduction during construction). A similar approach would be appropriate for trees. | 12

Appendix G (Plants and Animals) suggests that tree removal estimates are based on a simple overlay of Alternatives 1-4 over the existing tree inventory. This leaves out 2 important options:

- Site design/building placement. While it’s inevitable that some trees will have to be removed if lot coverage increases during redevelopment, careful building placement would help minimize tree removal.
 - Significant new plantings. In addition to the required street trees and landscaping, the site presents opportunities for extensive plantings to the south and west. Reforestation of the steep slope between YT and Little Saigon would help stabilize the soil and could contribute to overall site canopy (although plantings would have to be balanced with views, light and access to P-Patches). Similarly, dense plantings on the I-5 side of Yesler Terrace (WSDOT property?) would increase canopy cover in the area while helping to mitigate freeway noise and, possibly air pollution, to the site.
- p 3.9-50. “SMC 25.11.070 provides guidance for tree protection...” and “SMC 25.11.080 provides guidance for tree protection...” Replace “guidance” with “requirements” | 13

- p 3.9-51. Edit top paragraph as follows: “These new and retained trees would contribute to the City’s overall 30-year canopy coverage goals.” | 14
- p 3.9-54. In talking about the public benefit requirements for street vacation, other options could include hill climbs and tree planting on the south and west slopes. | 15
- View from I-5 (p. 3.10-25). There is only one north bound view from I-5. There should also be multiple north and south bound views. | 16
- In several instances (e.g. Harborview Viewpoint, 9th and Jefferson viewpoint), the narrative discusses views of Mt. Rainier. However, none of the accompanying **photos show** Mt. Rainier because they were taken on an overcast day. This diminishes the significance of the view and the reason why the view corridors were implemented. Adequate decision making would need this basic information. This same problem occurs when discussing views of the Cascades (e.g. p. 3.10-31). | 17
- The narrative often minimizes the extent of the impacts. For example, the discussion of views from 9th and Jefferson states that the alternatives “partially obscure” the views of Mt. Rainier when, in fact, the alternative mostly obscures the mountain. | 18
- p. 3.10-106-113. Shadow impacts do not analyze impacts on proposed smaller open spaces within the Yesler Terrace redevelopment. | 19
- p 3.13-43. The “Sustainable Transportation Features” section is very general – there are specifics elsewhere in the EIS, but it would help if a few were referenced here. The text refers to a 52-item sustainability checklist, and says that Yesler plans would include almost every element – perhaps include a few bulleted examples. | 20
- p 3.17-1. Again, farming should be included as part of Environmental Justice section – relates to access to healthy (and affordable) food. (See comments relating for Chapter 1). | 21
- 3.17-2. “...no current land uses that pose an environmental health risk...,” then mentions adjacency to I-5. I-5 impacts are discussed elsewhere; should be included in this section as well. | 22
- The DEIS refers to future review for impacts – one such example is for wind analysis “*at the time of individual permit applications*” (page 3.18-3). For the preferred alternative in the FEIS, provide more detailed analysis of wind impacts and mitigations. | 23

Transportation Technical Report

Page 19, Table 4: In general, tables and text identifying poorly-performing intersections should indicate those intersections operating at LOS E as well as LOS F, such as the Broadway/E Madison Street intersection during the PM peak hour. | 24

Page 19, Table 4: Why does the level of service at the 14 th Avenue S/Rainier Avenue S/S Jackson Street intersection improve so substantially from 2010 to 2030?	25
<ul style="list-style-type: none"> • Pages 23-24, Table 6: Footnotes in this table should be edited/checked. Under the “# Buses/Weekday” column, the heading has a footnote #4. Based on the footnotes at the end of the table, this should be referring to footnote #5 (after those footnotes are renumbered – see below). (This comments applies to both pages of Table 6.) • Under this column, for Rte 99, the response is “n/a,” with a reference to footnote #5. This should be footnote #6, after renumbering. • Footnote #2 should read “calculated from,” not “calculated form”. • The footnotes should be renumbered, as there are two #3s. 	26
Page 28, fourth paragraph: The pedestrian improvements that will be made on 9 th Avenue and South Main Street should be described in more detail. Also, Bailey Gatzert is misspelled.	27
Page 29, Figure 13: The north side of Yesler Way between Broadway and I-5 is shown as a bicycle lane on this figure, but the text (page 28) indicates that this segment is to be marked as a sharrow.	28
Page 37, Table 10: The anticipated shifts in resident mode splits are somewhat surprising, and should be further discussed. In particular, carpooling is expected to decline from 8.7% to 1.4% between 2010 and 2030, walk trips are expected to increase from 26.1% to 63.1%, bicycling is expected to increase from 0.6% to 6.7%, and transit is expected to decline from 39.5% to 18.8%, despite the addition of the Streetcar and the opening of the Capitol Hill light rail station. What likely accounts for these substantial shifts?	29
Page 38, Section 3.2.5, first paragraph: The reference to Appendix A should be to Appendix C.	30
Page 41, first paragraph following bullets: The reference to Appendix B should be to Appendix D.	31
Page 43, Section 3.4: Further documentation is needed of trip assignments within the Yesler Terrace site, particularly at the study area intersections.	32
Page 51, second paragraph: The second sentence should begin, “Many of the intersections...”	33
Page 51: As noted above, level of service E intersections also should be identified, both in the text and in Tables 17 and 18.	34
Pages 52-53, Tables 17 and 18: A column providing the No Action analysis results should be provided in each table.	35
Page 54: The Street Vacation section should note that street vacation review, including an analysis of street vacation policies, is an independent process from the Environmental Impact Statement that is part of SEPA review; a discussion of any of the street vacation policies in the	36

EIS is provided for information, not as part of the formal street vacation analysis. It might be appropriate to move the street vacation policy analysis to an appendix, rather than having it in the body of the EIS.	36 cont
Page 54, second paragraph: The first sentence is confusing (“Alternatives 2 and 3 propose to vacate 9 th Avenue between Yesler Way and 9 th Avenue”).	37
Page 54, third paragraph: The last sentence notes that “parking along the streets to be vacated and not replaced will be accommodated by on-site parking within the redeveloped area”. Would this in effect be a replacement of public parking with private parking, or would the on-site parking be publicly available?	38
Page 55, second paragraph: The fifth sentence is missing a word (“Most of the work on the Streetcar is planned <u>to</u> occur between the existing curbs...”).	39
Page 57, last paragraph: The text notes that “a desirable volume of less than 3 vehicles per minute (180 vehicles per hour) is the target for a two-lane residential street; 1 vehicle per minute (60 vehicles per hour) for a woonerf”. What are these volume standards based on?	40
Page 58, Table 20: The expected peak volumes of the residential streets are shown to be below the desirable maximum volumes of 180 vehicles per hour in the peak direction. Would any of these be likely to meet the woonerf desirable volume threshold of 60 peak direction vehicles per hour?	41
Page 60, first paragraph: The first sentence seems awkward. Wouldn’t it be simpler and clearer to state that higher traffic volumes tend to result in a higher number of collisions? Or is the sentence meaning to say something else?	42
Page 60, last bullet: The text suggests that adequate sight lines between motorists and pedestrians need only be provided “where conflicts cannot be avoided”. Adequate sight lines always should be provided, and, in part, are implemented through sight triangle requirements of the Land Use Code.	43
Page 64, last full paragraph: The reference to a majority of trips (fifth sentence) should be to a plurality of trips.	44
Page 65, Section 3.11, third paragraph: As Yesler Terrace is outside of the downtown Traffic Control Zone, why is the prohibition of very large trucks in this Zone relevant?	45
Page 65, Section 3.12.1: (1) More information is needed on the derivation of the varying parking demand rates for the residential units. Are these rates based on empirical data, or information from the existing Yesler Terrace units? (2) Why not use unit-specific parking rates (following additional supporting documentation) for all the alternatives, instead of deriving a generic parking demand rate based on Alternative 2?	46

Page 66: The statement that “overall parking demand on the site would be much lower on a Saturday because there would be very few office employees parked at the site” is not really true for the Existing Zoning alternative (only 20,259 sf of office, the same as the No Action Alternative).	47
Page 67, Table 24, footnote c: The vehicle per unit rate probably should be 0.85, not 0.60.	48
Page 70, Section 4: (a) The potential parking impacts of the East of Boren site should be analyzed in this chapter. What is the likely parking demand and how does that compare to the proposed supply? (b) What are the likely non-motorized and transit impacts for the potential East of Boren development?	49
Page 71: How are the future driveways for development in the East of Boren sector expected to operate during peak hours?	50
Page 72, Section 5.1, sixth bullet: The community also should be notified if sidewalk closures are required.	51
Page 72, “Off Site Intersection Improvements”: Potential mitigation at LOS E intersections should be identified here.	52
Page 72, Construction employee parking areas: Should be specified as being “off street”.	53
Page 76, Table 28: (a) It is quite likely that TMPs for Yesler Terrace office buildings will need additional elements to achieve the TMP goals identified on page 75. In particular, transit subsidies should be provided. A review of the CTR programs mentioned on page 37 could suggest other elements that might be appropriate for these future developments. (b) The heading at the top of the table identifies the Director’s Rule as 19-2009; it is actually 19-2008. (c) The footnote refers to numbers in the right-hand column; these are in the left-hand column.	54
Page 78, Section 6: (a) Any significant impacts related to LOS E intersections should be identified here. (b) More information is needed to be able to conclude that the mitigation proposed at the LOS F intersections (described in Table 27), other than Broadway/E James Street, would reduce the impacts of Yesler Terrace traffic to a less-than-significant level.	55
Appendix B, “Yesler Terrace On-Street Parking Utilization Study” table: What do the shaded lines indicate?	56
Appendix C, “Trip Generation Summary, No Action Alternative”: The PM peak person trips for the office use look high (about 5.4 trips/1,000 sf), probably because the ITE equation was used. For this size of office use, the ITE rate likely would produce a more accurate projection than the equation. (This also is the case for the “Existing Zoning” Alternative.)	57
Appendix C, “Trip Generation Summary, No Action Alternative” (and other alternatives): It is not clear how the internal trip percentages were used to reduce person trips by land use; the reduction doesn’t seem to be quite proportional (e.g, the daily high-rise apartments person-trip	58

estimate is 2,830, from the “total person trips by all modes” table; subtracting 8.2% internal trips (from Table 9) from this amount leaves 2,598 person trips; but the “external trips only” table shows 2,660 daily trips for this use).

58
cont

General Comments

- Urban form: The proposal places the high rise buildings at the site’s edges and preserves the community center and playground at the neighborhood’s center. The EIS mentions but does not illustrate that smaller open spaces would be located in each of the geographical sectors. | 59
- Depicting the secondary open spaces are particularly important as they would be impacted by the large buildings proposed. | 60
- The Draft EIS neglects an examination of “bulk” and “scale”. The analysis of height is two-dimensional (shows cross sections) and does not suffice to address bulk. The FEIS should include axonometric drawings to depict bulk and scale issues for the preferred alternative. | 61
- Minor references are made to re-using building materials. SHA should work to maximize recovery and re-use of building materials. | 62
- Non-residential buildings (and larger residential buildings) should not have design/build HVAC systems after building design is permitted. HVAC mechanical systems with acoustic reports recommending methods to meet noise ordinance should accompany construction applications, not follow after construction permit issuance. | 63
- FEIS should analyze potential adverse impacts to views from SEPA Scenic Routes and from Harborview Hospital Viewpoint (SMC 25.05.675P) | 64

**For additional information, contact:
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Response to DEIS Letter 2
Seattle Department of Planning & Development (DPD)

1. Comment acknowledged. In general, as the density increases in the alternatives, the amount of open space, both public and private, increases. Density increases for the alternatives occur through high-rise building footprints replacing mid-rise building footprints; high-rise buildings typically have slightly smaller footprints than mid-rise buildings. The different alternatives do have different building footprints and open space. Alternatives 1 and 1A share the same road grid, which is different than Alternatives 2 and 3. Some reconfiguration of building orientation and footprints occur due to the different optimal floor plate sizes for mid-rise and high-rise buildings. These factors contribute to the different open space areas and tree removal impacts.

There are differences in building footprints, roadway alignments and the amount of parks and open spaces provided amongst the alternatives (i.e. different amounts between Alternatives 1 and 3); therefore, the differences between these alternatives is reflected in the different impacts to vegetation/built area, tree impacts, tree canopy impacts, and wetland impacts, as discussed in DEIS and **FEIS Section 3.4**.

DEIS Table 3.4-3 shows the percentage differences between the DEIS Alternatives 1-4. While this table indicates the same percentage breakdown for Alternatives 1-3, the detailed data provided in DEIS Appendix A and **FEIS Appendix A** provides the actual acreages and reveals differences in the amounts of vegetated versus built environment assumed under each alternative. The acreage amounts of built versus vegetated areas assumed under each alternative (as detailed in **FEIS Appendix A**) is summarized in Table 6-1 provided below:

Table 6-1
COMPARISON OF THE POST-DEVELOPMENT SITE BREAKDOWN
UNDER THE PREFERRED AND DEIS ALTERNATIVES 1-4
ON THE FEIS SITE¹
(ACRES)

Type of Area	Preferred Alternative	DEIS Alternative					
		1	1A	2	3	4	No Action
Built Areas ²	29.01	26.67	26.47	26.84	26.72	26.96	21.1
Vegetated Areas ³	9.87	9.86	10.06	9.86	9.81	9.56	15.4

Source: CollinsWoerman, 2011.

¹ The data provided in Table 6-1 is a summary of detailed vegetation and built area information provided in **FEIS Appendix A**.

² Built areas include building footprints, streets, sidewalks, parking and hardscaped open space.

³ Vegetated areas include landscaped and natural open space areas.

2. The estimated existing tree canopy impacts data presented in DEIS Table 3.4-6 for the DEIS Alternatives 1-4 has been revised from what was presented in the DEIS. Changes to this data are a result of a more refined analysis of the existing vegetation and potential

grading activities associated with proposed redevelopment designs. This updated information is provided in **FEIS Chapter 4, Updates to the DEIS Alternatives**.

While the existing tree canopy is identified to be 23.5 percent, 5.2 percent were determined to be “exceptional” as defined by the City, 28.6 percent were determined to be “valuable”¹ and 66.3 percent were determined to be neither exceptional nor valuable trees. As noted in the DEIS and **FEIS Section 3.4**, it is important to note that the 66.3 percent of the existing tree canopy could be removed over time to ensure the health and safety to the public as they were evaluated and determined to be unhealthy or hazardous (as detailed in the *Yesler Terrace Tree Survey* provided in **FEIS Appendix D**).

As discussed in **FEIS Section 3.4**, under the Preferred Alternative, the building layout and open space areas have been configured such that more existing exceptional trees, valuable trees and existing tree canopy would be preserved than is assumed under DEIS Alternatives 1-4.

In response to your comment, a new tree canopy analysis has been completed for this FEIS that calculates the projected amount of tree canopy coverage assumed after buildout is completed. The methodology used to perform this tree canopy analysis is detailed in **FEIS Appendix D**. This new analysis is provided in **FEIS Section 3.4**. This analysis concludes that the 25-year projected tree canopy coverage would be greater than 20 percent under DEIS Alternatives and would be highest under the Preferred Alternative (25.2 percent)

Finally, please note that the estimated exceptional and valuable tree impacts and existing tree impact data presented in DEIS Table 3.4-4, 3.4-5 and 3.4-6 for the DEIS Alternatives 1-4 has been revised from what was stated in the DEIS. Detailed grading plans were not available at the time of the analysis, and impacts to exceptional trees were determined based on the estimated horizontal extent of impacts to root zones. The analysis completed for this FEIS took into account grading plans, which allowed for both horizontal and vertical impacts to root zones. This updated information is also provided in **FEIS Chapter 4, Updates to the DEIS Alternatives**.

3. The Environmental Justice section is limited to analysis of the redevelopment’s potential to result in disproportionately high and adverse human health impacts to minority and/or low income populations and would not, therefore, include urban agriculture issues.

As stated in DEIS Section 2 and 3.5, Sustainable Design is a guiding principle for Yesler Terrace in the approach to design of the neighborhood as a whole, and potential sustainable features are identified including urban agriculture. The DEIS states that opportunities could be created as part of redevelopment.

¹ “Valuable trees” is not a term that is included in the City’s tree preservation regulations, nor do City regulations require that such trees be retained. However, “valuable trees” have been defined and assessed in the DEIS and this FEIS analysis in order to further describe the condition of the onsite trees and their potential to be preserved (see **FEIS Appendix D** for details).

As stated in **FEIS Section 3.4** and **FEIS Section 3.15.1.2**, new P-patch Community Gardens could be provided onsite to offset the loss of the existing P-patches onsite. Specific locations and amounts of P-Patch area to be provided would be determined during future design and permitting.

4. SMC 25.11.090 states that exceptional trees and trees over 2 feet in diameter that are removed in association with development shall be replaced by one or more new trees. Because trees are important to the ecosystem and the health, safety, and welfare of the public and because it is anticipated that regulatory requirements for trees will become more prevalent in the future, options to mitigate beyond the 1:1 ratio would be determined at the time of final design. A mitigation measure is listed that indicates that replacement trees should include species that reach similar stature at maturity and/or species that support ecosystem functions and Low Impact Development design criteria (see **FEIS Section 3.4.3**).

The FEIS recognizes that mitigation and improved stormwater facilities would help offset impacted ecological functions resulting from project impacts. A new mitigation measure has been added to **FEIS Section 3.4.3**.

Please also refer to the response to Comment 2 of this letter.

5. Comment acknowledged. The following sentence has been added as a bullet under in DEIS Section 2.8.6, Development Phasing/Assumed Buildout Date, under the subheading, SHA Rental Housing: "Maximize onsite relocations to minimize disruption to existing tenants." This addition is reflected in **FEIS Chapter 7, Errata**.
6. Comment acknowledged. Potential conflicts between underground utilities and GSI would be considered during redevelopment phasing.
7. Comment acknowledged. A brief description of the DEIS redevelopment alternatives is included in **FEIS Chapter 2**.
8. Rainwater harvesting would be considered as an option for green stormwater infrastructure (GSI). Rainwater harvesting was not included in this EIS analysis. If rainwater harvesting is implemented and used for water reuse, then that total volume of runoff could be removed from the stormwater system potentially reducing overall flows significantly. This is reflected in **FEIS Chapter 4, Updates to the DEIS Analysis, Green Stormwater Infrastructure**.
9. It is acknowledged that slide-prone areas are located along the southern boundary of the SW Sector on DEIS Site. However, most of the proposed redevelopment activities would not be located within or adjacent to these areas. Perched groundwater, where encountered, is typically deeper than 15 feet below ground surface. Therefore, stormwater infiltration could be employed over a majority of the site. However, use of infiltration systems within and near the slide-prone areas would be avoided if it could adversely affect slope stability in the area. The DEIS and FEIS stormwater analyses conservatively assumed no infiltration in existing soils (see DEIS Section 3.3, Water Resources, DEIS Appendix F and **FEIS Section 3.3** and **FEIS Chapter 4, Updates to the DEIS Analysis, Green Stormwater Infrastructure**).

10. A bioretention liner would be provided for areas adjacent to critical areas (i.e. steep slopes. The preliminary stormwater modeling in the DEIS and this FEIS assumed no infiltration in existing soils, which is similar to a lined system. This modeling was used to calculate the approximate size of bioretention facilities that would be required for the project (see DEIS Section 3.3, Water Resources, DEIS Appendix F and **FEIS Section 3.3, Water Resources** and **FEIS Chapter 4, Updates to the DEIS Analysis**, for details).

See the response to Letter 2, Comment 9, regarding limitations on the use of stormwater infiltration in certain areas of the site.

11. The subject sentence is updated to read: "The addition of new trees would mitigate for exceptional trees and/or tree canopy lost and support Seattle's 30-year goal of 20 percent coverage for all multi-family residential sites, 15 percent coverage for all commercial/mixed use sites, or 25 percent for newly developed parks." This is reflected in **FEIS Chapter 7, Errata**.

Please also see the response to Comment 2 of this letter.

12. Please see the response to Comment 2 of this letter.
13. Comment acknowledged. The changes are reflected in **FEIS Chapter 7, Errata**.
14. Comment acknowledged. This change is reflected in **FEIS Chapter 7, Errata**.
15. Comment noted. Hill climbs and tree plantings could also be provided as a public benefit for proposed street vacations under the Preferred Alternative.
16. Comment acknowledged. As per email correspondence with the City of Seattle, Department of Planning and Development dated January 7, 2011, only one additional viewpoint was determined to be necessary from I-5. This viewpoint (Viewpoint 18) has been added to the analysis in this FEIS to depict the view of the Yesler Terrace site for motorists traveling southbound on I-5. This viewpoint is depicted and analyzed for the DEIS Alternatives in **FEIS Chapter 4, Updates to the DEIS Analysis** and in **FEIS Section 3.10** for the Preferred Alternative.
17. Comment acknowledged. For photosimulations where mountains were referenced in the text, but not necessarily visible in the figure, these have been updated with sketched-in representations of the Olympic Mountains, Cascade Mountains and/or Mount Rainier. See **FEIS Chapter 4, Updates to the DEIS Analysis**, for the updated photosimulations completed for the DEIS Alternatives and see **FEIS Section 3.10.1.2** for the photosimulations prepared for the Preferred Alternative.
18. Comment acknowledged. The analysis related to Viewpoint 2 (9th Avenue and Jefferson Street) and Viewpoint 4 (Harborview Viewpoint) has been corrected to more accurately describe the nature of the change that would occur under the view of the redeveloped site. These changes are reflected in **FEIS Chapter 7, Errata**. See also the response to Comment 17 of this letter for further information on photosimulations.

19. Comment is noted. Since there is flexibility within this Planned Action EIS for building locations to move within the sectors, which would ultimately influence where smaller and adjacent open spaces would be located, analysis of shadow impacts to these smaller open spaces is considered premature at this stage in the planning process. However, siting and design criteria have been developed for the location of high-rise buildings to address how shadow/shade impacts could be minimized to the smaller onsite open space areas. These criteria have been incorporated into the analysis of the Preferred Alternative and are included in **FEIS Section 3.10.3**.
20. Comment noted. The Sustainable Transportation Features section was included in the DEIS to show that the project would meet the City's policy objectives. The Sustainable Transportation Checklist (see Appendix E of the Transportation Technical Report; Appendix N of the DEIS) is very detailed and presents 52 criteria related to land use planning, urban form, safety and security considerations, site planning, building placement, building entrance design, parking supply and connections, internal transportation network, passenger pick-up and drop-off, pedestrian and cyclist routes, transit facilities, parking attributes, loading, site grading, internal road design, pedestrian facilities, signage, transit shelters, bicycle facilities, and landscaping. A summary of this list was not included in the text so as to not imply a preference of one element over another—all elements work together to create the sustainable environment.
21. Please refer to the response to Comment 3 of this letter.
22. Comment acknowledged. This change is reflected in **FEIS Chapter 7, Errata**.
23. Specific building designs, locations, and adjacent topography would ultimately influence the wind patterns onsite and in the immediate vicinity. Siting and design criteria have been established for high-rise buildings under the Preferred Alternative to minimize wind impacts to pedestrians and open space areas and are included in **FEIS Section 3.18**. As well, a site specific wind analysis could be required at the time of permit applications for individual projects/buildings to further evaluate potential pedestrian wind impacts and determine whether specific mitigation would be necessary.
24. Additional assessment addressing existing LOS E intersections is provided for the DEIS Alternatives in **FEIS Chapter 4, Updates to the DEIS Analysis**, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
25. As described on page 3.13-3 of the DEIS and in Section 2.1.2 of the Transportation Technical Report (DEIS Appendix N), transportation infrastructure improvements planned as part of the First Hill Streetcar project were assumed to be in place under future baseline conditions. One modification proposed by the Streetcar project is elimination of the southbound movement on 14th Avenue S at the 14th Avenue S/Rainier Avenue S/S Jackson Street intersection; this would improve future level of service compared to existing conditions. A table note has been added to clarify this, as noted in **FEIS Chapter 7, Errata**.
26. Corrections are noted in **FEIS Chapter 7, Errata**.
27. The City of Seattle Pedestrian Master Plan identifies locations throughout the city that are of high priority for pedestrian improvement, as determined through a prioritization

methodology that is described in the Plan, but does not specifically identify what the improvements may be. Text has been added to **FEIS Section 3.13.3** to clarify that the specified locations have been identified in the Pedestrian Master Plan as high priority areas for pedestrian improvement.

The spelling of Bailey-Gatzert has also been corrected. The revision is noted in **FEIS Chapter 7, Errata**.

28. The bicycle features shown in the legend of Figure 13 were incorrectly switched in the DEIS. A corrected Figure 13 and updated description of completed bicycle projects in the site vicinity are provided in **FEIS Chapter 7, Errata**.
29. The mode of travel data for residential uses presented in Table 10 were provided for information, and primarily to show that the percentage of drive alone trips is expected to decrease in the future. The data were also used to determine the relationship between pedestrian and bicycle travel modes. Future mode of travel estimates are from the Puget Sound Regional Council and reflect a modeled condition based on land use and other factors. The mode split assumptions were not explicitly used to derive vehicle trips. Through discussions with staff at DPD, it was decided that “High-Rise Apartment” trip rates should be used to estimate the residential trips. These trip rates reflect a condition where many residents already walk or ride transit. A small adjustment was taken to reduce the drive alone trips since the Puget Sound Regional Council data did show that trips by that mode would be very low.
30. Correction is noted in **FEIS Chapter 7, Errata**.
31. Correction is noted in **FEIS Chapter 7, Errata**.
32. New trip assignments are provided for the Preferred Alternative in **FEIS Section 3.13, Transportation**. In addition, a detailed trip assignment showing turns at near-site intersections is included for the Preferred Alternative.
33. Correction is noted in **FEIS Chapter 7, Errata**.
34. Additional assessment addressing projected LOS E intersections for the DEIS Alternatives is provided in **FEIS Chapter 4, Updates to the DEIS Analysis** and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
35. A column summarizing No Action LOS is provided for comparison to the Preferred Alternative LOS in **FEIS Section 3.13, Transportation**.
36. Clarification that the street vacation process is a separate process from the EIS is provided in **FEIS Chapter 7, Errata**. However, as street vacation is part of the proposal, it is appropriate to assess the consistency of the proposal with City street vacation policies as part of the impact analysis.
37. Text has been modified to say “8th Avenue between Yesler Way and 9th Avenue/E. Fir Street”, as shown in DEIS Figure 2-7. Correction is noted in **FEIS Chapter 7, Errata**.

38. Parking provided onsite would be private, but would serve area residential and commercial development similar to the existing publicly-available parking.
39. Correction is noted in **FEIS Chapter 7, Errata**.
40. The desirable volume for woonerfs is based on information provided in a research paper entitled, *How Much is Too Much Traffic* (ITE Journal, May 1982). That paper presented the relationship between traffic flow and the environmental quality on a residential street. It rated the quality based on the exposure to traffic in terms of vehicles per minute, and suggested that exposures of 1.0 vehicle per minute or less would represent a “good” environment. This level of traffic (60 vehicles per hour) was presented as the desirable volume for the lowest class of street. A rate of three times this rate was selected for the next highest class, since it could be used to collect traffic from several woonerfs. A footnote clarifying this has been added, as noted in **FEIS Chapter 7, Errata**.
41. The project information is not yet detailed enough to estimate the peak hour traffic volumes on the woonerfs. However, a review of potential access locations and estimated parking spaces to be served in various areas shows that woonerfs are likely to have very low volumes.
42. Text has been modified as suggested, as noted in **FEIS Chapter 7, Errata**.
43. Text has been modified to clarify that adequate sight lines should always be provided, as noted in **FEIS Chapter 7, Errata**.
44. Text has been modified to clarify that the largest proportion of trips would be generated by the Northwest Sector, as noted in **FEIS Chapter 7, Errata**.
45. The existence of the Traffic Control Zone downtown is one of two reasons that most companies do not use full-size semi-tractor trailer for downtown deliveries; the second is a general predominance in the area of tight maneuvering spaces. For these reasons, it is reasonable to expect that companies would not use full-size semi-tractor trailer trucks for delivery to Yesler Terrace, as it is located in the downtown vicinity.
46. Please see **FEIS Chapter 5, Key Topics**, for further information on parking.
47. The discussion of the difference between office-generated parking demand on weekdays and Saturdays is presented to explain why the weekday parking demand is expected to be higher for the higher density alternatives—because the Saturday reduction in office-generated parking demand would be greater than the Saturday increase in retail-generated parking demand—and thus represents the most conservative scenario for parking analysis. While it is true that the office-generated parking demand would have far less effect under the Existing Zoning alternative (Alternative 4), the overall parking demand under this alternative is also expected to be much lower. The parking analysis presented in the DEIS reflects ‘worst case’ parking demand that is reflected in the higher density alternatives.
48. Correction is noted in **FEIS Chapter 7, Errata**.

49. Additional information about the expected parking, non-motorized, and transit impacts for the East of Boren sector is provided in **FEIS Chapter 4, Updates to the DEIS Analysis** and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
 50. Additional information about the expected site access and circulation impacts for the East of Boren site is provided for the DEIS Alternatives in **FEIS Chapter 4, Updates to the DEIS Analysis**, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
 51. The DEIS lists “Sidewalk and bus stop closures and relocations” as elements to include in the *Construction Management Plan*. This has been updated to clarify that non-motorized detours would be provided when needed and an additional element to “notifying community if sidewalk or bus stop closures are required” has been added. These revisions have been added to **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
 52. Additional assessment addressing projected LOS E intersections is provided in **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
 53. Clarification is provided in **FEIS Chapter 7, Errata**.
 54. Corrections to table are noted in **FEIS Chapter 7, Errata**. The following mitigation measure has been added to FEIS Transportation Section 3.13: "Require tenant to offer transit pass subsidy to employees who work at the site on a case-by-case basis."
 55. Additional assessment addressing projected LOS E intersections is provided in **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
- A “mitigated LOS” summary is provided in for the Preferred Alternative in **FEIS Section 3.13, Transportation**.
56. The lines in the parking utilization summary had been shaded as part of internal review during the DEIS development that should have been removed.
 57. The trip generation calculation for the No Action Alternative did apply the trip equation to determine the PM peak hour trips. However, the analysis resulted in the existing site generating 31 PM peak hour vehicle trips, which is reasonable given the number of vehicles observed parked near the existing office uses. Had the average trip generation rate from ITE *Trip Generation* been applied (1.49 trips per 1,000 SF of office space), it would have resulted in 30 PM peak hour vehicle trips. The difference is negligible, and would not change the conclusions in the DEIS.
 58. The internal trip percentages are independently calculated for each alternative, and are based on the trip pairs that could occur among various land uses. For example, a residential use would generate trips in the afternoon that could be returning from an onsite office use, or leaving the residence to go to the community center. Each land use

pairing has a unique internal trip percentage that is applied to each side of the trip. For this alternative, internal trips to or from the residential uses was about 6 percent, but the office and community center had higher internal percentages at 11 percent due to the potential interaction between those two uses. The 390 daily internal trips (or 8.2 percent daily internal trips) is the sum total of the entire site's internal trip generation.

59. As stated on page 3.15-9 of the DEIS, while the general size and location of the various proposed parks and open space facilities within each sector have been identified, specific features have not been determined at this time with the exception of the Commons Park. In DEIS and **FEIS Section 3.15.1**, the amount of each type of park and open space assumed to be provided in each sector is described. Illustrations of the precise locations of each type of open space is not provided because that level of detail is not known at this time and would be determined at the time permit applications are submitted.
60. Comment acknowledged. Sector Park locations were not identified in the DEIS, however, as noted in Section 3.15.1, the Sector Parks would be configured to allow maximum access to light and air (see page 3.15-14). In **FEIS Section 3.10.3.3**, other possible mitigation measures have been identified to address potential shadow impacts to small parks and open space areas. Please also see the response to Comment 59 of this letter.
61. Comment acknowledged. Three dimensional drawings are provided for DEIS Alternatives 1-4 and the Preferred Alternative to illustrate the bulk and scale of the proposed redevelopment. Please refer to **FEIS Chapter 4, Updates to the DEIS Analysis**, for illustrations of DEIS Alternatives 1-4 and **FEIS Section 3.10.2** for the drawing of the Preferred Alternative.
62. As discussed in the DEIS on page 2-34 in Section 2.8.2, Sustainable Features, potential reuse of demolition materials onsite and salvage and reuse of building components are options under consideration. Due to the presence of asbestos and lead-based paint in the majority of the existing onsite buildings, however, it is questionable that demolition materials could be potentially be reused. Building materials would be tested as part of demolition activities to determine the level of contamination present.
63. Comment acknowledged. HVAC systems for all buildings would be reviewed during the final design process to ensure noise from such units complies with the Seattle noise limits.
64. The DEIS provided analysis of potential adverse impacts to views from SEPA Scenic Routes and from Harborview Hospital Viewpoint, as per SMC 25.05.675. Please refer to pages 3.10-10 and 3.10-13 to 3.10-15 in DEIS Section 3.10, Aesthetics, for the analysis and photosimulation completed for the Harborview Hospital. Please refer to page 3.10-25 of the DEIS for the discussion of scenic routes analyzed in the DEIS.

Please refer to **FEIS Figure 3.10-3** in **FEIS Section 3.10, Aesthetics**, for the analysis and photosimulations completed for the Preferred Alternative for the Harborview Hospital Viewpoint and **FEIS Section 3.10.2** for a discussion of the scenic routes analyzed for the Preferred Alternative.

Parks has serious reservations regarding the loss of the playfield associated with Yesler Community Center. If Yesler Terrace redevelops as proposed, the existing playfield, used for baseball/softball/T-ball and soccer will be converted to housing and a space to the west of the community center will be developed as park. However, this park will not include a space for baseball/softball/T-ball and soccer. This would leave the Yesler Community Center as the only community center in Seattle without an associated playfield to support the typical community center organized sports activities. These sports activities provide a healthy and positive outlet for surrounding youth.

1

The DEIS highlights that the existing playfield is currently used by the Seattle Central Little League (SCLL). Loss of this field will require the SCLL to find other field(s) on which to play.

The DEIS also indicates that the surrounding playfields are currently scheduled to capacity and that there may be no additional opportunities to support SCLL activities unless an additional ballfield is developed or improved at the Bailey-Gatzert Elementary School. Wouldn't it be better to preserve an existing recreational resource which currently serves the community?

With the redevelopment of Yesler Terrace, the amount of children in the neighborhood will likely increase. Therefore, given children's needs, SHA should evaluate the loss of active recreational space and suggest mitigations in order to serve the redeveloped community.

2

**For additional information, contact:
David Graves, Senior Planner
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Response to DEIS Letter 3
Seattle Department of Parks

1. Comment noted. As indicated in DEIS and **FEIS Chapter 3.15.1.2**, the existing Yesler Playfield would be displaced under the Preferred Alternative and DEIS Alternatives 1-4 and is identified as an impact. While the redeveloped site would not include an active playfield, under the Preferred and DEIS Alternatives 1-4, a significant increase in amount of public open space would be provided on the Yesler Terrace site for use by onsite residents and the surrounding community.

2. The evaluation of the impacts of the loss of the Yesler Playfield is identified as an impact in the DEIS in Section 3.15.1.2 and possible mitigation measures are provided in DEIS Section 3.15.1.3. As stated on page 3.15-4 of the DEIS, most of the existing play equipment on the Yesler Terrace site is in poor condition and does not meet current safety standards. The Commons and new Sector Parks would include children's play areas that would represent an improvement in both the quality and amount of recreational opportunities for children on the site and in the surrounding neighborhoods.

Relocation: (2-51). Plans for relocation and relocation assistance seem incomplete. Please provide more detail.

1

(3.9-15) Goal UVG36 “Achieve development...at a pace appropriate to current conditions in the area.”

2

Provide additional information about the sequence of development that is mentioned in relationship to the Master Planned Community..

(3.9-35) “Redevelopment of Yesler Terrace could contribute to broad changes in land use trends, or increased property values and rental rates.” SHA is encouraged to consult the City’s Livable South Downtown EIS and consider the appropriateness of the potential tools to mitigate displacement in adjacent communities.

3

Shadows

(3.10-106-113)

From this discussion and the Appendix K , there appears to be significant shading on park space under the more dense alternatives. While it is not an explicit requirement of the City’s SEPA policies, it would be good to see the potential effects of shading on possible community space, especially given the high use of existing garden space in Yesler Terrace’s current configuration. Please provide further analysis of how shading impacts on gardens and other vegetation could be mitigated.

4

Transportation

(3.13-35) “With the improved pedestrian route, King Street Station would also only require about a 10-15 minute walk from Yesler Terrace....” FEIS should acknowledge that this is not a realistic option for most elderly or disabled people.

5

Community Services

(3.15-58) “Some organizations could choose to permanently relocate offsite due to the inconveniences associated with a temporary move. It is assumed that other similar rental properties are available in Seattle” What if a majority move off site, and due to rental prices

6

must relocate far from Yesler? What mitigation beyond transportation vouchers is available to the clients?

(3.15-59) “If the Community Council does not continue in its present form, Community Associations (or Homeowners Associations) may be formed to take its place.” If the plan is to relocate and disperse the low income residents throughout the neighborhood over time, then chances are, unless active support is offered, the Yesler Terrace Community Council will have a difficult time sustaining its capacity. Unless deliberate plans are made before hand, the end result may be to fracture the community, i.e. SHA residents in one council and homeowners in another or distinct condo associations requesting representation separately on the District Council. The end result could be seen as disempowering a disadvantaged community after their having worked hard to create a strong and independent council. What are SHA’s plans to ensure the continuation of a strong voice for low income residents of the community after relocation.

7

Wind Analysis

(3.18-2). Provide analysis of wind impact on pedestrians in the preferred alternative.

8

For additional information, contact: 6-24
Thomas Whittemore
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Response to DEIS Letter 4
Seattle Department of Neighborhoods

1. A discussion of tenant relocation and relocation assistance is provided in DEIS and **FEIS Section 3.16.3**. Please also refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding tenant relocation, relocation assistance and replacement units.
2. No specific sequence of development has been detailed at this time. However, it is likely that under the Preferred Alternative the East of Boren Sector and the East of 12th Sector would provide early replacement housing for a portion of the existing 561 extremely low income units. The NE Sector is also likely to be one of the earlier sectors to redevelop. The sequence of development would be consistent with the phasing criteria outlined in the DEIS on page 2-51 through 2-56 in Section 2.8.6, Development Phasing.
3. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding potential indirect land use impacts to the Little Saigon neighborhood, as well as further review of the City's Livable South Downtown EIS.
4. Comment noted. An analysis of the potential impacts of shadows in the Yesler Community Center and the Commons Park is provided in DEIS and **FEIS Section 3.10.3.2**. As noted in DEIS Section 3.15.1, the Sector Parks would be configured to allow maximum access to light and air (see page 3.15-14). Please see the response to Letter 2, Comment 19 for additional information.
5. Comment noted. Text has been added to clarify that walking a longer distance to bus stops is only an option for those who are physically able to do so. Please note, detailed descriptions of transit access adjacent to the site, and options for accessing all destinations exclusively via transit, are also provided in the DEIS and **FEIS Section 3.13**.
6. As noted in **FEIS Section 3.15.6.2**, redevelopment under the Preferred Alternative on the FEIS Site (DEIS Site and East of 12th Sector) would result in an increase in space for neighborhood service uses as compared to existing conditions. In total, it is estimated that 65,000 SF of neighborhood services space would be provided, including the 21,971 SF Yesler Community Center. This is approximately 15,000 SF greater than the range evaluated in the DEIS, which assumed approximately 50,000 SF of neighborhood services space for Alternatives 1-4, and is approximately 15,000 SF greater than the existing amount of neighborhood services space at the site. Also, the Preferred Alternative assumes the Yesler Terrace Steam Plant could be adaptively reused for community services uses. This could reduce disruption to community service providers, Yesler Terrace residents and the community, by allowing some programs/services to move directly from their current locations into the renovated building. Refer to **FEIS Section 3.15.6** for additional information.

Redevelopment could temporarily disrupt residents' access to social services that are currently located on the site due to the need for some residents to temporarily relocate offsite during construction, as described in the DEIS. SHA's proposed relocation plan (see DEIS and **FEIS Section 3.16.3, Socioeconomics**, for details) specifically

addresses the need to maintain service connections for residents as part of relocation assistance.

7. As a result of its commitment to community building, SHA would continue to seek ways to ensure low income residents have a voice in shaping operations and redevelopment of Yesler Terrace. As long as HUD continues to provide funding, SHA would provide Resident Participation Funds to all duly elected public housing councils, including the Yesler Terrace Community Council. If the Yesler Terrace Community Council no longer existed in its current form, SHA would seek to support whatever new structure emerged.
8. Please see the response to Letter 2, Comment 23.

The Human Services Department’s (HSD’s) comments focus on the economic interests and social service needs of the existing and future low-income residents of Yesler Terrace. We are encouraged by SHA’s commitment to continue providing housing and services to their existing tenants and offer the following comments in support of that commitment.

1. Neither the development alternatives nor the “Development Phasing Criteria” found on page 2-51 explicitly commit SHA to develop (or redevelop) the extremely low-income housing or the low-income housing on a schedule concomitant with the market rate housing. As related to economic justice, HSD suggests that an explicit commitment to redevelop subsidized housing on a schedule concurrent with the development of market rate housing may be an appropriate mitigation measure to be inserted into Section 3.16.3. | 1

2. The development of a high quality, equitable mixed-income neighborhood requires an appropriate level of aesthetic consistency between market rate and subsidized housing. This avoids any stigma or discrimination between market rate tenants and subsidized tenants. While Section 3.10 details at length the visual affect of the four alternatives on Seattle’s skyline and view corridors, we do not see an explicit statement from SHA saying that the two types of housing will not be visually distinguishable. HSD encourages an explicit mitigation statement to ensure that subsidized housing is not significantly or noticeable aesthetically different from market rate housing. | 2

3. Access to and enjoyment of public amenities such as open space should not be markedly different for subsidized vs. market housing. We are concerned with the statement on page 2-52, under “Land Value,” regarding the creation of value leading to private sales of certain lots within the Yesler Terrace redevelopment area: “Develop public open space areas prior to building development to create market interest and additional value for parcels adjacent to parks.” This statement could be read to mean that private housing developments will be provided easier, more direct access to parks than SHA-owned subsidized housing. The resulting distribution of private vs. public housing may be seen as discriminatory or at least in violation of economic justice principles. The DEIS should address this, either by clarifying the intent of the quoted statement or mitigating for any potentially discriminatory housing pattern that may result from the statement. | 3

4. Regarding the sale of Yesler Terrace land to private developers, HSD strongly agrees with SHA that private sales should include agreements and conditions “to ensure compliance with overall land use approvals for the site.” (Page 2-41) We would go further to say that those agreements should ensure compliance with the overall commitment to develop a mixed-income community and to make such agreements an explicit mitigation measure in an appropriate section. | 4

5. Regarding the continuation of community services for the existing Yesler Terrace population, HSD is pleased that SHA has stated that the redeveloped Yesler Terrace site “would provide equivalent space for neighborhood service uses (i.e., community services) as under existing conditions (approximately 28,000 SF).” (Page 13.15-59)
Given the uncertainty of the exact mix of services or providers to be provided post-redevelopment, we encourage the insertion of a mitigation statement in Section 3.15.6.3 explicitly stating that the placement of that space, the comparability of that space, and the inflation-adjusted cost of that space also be commensurate or better than current conditions and that SHA commit to engaging the post-redevelopment community in identifying what services are needed.

5

6. The current residents of Yesler Terrace have an organized, recognized “voice” in the operations of their community via their Community Council. The DEIS opens the possibility that the Community Council may or may not exist in its present form in the post-redevelopment environment. (See reference, page 13.15-59.) HSD would deem any diminution of the current residents’ access to influence in their community as a negative effect of the redevelopment. The insertion of market rate housing into the neighborhood under the four alternatives would reduce the proportion of housing units at or below low-income rates to less than half of the total units. Any resulting “homeowners association” or “community association” may not have the interests of low-income families as its primary orientation. HSD strongly supports a mitigation measure that ensures continued strong representation in the operation and development of the Yesler Terrace neighborhood by residents at or below the low-income level.

6

For additional information, contact:
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Response to DEIS Letter 5
Seattle Human Services Department

1. Comment acknowledged. Please see the response to Comment 2 of Letter 4 for additional information about the phasing of development.
2. Comment acknowledged. Design guidelines would be developed during the Development Plan process that would be intended to ensure that the aesthetic quality of subsidized housing is equitable to market rate housing.
3. Comment acknowledged. Open space areas and/or parks and low income housing would be distributed equitably across the FEIS Site as described in **FEIS Section 3.15.1**. The intent of the stated phasing criterion is to ensure that public open space is available concurrent with any residential development, whether it is low income or market rate housing.
4. Comment noted. The Development Plan adopted by the SHA Board for the Yesler Terrace redevelopment would include language/conditions regarding the formation of a mixed income community. The development agreements associated with private land sales would be consistent with the overall Development Plan.
5. SHA is committed to continuing its current level of provision of Community/Neighborhood services space at the redeveloped Yesler Terrace and has developed a Social Infrastructure Plan to determine future needs for these services. Information from this planning process (which included stakeholder participation and feedback) has been used to determine that Neighborhood Services uses would comprise approximately 65,000 SF under the Preferred Alternative, an increase from the approximately 50,000 SF proposed under DEIS Alternatives 1-4, and 15,000 SF greater than is provided under existing conditions. Please also refer to the response to Letter 4, Comment 6 for further information.
6. Comment noted. Please refer to the response to Letter 4, Comment 7.

- | | |
|--|---|
| <p>1. The DEIS projects up to 1,000+ additional students from the new residents at Yesler Terrace to be absorbed by Seattle Public Schools. The mitigation discussion focuses on the current set of tools used by the district’s enrollment services. However, considering the magnitude of the impact, SHA may want to be more explicit in how they intend to work with Seattle Public Schools to incorporate the additional students.</p> | 1 |
| <p>2. Comment 2: Some statements in the DEIS suggest – although perhaps not explicitly - that changes in zoning can, alone, lead to increased land values. Projected impacts associated with higher land values resulting from various Yesler Terrace redevelopment alternatives are outlined in the DEIS, for example on p. 18 of the .pdf of the Summary Chapter (quoted below). The range of influences on land values is complex and should be addressed in the Final EIS. Zoning, including permitted density, is just one variable. Equally important factors that influence the value of land include other legal and governmental regulations; physical attributes (location, neighborhood amenities, lot sizes, patterns of land use, and schools and parks); and economic forces (residential market factors, for example, include income levels, growth, vacancy rates, availability of real estate financing, and market demand).</p> <p style="margin-left: 40px;">p. 18 “Redevelopment of Yesler Terrace could potentially result in changes to adjacent and nearby areas in the form of displacement of businesses, low income individuals, and/or the services that support them due to increased property values and/or rents.”</p> | 2 |
| <p>3. Comment 3: Be sure that consistent language is used in the Impacts Table when describing impacts that are shared by different alternatives. For example, on p. 16 of the .pdf, will tenants who are not in “good standing” be invited to return to renovated units under the “No Action Alternative?” Because the “good standing” language only appears for Alternatives 1-4, that is what the reader can assume. Another example is on at the bottom of p. 16, top of p. 17 of the .pdf – Alternative 4 has different “impacts” language than Alternatives 1-3, but it is not clear why or what the difference really is. Since the “Same as Alternative 1” language is being used, where that is not the case, the degree of difference in impacts compared to Alternative 1 should be clear to the reader.</p> <p style="margin-left: 40px;">p. 16 Displacement of Existing Uses - Residential</p> <ol style="list-style-type: none"> 1. All existing residential structures would be demolished over time and the residents would be temporarily or permanently displaced and offered relocation assistance. Residents in good standing with SHA would be offered the opportunity to return to the redeveloped community. 2. Same as Alternative 1. 3. Same as Alternative 1. 4. Same as Alternative 1. 5. Same as Alternative 1. | 3 |

6. As buildings are remodeled or replaced as necessary, or on a programmed schedule, residents could be temporarily or permanently relocated and offered relocation assistance. Impacts would be as described under Alternative 1 but would be less intense and occur over a longer period of time.

3 cont

pp. 16-17 Conversion of Land Uses

1. Redevelopment of the site would result in the conversion of the site from a low-rise, multi-family residential complex into a dense urban mixed use neighborhood with mid and high rise buildings. Same as Alternative 1.
2. Same as Alternative 1.
3. Same as Alternative 1.
4. Redevelopment of the site would result in the conversion of the site from a low-rise, multi-family residential complex into a dense urban mixed use neighborhood with low, mid and high rise buildings.
5. As buildings, roadways and utilities are replaced or repaired as necessary, or on a programmed schedule, they would be replaced in-kind in the same location; therefore, no conversion of land uses would be anticipated.

For additional information or clarification, contact:

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Response to DEIS Letter 6
Seattle Office of Housing

1. The analyses provided in DEIS Section 3.15.2 and **FEIS Section 3.15.2** of the projected number of new students generated under the EIS Alternatives represents a worst-case scenario based on demographic information of the existing onsite residents and census data. Redevelopment of the site would occur over the proposed 20-year buildout period; therefore, the new students would also be generated incrementally over that period. As stated on DEIS page 3.15-29, the Seattle Public School District (SPS) reevaluates enrollment and capacity management issues on an annual basis. SHA would continue to coordinate with SPS to ensure the district is informed of redevelopment phasing in advance to support the district's capacity planning process.
2. Comment acknowledged. As noted in DEIS and FEIS Section 3.16.2, redevelopment in low income or underutilized areas can sometimes result in changes in adjacent and nearby areas. While such indirect and cumulative impacts are possible, their occurrence would also be dependent on other conditions, such as favorable market/economic conditions, local plans and zoning, political support and other broad development trends that are already in progress. Please refer to **FEIS Chapter 5, Key Topics**, for further discussion regarding potential indirect land use impacts to Little Saigon.
3. Comment noted. On DEIS page 1-16, on the row that describes "Displacement of Existing Uses – Residential" the No Action language is updated to include the following phrase:

"Residents living at Yesler Terrace at the time of relocation would be offered the opportunity to return to the redeveloped community."

This update is also noted in **FEIS Chapter 7, Errata**.

On DEIS page 1-16, the row that describes "Conversion of Land Uses" summarizes the detailed impact analysis provided in DEIS Section 3.8.2. The comparison of the DEIS Alternatives provided on this table demonstrates that the existing low-rise, multifamily uses on the site would be converted to mixed uses in mid to high-rise buildings under DEIS Alternatives 1-3 and mixed uses in low, mid and high-rise buildings under DEIS Alternative 4. Existing uses would remain under the No Action Alternative.

General Comment: The consultant has done a good job of recording our information and comments; however, there are a couple of places where we would recommend refinement of the language so as to avoid the conclusion that redevelopment will have little/no measurable impact on police workload. These are as follows:

On page 3.15-48, last paragraph, first sentence should be changed to read:

“The Police Department believes that there are several factors that could mitigate the impact to police workload likely to result from the redevelopment alternatives.”

1

Also under this paragraph – consultant should verify that SHA, indeed, is committed to maintaining the dedicated CPT Officer. Our contracts are year to year and we (SPD) cannot assert this commitment.

2

It would also be useful to add language to the effect that SHA and SPD should work together to ensure effective collaboration between SPD officers and SHA security staff and that both parties should explore opportunities to secure outside grant support for additional crime prevention program activities.

3

On page 1-27 and 28, in matrix under Operation, Alternative 1 –Lower Density comment would best be changed to read,

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“Increases in the on-site population and employment would be accompanied by increases in demand for police service; however, the exact number of incremental new calls cannot be quantified. Likely impact to police workload can be mitigated by SHA’s continued funding for dedicated police staff and full implementation of the Neighborhood Policing Plan, which will add officers to the force. As well, development and implementation of a strong SHA security plan, the design and layout of the site, increased residential density, increased activity levels, and improved site lighting should contribute to safety improvements. Impacts can be significantly mitigated.”

Other Suggested Edits:

On page 3.15-46, last paragraph, last sentence. The SHA-funded CPT Officer is included in the count of patrol officers in this paragraph. I would clarify this. Also, if want to use the most recent available numbers for the document, in late October there were 112 patrol officers and 15 sergeants. Other numbers remain unchanged.

5

On page 3.15-46, first line of last paragraph – there is no ‘s’ after ‘on-view’

On page 3.15-47, first line of 2nd paragraph – there is no ‘s’ after ‘on-view’

On page 3.15-47, third line of 2nd paragraph – there is no ‘s’ after ‘on-view’

6

On page 3.15-49, last line under Cumulative Impacts – I would suggest the word ‘mitigated’ rather than ‘managed.’

7

For additional information or clarification, contact:

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Response to DEIS Letter 7
Seattle Police Department

1. Comment acknowledged. This change is reflected in **FEIS Chapter 7, Errata**.
2. Comment noted. In the near-term (i.e. until market rate housing is introduced to the site), SHA expects to continue funding for one dedicated police staff at the site, who serves as a Community Police Team officer to work with Yesler Terrace management and residents on crime and crime-related concerns. As redevelopment of the site progresses, SHA's funding of dedicated police staff would be reevaluated annually. As market rate housing is added to the site, SHA could elect to contribute to a shared fund along with new homeowners associations, to fund a dedicated police officer, or to fund private security for the site. This clarification is noted in **FEIS Section 3.15.4**.
3. The following has been added as an 'other possible mitigation measure' and this change is reflected in **FEIS Chapter 7, Errata** for the DEIS Alternatives and in **FEIS Section 3.15.4.3** for the Preferred Alternative:

SHA and SPD could work together to ensure effective collaboration between SPD officers and SHA security staff, and both could explore opportunities to secure outside grant support for additional crime prevention program activities.
4. Comment acknowledged. The following updated statement is incorporated into **FEIS Chapter 7, Errata**.

“Increases in the onsite population and employment would be accompanied by increases in demand for police service; however, the exact number of incremental new calls cannot be quantified. Likely impact to police workload can be mitigated by SHA's continued funding for dedicated police staff or contribution to funds for private security and full implementation of the Neighborhood Policing Plan, which would add officers to the force. As well, the design and layout of the site, increased residential density, increased activity levels, and improved site lighting should contribute to safety improvements.
5. Comment acknowledged. These changes are reflected in **FEIS Chapter 7, Errata**.
6. Comment acknowledged. These changes are reflected in **FEIS Chapter 7, Errata**. However, please note that the third line of the 2nd paragraph does not contain the word cited for correction (on-views).
7. Comment acknowledged. This change is reflected in **FEIS Chapter 7, Errata**.

Seattle City Light

#	Reviewer	Document	Page	Section	Comment
1	BK	Public Utilities Technical Report from SvR Design Company	General	Utilities Impact	This report has 32 pages of discussion on the SPU utilities, namely water, sewer and only one quarter of a page on the Seattle City Light electrical system and the impact of this redevelopment plan
2	BK	Public Utilities Technical Report from SvR Design Company	General	Utilities Impact	The information about the expected annual peak demand and energy use is undocumented; report does not indicate how the information was obtained or calculated.
3	BK	Public Utilities Technical Report from SvR Design Company	General	Utilities Impact	Report doesn't say how the City Light residential and commercial conservation programs would affect or mitigate the projected loads and the resultant use.
4	BK	Public Utilities Technical Report from SvR Design Company	General	Utilities Impact	An earlier project report entitled Yester Terrace Sustainable Energy Analysis had a much more complete assessment of the projected energy loads and actually had a breakout by the load factors, plug and lighting loads, water heating loads, space heating, and cooling loads.
5	BK	Public Utilities Technical Report from SvR Design Company	General	Utilities Impact	While City Light under State law is required to provide electrical service to its customers, it also has an obligation to try to maximize the conservation potential of any project or electrical service request. This particular report didn't or hasn't completed that required analysis.
6	BK	Public Utilities Technical	General	Utilities Impact	Recently consultants on behalf of SHA conducted a study of a potential energy district based on geothermal, solar thermal and sewer heat recovery technology(ies)

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		Report from SvR Design Company			in conjunction with or as a part of the redevelopment plan. Because the district approach has the potential to substantially change the energy use through reduced heating and cooling loads, that study should be included in this EIS.	6 cont
7	BK	Public Utilities Technical Report from SvR Design Company	General	Utilities Impact	The geothermal, solar, sewer heat recovery system could be financed through a five year third party tax equity partnership flip strategy. This financing method would give the investment tax credit and the accelerated depreciation to the third party and thereby reduce the overall project cost, This cost reduction strategy would make the GX/S system look better than the other heating and cooling options.	7
8	BK	Public Utilities Technical Report from SvR Design Company	General	Utilities Impact	While the one-quarter page discussion doesn't elaborate upon an overhead versus an underground distribution system, the energy district system and the construction thereof could dramatically reduce the costs of an underground electrical system. An earlier cost analysis shows that the second trench adds about thirty percent to the overall construction cost..	8
9	GA	DEIS YTRD		3.5 and 3.14	The EIS should make a proactive statement about SHA's intent to work with Seattle City Light and Puget Sound Energy to participate in their available energy efficiency programs to maximize the energy efficiency of the development pursued under this plan.	9
10	GA	DEIS YTRD		3.5-2, Energy	In sentence starting "Other strategies that can reduce energy use..." add "...designing and installing energy efficient lighting, building systems and controls..."	10
11	GA	DEIS YTRD		3.5-3	Regulatory Context, State of Washington: Discussion does not include reference to Washington RCW 19.27A.160 which establishes goal for State Building Codes Council to improve state energy code by 10% every 3-year code cycle from 2010 to 2031.	11
12	GA	DEIS YTRD	3.14.3	Page 3.14-13	Possible Mitigation Measures: Insert "energy" in the bullet point referencing water conservation.	12
13	LG	DEIS YTRD	3.5.2	Utilities	In planning for additional electrical load SCL (and valuing new conservation and renewable resources) SCL focuses on new or "marginal" electrical resources in analyzing energy impacts in addition to GHG emissions. This is because over the foreseeable future, forecasters anticipate that the lion's share of market demand for	13

					electricity will be met by new fossil fuel resources being added somewhere. This secondary effect is a bit difficult to communicate but is an important distinction relevant to this section. We request that preparation of the FEIS reflect consultation with Corinne Grande,(EAD at SCL) on specific text revisions.
14	LG	DEIS YTRD and Appendix B	DEIS pg 22-25 / App B pg B1 - B16	Air Quality - GHG emissions	SCL has uses the eGRID non-baseload emission rate of .60 metric ton/MWh in calculating GHG emissions for new meeting new electrical load for reasons described in the comment above. Our review did not include drilling down to check calculations. We ask that the preparer contact Corinne Grande to ensure that emissions calculations for electrical energy requirements reflect this emission rate as this is not a given when using the tables developed to summarize GHG emissions for new buildings.

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cont

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For additional information, contact:
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Response to DEIS Letter 8
Seattle City Light

1. In order to provide a more refined energy analysis for the Preferred Alternative, a more detailed energy analysis was completed for this FEIS using modeling to simulate the Washington State energy code standards for estimating the requirements for space heating, space cooling, water heating, plug loads and lighting. This information is summarized in **FEIS Section 3.5** (refer to **FEIS Appendix E** for more details on the methodology, key assumptions and conclusions for the energy analysis).
2. The methodology employed for the DEIS energy analysis calculated energy consumption by multiplying square footage of different uses by simple factors from the Washington energy code, as described in DEIS Section 3.5. See **FEIS Appendix E** for the refined methodology used for the Energy Analysis completed by Gibson Economics.
3. For purposes of this EIS analysis, the energy analysis provided in **FEIS Section 3.5** and **FEIS Appendix E** represents a conservative scenario, assuming the construction of all electric building energy systems. This energy analysis concludes that under this scenario no significant impacts to the existing electrical infrastructure would be expected with the proposed redevelopment. These calculations did not take into consideration any potential mitigation efforts to reduce the energy use of the redevelopment, such as LEED® building techniques, or a potential district energy system or energy conservation measures, even though these features could be incorporated into the final development. The specific sustainable features that would be incorporated into the redevelopment that would serve to reduce electrical consumption would be determined during the design phase of the project.

Separate from this EIS, the report entitled, "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics was issued December 12, 2010, and provides a discussion of the array of potential sustainability elements relating to energy that could be incorporated into the final development and the relative reduction in energy consumption that could be realized with each feature.

4. Comment acknowledged. See the response to Comment 3 of this letter.
5. Comment acknowledged. See the response to Comment 3 of this letter.
6. Comment acknowledged. See the response to Comment 3 of this letter.
7. Comment acknowledged. See the response to Comment 3 of this letter.
8. Comment acknowledged.
9. SHA intends to work with Seattle City Light and Puget Sound Energy to participate in their available energy efficiency programs to maximize the energy efficiency of the development.

10. Comment noted. The phrase, “designing and installing energy efficient lighting, building systems and controls.” is added to the 1st sentence of the 5th paragraph on DEIS page 3.5-2. This change is also noted in **FEIS Chapter 7, Errata**.
11. Comment noted.
12. The section on which this comment is based applies to water utilities, not energy. Energy is discussed in **FEIS Section 3.5**. Please see the response to Comment 3 of this letter.
13. Please see the response to Comment 3 of this letter.
14. Please see the response to Comment 3 of this letter.

Document name	Item	Comments	1
<i>Chapter 1, EIS Summary</i>	Trip Generation impacts	The daily trip data should include all modes by percentage. Pedestrian and bike trips are identified elsewhere and should be included here.	2
<i>Chapter 1, EIS summary</i>	Transit Trips Impact	Identify the percentage of all trips composed of transit trips. For instance, Alternative 1 identifies 27,370 total trips and 8,490 transit trips, for 31% transit trips.	3
<i>Chapter 1, EIS summary</i>	Construction Impacts	Rideshare, shuttles, carpool, transit passes and related programs could be put in place to mitigate impacts of construction, employee travel and parking where possible.	4
<i>Chapter 1, EIS summary</i>	Construction Impacts	Bicycling and/or pedestrian routes will be impacted by construction activity. Please, define appropriate mitigation for these impacts	

<p><i>Chapter 1, EIS summary</i></p>	<p>TMP provision</p>	<p>TMP elements should consider provisions for on-site services, not just providing information about travel alternatives. Examples are: on-site car sharing, on-site bikesharing, subsidized transit products, bicycle storage and bike commuting facilities. Clarify how these elements can be used in both office and residential components of the project. Car sharing alternatives should also be considered in on-site parking analysis.</p>	<p>5</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Table 2-1</p>	<p>Amount of parking supply for redevelopment uses higher parking ratios than would be expected for development located near two of the state’s largest employment centers and for development with such strong transit access. This area does not have minimum parking requirements in order to allow developments to take advantage of site conditions and build only the amount of parking that is determined to be needed. The office and neighborhood commercial parking ratios used for the parking space estimates in Table 2-1 are higher than the City’s minimum parking requirements for outside of urban villages. SDOT strongly encourages looking at reducing the amount of parking built in order to reduce costs and to support transit use. In particular, seems that the office ratio could drop below 1 space / 1,000 square feet instead of the 1.5 spaces / 1000 square feet. Should require fewer parking stalls and more shared parking.</p>	<p>6</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Table 2-1</p>	<p>Regarding the residential parking supply and ratios that increase as unit building size (bedrooms) increase: the City no longer escalates the residential parking requirement by number of bedroom units. Legislative changes were made as part of the Neighborhood Business District Strategy (NBDS) in 2007. More analysis can be found in the City’s Commercial Code update project here.</p> <p>Using the 2000 Census that reports on vehicles available, the analysis for the NBDS project found that Seattle’s previous multifamily parking requirements of 1.1 to 1.5 spaces per unit generally provided more parking than households in urban centers and villages typically used. In buildings with 5 or more units, average number of cars per household was 0.8, with a decreasing number of cars per household as the number of units increased. Data indicated that City regulations that required more parking in larger buildings was inverse to the actual patterns of auto ownership. Residents of larger buildings are more likely to have fewer cars than other residents of Seattle. The residential</p>	<p>7</p>

		parking ratios need to be adjusted and parking maximums considered.	7 cont
<i>Yesler Terrace Redevelopment Draft EIS</i>		The denser alternatives (Alt. 3 and 4) would seem to allow for lower parking ratios, since at higher densities, auto ownership tends to be reduced compared to low density development.	8
<i>Yesler Terrace Redevelopment Draft EIS</i>	Affected environment	First sentence – “This section discusses the existing and future transportation conditions <u>without</u> the YT redevelopment.” Needs clarification – does "without" mean beyond the project site and within the boundaries of the study area?	9
<i>Yesler Terrace Redevelopment Draft EIS</i>	Future traffic forecasts	What are the planned "pipeline projects"? These should at least be quantified even if it is not used for calculating the trips.	10
<i>Yesler Terrace Redevelopment Draft EIS</i>	Non-motorized transportation	Pedestrian Master Plan Tier 1 and 2 (across and along the roadway) projects need to be included as part of the existing network evaluation	11

<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Non-motorized transportation</p>	<p>The sharrow definition could be amended to be defined as " Shared lane pavement markings (or "sharrows") are bicycle symbols carefully placed to guide bicyclists to the best place to ride on the road, avoid car doors and remind drivers to share the road with cyclists. Unlike bicycle lanes, sharrows do not designate a particular part of the street for the exclusive use of bicyclists. They are simply a marking to guide bicyclists to the best place to ride and help motorists expect to see and share the lane with bicyclists."</p>	<p>12</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Freight Movement</p>	<p>SDOT designates truck routes – not truck streets.</p>	<p>13</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Trip generation</p>	<p>Bike trips are estimates to increase to 10%of all off-site non-motorized trips. How did you arrive at 10% increase? Hills could be a major factor in the bike mode share.</p>	<p>14</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>		<p>The second to last line: "EMME2" should be corrected to EMME3. The drive alone mode share for future residents is assumed to be 9.8%, which seems to be very low. Any reasons behind that except PSRC model mode shares for zone 148 and 158? This is a key assumption and needs to be verified.</p>	<p>15</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>			
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Trip generation and Street vacations</p>	<p>Please add a site sector map or a reference to a site sector map in order to help the reader understand the issues being discussed in the text.</p>	<p>16</p>

<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Traffic Safety</p>	<p>Is there a source to the statistical trend information about collisions? Based on numbers or rates? And what does “where practical” mean to provide left turns – how would this impact the lane or roadway width or channelization?</p>	<p>17</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Transit</p>	<p>Assumed that transit riders would walk a distance of less than a quarter mile – common analysis unit for walking distance is a quarter mile (not less than a quarter mile). And this statement is inconsistent with further in paragraph that states that people could “use Route 27 and walk a third of a mile to Colman Dock”</p>	<p>18</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Transit</p>	<p>Needs to have an improved pedestrian connection to S Jackson St in all alternatives. Would like more details about the connection</p>	<p>19</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Transit</p>	<p>Seems likely that someone in the transit tunnel would more likely use streetcar than Rt. 27 (especially considering frequent headways for streetcar), yet ridership in all alternatives forecast that Rt. 27 would have higher ridership than streetcar. Please clarify.</p>	<p>20</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Non-motorized Facilities</p>	<p>Enhanced pedestrian/bicycle treatments are called features, not amenities.</p>	<p>21</p>
<p><i>Yesler Terrace Redevelopment Draft EIS</i></p>	<p>Non-motorized Facilities</p>	<p>The HCM analysis of pedestrian level of service is one way of measuring pedestrian volumes, but meeting Pedestrian LOS A is not a desirable outcome for the walkway connections at Yesler Terrace. The project should set a desirable sidewalk width and, if necessary, a Pedestrian LOS that results in a lively, active and safe sidewalk condition. While SDOT does not have a desired Pedestrian LOS standard, we would be happy to discuss this issue further if more clarification is needed.</p>	<p>22</p>

<i>Yesler Terrace Redevelopment Draft EIS</i>	Mitigation of construction impacts	Need to provide temporary detour routes for pedestrians when existing routes are impacted by construction.	23
		Unsure if the action of “adding an extra lane/turn pocket” as a mitigation measure would the increase curb-to-curb distance, or if it is simply a rechannelization within the existing street width. If adding the extra lane/turn pocket does result in a wider curb-to-curb distance, please indicate the mitigation for increasing the pedestrian crossing distance which can impact safety conditions.	24
<i>Yesler Terrace Redevelopment Draft EIS</i>	Transit	Need to suggest /recommend a more robust set of mitigation measures for transit	25
<i>Transportation Technical Report for Draft EIS</i>	Transit	Per Table 21, the destination of 72.1% of residential transit trips from Yesler Terrace is the Downtown Commercial Core. The volumes on the Route 27 are expected to be 1,590 to 3,640 daily trips (Table 22), increasing loads.	26
		Urban Village Transit Network policies are in place to identify and improve service deficiencies on UVTN-designated routes, such as Route 27. Yesler Terrace, the City of Seattle and Metro Transit should review service in that corridor to determine needs based on development scenarios and transportation changes as identified in the Technical Report.	27
<i>Transportation Technical Report for Draft EIS</i>	TMP Goal	Seattle’s Comprehensive Plan non-SOV goal for the First Hill/Capitol Hill urban center does not refer only to peak period trips, but to all daily trips. Please address the non-peak impacts of trip generation as these constitute a large proportion of all trips. (Daily trip data for all development scenarios is available in the Trip Generation Summary.)	28
	Paragraph 1		

<i>Transportation Technical Report for Draft EIS</i>	TMP Goal	Comprehensive plan goals should be adopted as the short and long-range goals for office development TMP.	29
	Paragraph 2		
<i>Transportation Technical Report for Draft EIS</i>	TMP Goal	It should be the objective of the TMP for each office building to meet the current standard for non-SOV all trips at the time the building comes online, not within five years of occupancy.	30
	Paragraph 2		
<i>Transportation Technical Report for Draft EIS</i>	TMP Elements-Office Building	“Office-related TMPs will be required consistent with....Director’s Rule 1-2008.”	31
<i>Transportation Technical Report for Draft EIS</i>	Non-Motorized Facilities	Yesler Terrace may consider creation of a bicycle sharing program modeled on the Seattle Children’s program. Such a program could coordinate with the many hospitals, educational institutions and businesses in the general vicinity of First Hill and Capitol Hill. If available in the future, Yesler Terrace may opt into a City of Seattle or other public agency-developed bicycle sharing program.	32
<i>Transportation Technical Report for Draft EIS</i>	3.12.4. On-Street Parking Supply	Starting in 2010, the City imposed a limit of four restricted parking zone (RPZ) permits per household in order to better manage permit sales in dense zones. The limit applies for all zones. One guest permit is allowed per household.	33
<i>Transportation Technical Report for Draft EIS</i>	5.3. Other Possible Mitigation Measures - On-Street Parking Supply	It is conceivable that the suggested RPZ mitigation measures could be established as part of the re-zone legislation for Yesler Terrace Redevelopment. It would be helpful to have additional supporting data documenting the amount of permits potentially requested compared to the street parking supply.	34

<i>Transportation Technical Report for Draft EIS</i>	Table 4	The existing LOS of 4th Avenue S / S Jackson Street intersection in PM peak is F while the 2030 LOS is much better at C. Is the volume data accurate or is there any road capacity modification?	35
<i>Transportation Technical Report for Draft EIS</i>	Mode of Travel	SDOT has created a mode share report for all Seattle urban centers using CTR 2007 & 2009 data and PSRC 2006 Household Activity Survey data which we can provide to supplement listed data sources. Consider using most recent CTR data for 2009 rather than 2007. What is the desired mode share? And then need to increase the mode share for the new, more aggressive goals.	36
<i>Transportation Technical Report for Draft EIS</i>	Mode of Travel	In Table 10, the "Office Employees" "Non-Vehicle Trips" (interpreted as "non-SOV") may have changed in 2009 CTR data, currently available from King County Metro. At any rate, 63.6% is less than the urban center goal for First Hill/Capitol Hill. TMPs and other mitigation measures should focus on Comprehensive Plan goals as opposed to CTR averages.	37
<i>Transportation Technical Report for Draft EIS</i>	Mode of Travel	Are the travel mode assumptions for existing and future residents and office employees from Table 10 consistent across all development scenarios?	38

For additional information, contact:
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Response to DEIS Letter 9
Seattle Department of Transportation

1. Comments noted. Trip estimates for all modes were provided in the DEIS in Tables 3.13-3 through 3.13-5. This information is presented in additional summary form as requested in **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
2. Please refer to the response to Letter 9, Comment 1.
3. Alternative transportation programs for construction employee commute trips have been added to recommended mitigation measures in **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
4. Potential construction impact to non-motorized modes, and mitigation to address non-motorized impacts, is provided in **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
5. Car sharing, onsite bike storage, and commuter bicycle facilities such as showers and lockers were listed as TMP elements for office buildings. Additional potential TMP elements have been added in **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
6. Please refer to the response to Letter 2, Comment 46.
7. Please refer to the response to Letter 2, Comment 46. The parking rates were intended to estimate the demand for parking of different size and types of units in order to assess the worst-case impact of potential parking garages. These rates are not related to the City's parking code requirements.

The overall average residential parking rate for the Preferred Alternative has been reduced to 0.70 stalls per residential unit as noted in **FEIS Section 3.13, Transportation**. This is a blended average of SHA housing at 0.6 stalls per unit and Market Rate housing at 0.8 stalls per unit.

8. Please refer to the response to Letter 2, Comment 46.
9. The Affected Environment presents "conditions without the Yesler Terrace redevelopment." For transportation, this means existing and projected future transportation conditions within the study area (as defined in the first section under Affected Environment), under the scenario in which the proposed project would not occur (no action alternative).
10. As described on page 3.13-6 and 3.13-7 of the DEIS, traffic volume forecasts were based upon the Puget Sound Regional Council 2030 regional forecast model. Because

this model already reflects traffic growth expected to result from build-out of the region's future land use plans, including future land use in the project vicinity, there is no need to additionally consider specific "pipeline" projects. Growth from surrounding development is already included in the modeled volumes. Travel demand forecasting models take into account how overall traffic patterns would change due to the cumulative regional growth as well as new infrastructure such as Link Light Rail and the First Hill Streetcar. Data available for pipeline projects typically consider a short-term horizon and the existing transportation network. Therefore, use of a travel demand model is generally the preferred analysis method when assessing long-term planning horizons, such as the 2030 horizon that is analyzed for this project.

11. The DEIS, with updates provided in the FEIS, identify Tier 1 and Tier 2 priority sidewalk improvement locations within and adjacent to the project site. Please also see response to Comment 27 in Letter 2.
12. Text has been modified as suggested, as noted in **FEIS Chapter 7, Errata**.
13. Truck street is the designation, as defined under Policy T10 in the transportation element of the City's current adopted Comprehensive Plan. The City's Street Classification system also includes the map of Major Truck Streets ([see http://www.seattle.gov/transportation/streetclassmaps/truckweb.pdf](http://www.seattle.gov/transportation/streetclassmaps/truckweb.pdf)).
14. The Puget Sound Regional Council's future forecasts for the site area predict that about 63 percent of all residential trips would be walking trips and 7 percent would be by bicycle (see Table 10 of the DEIS Transportation Technical Report). Therefore, bike trips would represent 10 percent of the offsite non-motorized vehicle trips for this use. A similar split was forecast for office uses. It is agreed that that hills could be a factor in bike mode share along several major travel routes. However, there are alternative routes with reduced grade that a rider could use from downtown. In addition, there are many destinations along the ridge of First Hill and Capitol Hill that could be easily reached by bicycle.
15. Correction to "EMME/3" is noted in **FEIS Chapter 7, Errata**.

As described on page 38 of the Transportation Technical Report (DEIS Appendix N), for the purpose of analyzing potential vehicle impacts, ITE trip rates were adjusted to assume that one PM peak hour trip would be generated per five residential units, which provides a conservative estimate of resident-generated vehicle trips that is higher than that reflected in the Table 10 mode shares.
16. Please note, a site sector map was provided on page 2-12 (Figure 2-4) in Chapter 2 of the DEIS, Section 2.6.2, and also on page 1 of the Transportation Technical Report (DEIS Appendix N). In addition, in Section 3.13.2 Impacts/Trip Generation (on page 3.13-19) text is provided that directs the reader to the sector description in Chapter 2 of the DEIS, Section 2.6.2.
17. Text has been modified to eliminate the reference to statistical trends, as per DPD suggestion under Letter 2, Comment 42, and has been modified to clarify what would be considered when determining the feasibility of adding a left-turn lane, as noted **FEIS Chapter 7, Errata**.

18. Please note, the assumptions in the “Transit” section describe how far transit riders would *need* to walk in order to access the different transit options, based upon the actual distance between the Yesler Terrace site and the different transit access points, not how far they would be *willing* to walk.
19. Please note, the DEIS alternatives are intended to reflect a range of features, and the DEIS analyzes the potential benefits and adverse impacts of each alternative respectively. It is not necessary to include every potential project feature in every alternative, as long as the range of alternatives includes the elements ultimately included in the Preferred Alternative. Feedback on preferred features provided during public review of the DEIS alternatives were considered in the development of the Preferred Alternative.

The potential pedestrian connection is described in detail in the “Non-Motorized Facilities” section of the “Impacts” section of both in the body of the DEIS (page 3.13-38) and in the Transportation Technical Report (Appendix N, page 64). Text has been added in the “Transit” section that directs the reader to this description, as noted in **FEIS Chapter 7, Errata**.
20. Please note, while the streetcar is expected to operate at more frequent headways, Route 27 provides a more direct route and much shorter travel time between Yesler Terrace and the downtown transit tunnel. Both waiting time and time in-transit were considered in the transit forecasts; resulting in the respective forecasts in which projected Route 27 ridership is higher.
21. The word “amenities” has been change to “features”, as noted in **FEIS Chapter 7, Errata**.
22. The pedestrian level of service assessment presented in the DEIS is consistent with the direction provided in this comment. The analysis was conducted to determine if the proposed sidewalk width would be adequate to accommodate a high level of pedestrian activity. The resulting conclusion of LOS A indicated that the proposed sidewalks could easily accommodate a high level of pedestrian activity.
23. Please refer to the response to Letter 2, Comment 51.
24. Three mitigation measures recommended some widening to provide additional turn lanes: at Yesler Way/8th Avenue, on eastbound Yesler Way at Broadway, northbound 9th Avenue at Jefferson Street, and southbound Rainier Avenue S at Dearborn Street. The roadway plan for Yesler Way includes the recommended features. An additional lane on 9th Avenue at Jefferson Street would likely require removal of a curb bulb at the intersection. If that is not desired, the intersection could be signalized to improve operations. The short right turn pocket on Rainier Avenue S at Dearborn Street was previously proposed to accommodate the past Dearborn Street Project (major redevelopment of the Goodwill site and surrounding properties).
25. The DEIS analysis provides detailed analysis of existing and projected future transit service in the study area, and provides recommendations for how transit service may be modified to adequately accommodate future transit demand of the proposed project,

based upon projected future conditions. However, it is recognized that actual transit modifications and improvements would need to evolve as overall transit demand and supply evolves. Please note, King County Metro has reviewed the DEIS and expressed strong support for the transit analysis and recommendations presented, including ongoing partnership with SHA and SDOT to evaluate service needs and pursue funding sources as needed as Yesler Terrace development progresses and other major transportation projects such as Link Light Rail are completed. (Please refer to Letter 1).

26. Comment noted. Please refer to the response to Letter 9, Comment 25.
27. Comment noted. Please refer to the response to Letter 9, Comment 25.
28. The text has been modified to refer to “trips” rather than “peak hour trips”, consistent with the language under Policy TG11 in the transportation element of the City Comprehensive Plan. City monitoring of TMP goals is consistent with the monitoring that is performed under the Washington State Department of Transportation CTR Employer Survey Report to reduce the paperwork required by employers. That survey report defines, “An affected employee is a person who works full-time and who begins a regular work day at a single worksite between 6 am and 9 am on two or more weekdays for at least twelve continuous months.” The TMP goals were set so they could be monitored by this process, and are consistent with the DEIS analysis. These clarifications are noted in **FEIS Chapter 7, Errata**.
29. The phrase “could be adopted” was used in the context of the DEIS because many alternatives, including a No Action Alternative were evaluated, and a TMP may not have been needed for all alternatives. The phrase has been changed to “should be adopted” for the Preferred Alternative as noted in **FEIS Section 3.13, Transportation**.
30. A phased TMP goal was suggested to be consistent with the Comprehensive Plan, which also has non-SOV goals that increase with time. However, because the redevelopment would have buildings with different occupancy dates, it would be easier to monitor the TMP progress against a single goal. Therefore, the goal has been changed to “no more than 20 percent of the employee commute trips should be by SOV” in **FEIS Chapter 4, Updates to the DEIS Analysis**, for the DEIS Alternatives, and in **FEIS Section 3.13, Transportation**, for the Preferred Alternative.
31. The phrase “could be required” was used in the context of the DEIS because many alternatives, including a No Action Alternative were evaluated, and an office TMP may not have been needed for all alternatives. The phrase has been changed to “will be required” for the Preferred Alternative as noted in **FEIS Section 3.13, Transportation**.
32. A bicycle sharing program has been added under “Possible Other Mitigation Measures” for the Preferred Alternative in **FEIS Section 3.13, Transportation**.
33. As discussed on pages 3.13-51 and 3.13-52 of the DEIS, there is concern that if the proposed residential units obtained the number of permits allowed under City policy, that the total number could be too high to be supported by parking supply in the area. The DEIS presents measures that could possibly be applied to reduce the number of permits that could be issued, but acknowledges that imposing different measures in one specific Restricted Parking Zone (RPZ) would require legislative action.

34. If all residences proposed under the DEIS alternative requested the City allowed limit of 4 permits per household, the total demand would range from about 2,200 under No Action to about 20,000 under Alternative 3 (with an additional 5,000 guest permits that could be requested). The parking inventory completed for the DEIS analysis (see Appendix B of the DEIS Transportation Technical Report) indicated 575-585 spaces are available in the project study area.
35. As described on page 3.13-3 of the DEIS and in section 2.1.2 of the Transportation Technical Report (DEIS Appendix N), transportation infrastructure improvements planned as part of the First Hill Streetcar project were assumed to be in place under future baseline conditions. One modification includes elimination of the eastbound left turn at the 4th Avenue /S Jackson Street intersection; this would improve future level of service compared to existing conditions. A table note has been added to clarify this, as noted in **FEIS Chapter 7, Errata**.
36. The referenced SDOT mode share report has been reviewed, and it is noted that the report indicates a slight decline in CTR non-SOV trips between 2007 and 2009 for the First Hill/Capitol Hill area, from 62 percent to 58 percent, but that the share is still well above the City's 2010 goal of 37 percent for this area. However, future mode of travel estimates were not based upon CTR data. They were based on Puget Sound Regional Council data and reflect a modeled condition based on land use and other factors. The mode of travel data for office employees presented in DEIS Table 10 in the "Mode of Travel" section were provided as background information, and do not represent targets or goals. Section 5.2 of the DEIS Transportation Technical Report and DEIS Section 3.13.3 (Mitigation/Transportation and Parking Management Plans) explicitly present the non-SOV trip goals established in the Comprehensive Plan for the First Hill/Capitol Hill Urban Center, as well as Transportation Management Plan measures that can be implemented to help achieve those goals.
37. Mode share assumptions were based on Puget Sound Regional Council forecasts, which take into account the projected characteristics of future land use, demographics, and mode options. The DEIS seeks to conservatively evaluate the potential trips that could be generated by the proposed development, based on established forecast methods. The DEIS proposes several measures that would encourage reduction in drive-alone mode share, and it is also expected that office developments would be subject to a Transportation Management Plan to reduce vehicle trips.
38. The same mode share assumptions were applied to all alternatives.



City of Seattle
Seattle Public Utilities

December 13, 2010

SEPA Responsible Official

Stephanie Van Dyke
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NEPA Certifying Officer

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SUBJ: Yesler Terrace Redevelopment Draft Environmental Impact Statement, Public Comments

Dear Ms. Van Dyke & Ms. Smith:

Thank you for the opportunity to provide comments on this important proposed project, Yesler Terrace Redevelopment. Seattle Public Utilities (SPU) has and will continue to partner with you throughout this process for this very complex project. Attached please find a list of detailed comments listed by section and page that SPU staff have prepared. These comments fall into three general categories: Policy, Technical and Environmental Impact. Some of the issues identified in the attached detailed list can be easily handled in the environmental review process, while other issues may be best handled through a Memorandum of Agreement between our agencies. Below is a high level summary of some of the issues that SPU wants to highlight. If it would be helpful, we would be happy to sit down and discuss with you these issues in relationship to the SEPA and NEPA environmental review process.

1. **Sustainable Development:** SPU supports and encourages the Yesler Terrace Redevelopment proposal and its stated design guiding principle for "Sustainable design as a guiding principle for Yesler Terrace...in the design of the street and infrastructure systems." However, the potential environmental impacts of the possible sustainable systems are not well articulated in this document. As the project evolves and the potential environmental impacts associated with the proposal are better understood, this DEIS will need to be re-analyzed to see if those impacts were discussed in this document or a Supplemental DEIS may need to be developed and released (which translates to time, money and schedule impacts).
2. **Asset Ownership Issues:** There appear to be differences of opinion or a lack of clarity on ownership of some of the Drainage and Wastewater infrastructure in the proposed project area. SPU and SHA should work early on to discuss these differences and resolve any ownership issues.

3. **Utility Impacts:** In general the characterization of the existing utilities in this document overstates the poor condition of the utility, based on age alone. SPU uses an asset management approach, which utilizes a number of criteria, with age just being one of many factors. The life expectancy of many of our utility assets can well exceed 150 years, which would outlast the life expectancy of the proposed Yesler Terrace Redevelopment Project. However, proposed construction impacts could have a negative impact on existing utilities and reduce its life expectancy. Therefore there are a number of issues that will need to be worked out between our two agencies as this project progresses. We recommend a Memorandum of Agreement be developed between our two agencies to help manage expectations and uncertainties as the project develops throughout the environmental review phase, design, construction and operations. Asset Ownership, design, construction, maintenance and operations would also be covered under this MOA. 3 cont
4. **Green Jobs:** The Yesler Terrace Redevelopment project has the potential be a national model for green jobs and to provide a broad array of green jobs, during the planning, design, construction, operation and maintenance of this proposed redevelopment. This is an area that SPU encourages Seattle Housing Authority to expand considerably due to the potential opportunities for innovative training programs for green jobs as well as permanent green jobs that would be available to current and future residents of Yesler Terrace. There are also examples of Community Benefits Agreements that can serve as models for appropriate strategies and partnerships for achieving these goals, which we can recommend to assist in this endeavor. 4
5. **Environmental Equity and Social Justice:** SPU strongly urges the Seattle Housing Authority to work with the City of Seattle's Office for Civil Rights to apply the principles of the Race and Social Justice Initiative throughout this Draft Environmental Impact Statement. Evaluation of the social equity and environmental justice impacts would be assisted by the use of tools from the Initiative, such as the Racial Equity Tool kit. <http://www.seattle.gov/rsji/> 5

These attached comments include technical information, policy issues as well as environmental impacts that all need to be further addressed. In summary, SPU looks forward to working with you to help resolve these issues in order to achieve the stated goals of your proposed project. If you have any questions, please feel free to contact me at 206-733-9191. Thank you for this opportunity to review and provide input on this document.

Sincerely,



Nancy Ahern, Deputy Director
Utility Systems Management Branch
Seattle Public Utilities
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Attachment #1: Detailed DEIS Comment Sheet

Yesler Terrace Redevelopment Draft Environmental Impact Statement, October 2010

COMMENT FORM

Seattle Public Utilities

Document:

Yesler Terrace, DEIS, October 2010

Mike Brennan, Sahba Mohandessi, Ingrid Wertz, Eric Thorberg, Frank

Consolidated SPU Comments:

McDonald, Vicky Beaumont, Timothy Lowry, Joel Banslaben, Sheryl Shapiro, Joy Keniston-Longrie

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Page No.	Exhibit No.	Comment	Priority 1-3	Reviewer	Agency	Comment Type	Action Taken by Tech Lead
3.3-2		Reference a "preliminary analysis" indicating a capacity constrained sewer system - note that this analysis utilized a simple flow routing model that does not account for backwater effects or the possibility of additional capacity during due to surcharging.	3	Mike Brennan	SPU	T	6
3.3-2		References a "12 inch public stormwater drainage main" serving Harborview "that runs along the west side of the NW Sector" This drain line is not owned and maintained by SPU, according to our records. It does pick up street drainage at Alder St, but it may have been constructed by WSDOT when I5 was constructed.	1	Mike Brennan	SPU	T	7
3.3-3		"some of the structures do not meet current standards" Should amend to also state that this does not signify that the existing structures are inadequate or do not have capacity.	3	Mike Brennan	SPU	T	8
3.3-3		"A portion of a dedicated 12-inch public stormwater drainage main runs through the western edge of the NW Sector". See second comment above.	1	Mike Brennan	SPU	P	9
3.3-4		With proper use of BMP's and effective accidental spill response planning, significant impacts to water quality and downstream resources would not be expected." Please give some examples of BMP's and accidental spill response procedures, i.e., spill kits, Baker tanks	3	Mike Brennan	SPU	EPT	10
3.3-5		2nd para: "...the project would use green stormwater infrastructure (GSI) for flow control and water quality treatment..." Earlier in the document, it is stated that It is conservatively assumed that infiltration will not be viable. Please explain how this relates to the GSI strategy. i.e., relying on the pervious pavement sub base for retention without infiltration capacity is extremely limited. Give a sense of how effective GSI is expected to be for flow control, and whether this leads to more hard controls such as underground detention facilities.	1	Mike Brennan	SPU	EPT	11
3.3-6		"The general policy of the City of Seattle is to separate stormwater and sanitary sewer..." This is not necessarily true in light of recent policy discussion at SPU. SPU does not have a detailed plan for separation of the downstream basins (east or west), and weighing the pros and cons of separation, with stormwater quality impacts to receiving waters, it is not safe to conclude that separation will be required for Yesler Terrace.	1	Mike Brennan	SPU	PT	12
3.3-6		Construction Dewatering - report should give an indication of where temporary dewatering volumes could be discharged. The combined sewer may not be able to handle all dewatering volumes.	2	Mike Brennan	SPU	T	13
3.3-8		1st para: ownership issue of drain line, see comment #2, repeat for all alternatives.	1	Mike Brennan	SPU	T	14
3.3-9		.."green roofs (30 percent of the roofs are assumed to be green)..." Why aren't green roofs listed as a GSI strategy on p. 3.3-4?	3	Mike Brennan	SPU	T	15
3.3-9		"The new public stormwater drainage mains would connect to the combined sewer system at two locations..." The report should not assume that separation will be required, see comment for 3.3-6	1 6-55	Mike Brennan	SPU	T	16

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3.3-14		2nd para: Discussion of 1st Hill Streetcar should include the observation that coordination between the projects will minimize environmental impacts by reducing the risk of rework by anticipating utility needs for YT on the streetcar project.	1	Mike Brennan	SPU	P	
3.14-1		"Some of the first cast iron public water mains in Yesler Terrace were installed over 100 years ago and have exceeded their design life expectancy" This seems to imply that we cannot expect much service life from these mains, which is not true. Life expectancy for cast iron water mains is primarily dependent upon two factors: soil corrosivity and the quality of the original installation. Age is a minor factor.	1	Mike Brennan	SPU	T	
3.14-2		Report cites METRO's CSO's that overflow to Elliott Bay and Lake Washington, but make no mention of any City of Seattle CSO's. SPU can provide information regarding the combines sewer basins tributary to this project regarding frequency of overflows and any capacity issues. This information is an important piece in evaluating the alternatives that are being evaluated for handling increased sewer flows that are expected from the project.	2	Mike Brennan	SPU	T	
3.14-5		Table 3.14-1 lists the expected domestic water demands for the different project alternatives. Since fire flow typically governs water supply needs, this table should also indicate expected fire flow requirements, or provide in another table.	2	Mike Brennan	SPU	T	
3.1		This Chapter makes repeated references to "drainage tunnels, located under the slide slope areas in the southern area of the project near S. Jackson St. I found some documentation that indicates that these tunnels were abandoned when I5 was constructed, with the groundwater being diverted to the I5 Freeway drainage system. There are test borings on record in this area. The title of the report I located is South Jackson Street and Courthouse Hill Slide Area.	3	Mike Brennan	SPU	T	
1-44		Environmental Health Required/Proposed Mitigation Measures A King County Waste Discharge permit would be required to discharge any dewatering water to the combined sewer. Monitoring of dewatering discharges would be necessary to determine whether physical and chemical parameters are within King County discharge limits. If parameters are outside acceptable limits, treatment would be necessary prior to discharging to combined sewer. "Dewatering" type (construction, temporary, etc.) needs to be specified. Permanent sub-surface flows must not be discharged to the public wastewater system. Existing stormwater conveyance systems are generally not sized to convey subsurface flows.	1 6-56	Sahba Mohandessi	SPU	P	

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App. F. p. 40		Section 6.2. Section entitled "Other Possible Mitigation Measures" should be listed under Section 6.1. (Comment also relevant to same text in DEIS Section 3.3.3)	2	Ingrid Wertz	SPU	E	
3.14-1 paragraph 2		"have exceeded their design life expectancy." - SPU does not replace pipes based on age alone. Other factors are figured into it - pipe breaks, soil conditions, redundancy. While they may be at the end of their "expected design life" this does not mean they are going to fail soon.	3	Thorberg	SPU	T	
3.14-1 paragraph 3		Estimating current demand. 11 months of data may not accurately predict/reflect the demand for the area given the variability in weather and precipitation across years. Weather, etc impact the amount of water that may be used in a given year. More data should be easily obtainable to get a bigger picture of the water use at Yesler Terrace. It maybe that this is the amount of water used based on the current type of use. Recommend at least 6 years of data.	2	Thorberg	SPU	T	
3.14-3 Water-Construction		In general, temporary bypass service is not allowed within our direct service area.	2	Thorberg	SPU	T	
3.13-4		Coordination with the street car project should be a priority. Identify impacts to water mains and services now based on the chosen alternative. It may be difficult/more expensive to deal with the infrastructure after the street car line is in place on Yesler.	1	Thorberg	SPU	T	
3.14-5	Table 3.14-1	Unsure of the basis for some of these numbers. Unable to track them all down. Mainly the calculation of MDD and PHD. PHD peaking factor seems high if you are assuming there is not a lot of irrigation use.	2	Thorberg	SPU	T	
3.14-6		East of Boren - States that a 8-inch main on Fir would replace the 8-inch main removed between Fir and Yesler. The figure in the Appendix 3.1-1 shows a 12-inch main as the replacement. This needs to be verified as to the intent	2	Thorberg	SPU	T	
3.14-6		SW Sector - Ensure that the installation of this new water main would not impact the Streetcar.	1	Thorberg	SPU	T	
3.14-6		Alt 2 and 3 - All replacement new water mains should be coordinated as to not impact the Streetcar.	1	Thorberg	SPU	T	
Appendix L or O							
pg 20 3.1.1		The Water System Design Manual; is published by the Washington Department of Health, not Department of Ecology.	3	Thorberg	SPU	T	
pg 20	Table 3.1-1	Under the notes - I am unsure of how the PHD was calculated . There is not a consistent peaking factor over the numbers shown in the complimentary Table 3.1-3	2	Thorberg	SPU	T	
pg 21 3.1.4		During the fire flow analysis was the MDD included in the flow. DOH sizing requirements for fire flow capacity require the analysis to take place during MDD conditions.	2 6-58	Thorberg	SPU	T	

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General		The majority of the text in the DEIS was taken from the Public Utilities Technical Report. I assuming that comments submitted on that prior document did not find their way into the DEIS as the language still remains the same in both documents. Ideally any comments on that previous document will also be reflected in addressing the DEIS.	2	Thorberg	SPU	T	
3.14-9		In the section titled <i>Alternatives 1, 1A, and 4, NW Sector</i> : no mention is made of the existing Privately Owned 12-inch diameter Storm Drain to Combined Sewer pipe which runs along the west edge of the NW Sector. Will this pipe remain? Also, acknowledge that this pipe is a private system.	1	McDonald	SPU	T	
3.14-9		In the section titled <i>Alternatives 1, 1A, and 4, NW Sector</i> : The first sentence "The existing 12-inch combined sewer main located between 9th Avenue and Yesler Way does not have capacity for the estimated flows." First, City records indicate that this length of pipe is a combination of 8-inch and 12-inch diameters. Second, will this existing pipe be abandoned if a new combined sewer main is located in 8th Avenue to Yesler Way?	1	McDonald	SPU	T	
3.14-9		In the section titled <i>Alternatives 1, 1A, and 4, SW Sector</i> : In the first sentence, denote that the "existing combined sewer main along I-5" is privately owned.	1	McDonald	SPU	T	
3.14-9		In the section titled <i>Alternatives 1, 1A, and 4, SW Sector</i> ; In the first sentence the following excerpted statement is made "a new sewer main would be located along the west property line", who is the proposed owner of this new pipe?	1	McDonald	SPU	T	
3.14-10		In the section titled <i>Alternatives 2 and 3, NW Sector</i> ; The first sentence "The existing 12-inch combined sewer main located between 9th Avenue and Yesler Way does not have capacity for the estimated flows." First, City records indicate that this length of pipe is a combination of 8-inch and 12-inch diameters. Second, will this existing pipe be abandoned if a new combined sewer main is located in 9th Avenue from Alder Street to the downstream point of connection at I-5?	1	McDonald	SPU	T	
3.14-10		In the section titled <i>Alternatives 2 and 3, NW Sector</i> ; Last sentence, denote that the "existing sewer main along the west edge of the NW Sector" is privately owned.	1	McDonald	SPU	T	
1-43		Under "Possible Mitigation Measures," last paragraph. Should add additional option - SHA could subscribe to City of Seattle contracted haulers.	2	Vicky Beaumont	SPU	T	
2-34		2nd paragraph beginning "Due to the presence of..." The waste generated from building demolition is more correctly termed "construction and demolition debris," or "C&D." In Seattle C&D programs and management is separate from municipal solid waste (MSW, including garbage, recycling and organics).	3	Vicky Beaumont	SPU	T	
			6-59				

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3.15-54		2nd paragraph under Possible Mitigation Measures. Should add additional option - SHA could subscribe to City of Seattle contracted haulers.	2	Vicky Beaumont	SPU	T	
2-20		Please describe the impacts to SPU DWW utility infrastructure as a result of the various street vacation and reorientation scenarios.	1	Timothy Lowry	SPU	P	
2-28		Describe how the project proposes to meet the stormwater code requirement for Green Stormwater Infrastructure to the Maximum Extent Feasible under the various development alternatives given that the soil infiltration rate is cited at 0 inches per hour, the down gradient slopes are composed of uncompacted cut slopes and I-5 retaining wall, contaminated sites are common, most of the trees are being removed, and typical green roofs have minimal flow control value,	1	Timothy Lowry	SPU	P	
2-33		With relation to Natural Drainage and Green Roofs built, update the text from, "Sustainable design opportunities", to "required green stormwater infrastructure to the maximum extent feasible as required by SPU stormwater management and development Director's Rules".	2	Timothy Lowry	SPU	P	
2-33		Additional regulatory negotiations are anticipated, so please provide additional information on: "District Infrastructure Systems for Energy, Water and Waste – District infrastructure systems aggregate enough service demands to make local neighborhood utility solutions feasible. District infrastructure systems could be used as one approach to provide necessary infrastructure services, if determined to be feasible. District solutions may reduce greenhouse gases. Water reuse and anaerobic digesters may reduce sewer flows. Rainwater capture may reduce stormwater flows. Water reuse and rainwater capture could also reduce potable water demands. District systems for Yesler Terrace could potentially include energy, potable water, wastewater, and solid waste." These issues are likely to impact stormwater and wastewater MOA's between SPU, SHA and other regulatory entities.	1	Timothy Lowry	SPU	T	
Chapter 1 and 2		Describe how potential rainwater and/or greywater harvesting techniques will be applied to GSI to the MEF as the owner has proposed in a recent report that is not included or cited in the DEIS. Given the poor site infiltration options, rainwater harvesting may be the optimal GSI technique.	2	Timothy Lowry	SPU	P	
general		Encourage SHA to discuss CSO flow control reduction plan with King County since the project is located on a King County CSO basin and potential overflows of the Elliot Bay Interceptor may have downstream impacts to SPU CSO basins and overflows into Elliot Bay. Impacts to Seattle include negative economic impacts to Seattle waterfront businesses and tourist sites. While Elliot Bay may not fall under the City of Seattle's jurisdiction, Seattle citizens may be directly adversely impacted by overflows that impact City assets such as the salmon restoration project near the SAM Sculpture Park.	2 6-61	Timothy Lowry	SPU	T	

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Modeling section		Provide continuous simulation modeling for stormwater that is better correlated to the various development alternatives given that soil infiltration is 0 inches per hour.	2	Timothy Lowry	SPU	T	
general		Describe the impacts to GSI infiltrating systems given that the report cites perched groundwater in the context of GSI to the MEF.	2	Timothy Lowry	SPU	T	
1-3		Alternative 2 - "substantial transportation and utility infrastructure improvements would be required" - need more detail	2	Timothy Lowry	SPU	P	
1-4		Alternative 3 - "substantial transportation and utility infrastructure improvements would be required" - need more detail	2	Timothy Lowry	SPU	P	
1-21		Increased vehicle trip generation will have increased impact to water quality degradation.	2	Timothy Lowry	SPU	P	
1-23		Sewer system improvements -- provide more detail on the, new combined sewer main to be located on 8th Ave and connected to the existing Yesler main. Also describe the connection to the new combined sewer main at S Main Street.	1	Timothy Lowry	SPU	T	
1-25		Please describe the impacts and opportunities related to the various park space acreages. Consider both the increased ratio of site impervious surface and the space available for Green Stormwater Infrastructure (GSI).	2	Timothy Lowry	SPU	T	
1-25		Discuss the integrated pest management plan for the landscaped areas and the effects on water quality and resident health.	2	Timothy Lowry	SPU	T	
1-26		Discuss the walkability to public schools and compare the impacts on water quality related to bus and vehicle trips.	2	Timothy Lowry	SPU	T	
1-29		Residents and Community Access to Services - discuss opportunities to provide onsite amenities to reduce vehicle trips and reduce pollution source control .	2	Timothy Lowry	SPU	T	
1-30		Discuss potential training programs for residents to acquire green jobs involving green stormwater infrastructure such as bioretention systems, permeable pavements, tree maintenance and rainwater harvest collection systems.	2	Timothy Lowry	SPU	T	
2-9		Please provide more details on, "Aging sewer and water infrastructure as some mains date back to pre-Yesler Terrace and service lines (side sewers) have extensive leaks and blockages."	2	Timothy Lowry	SPU	T	
2-14		While not directly related to SPU interests, secondary benefits may be achieved through collaboration with King County to reduce overflows as stated in, 'The SPU sewer system conveys sewer flows to the King County Metro System, and includes pump systems, trunk lines and combined sewer/stormwater mains. Sewage is ultimately treated at the West Point Sewer Treatment Plant. The County's collection system downstream of the site has limited capacity and has combined sewer overflows during intense rainfalls. The lack of separation between the sewer and stormwater systems and uncontrolled stormwater flows contribute to downstream overflows in the combined mains."	2 6-62	Timothy Lowry	SPU	P	

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2-39		Describe and quantify from an LID approach how much pedestrian paths might reduce the effective impervious surface .	2	Timothy Lowry	SPU	T		79
2-39		Describe how an LID approach utilizing park/landscape/open space areas might be used for code required GSI to the MEF.	2	Timothy Lowry	SPU	P		80
2-47		Describe how the build out density tradeoffs will impact the GSI to the MEF requirement.	2	Timothy Lowry	SPU	P		81
3.1-2		Describe the infiltration potential for the soil classifications as they impact infiltrating systems such as bioretention systems and permeable pavements.	2	Timothy Lowry	SPU	T		82
3.1-2		Describe the slope stability as it impacts infiltrating systems such as bioretention systems and permeable pavements.	2	Timothy Lowry	SPU			83
3.1-9		Provide general discussion about how deep cuts, excavations and drilling be prevented from impacting SPU utility infrastructure.	2	Timothy Lowry	SPU	P		84
3.3-1		Detail the location of private and public utility infrastructure and the impacts to SPU assets.	1	Timothy Lowry	SPU	T		85
3.3-1		"The public combined sewer system leaves the site at three separate locations" - Please provide a map.	2	Timothy Lowry	SPU	T		86
Appendix D - Page 24		This page is missing - please renumber or add.	2	Timothy Lowry	SPU	E		87
Appendix F - Page 15		Describe the infiltration and/or under drain scenario for GSI given the statement, "Based on the assumption of 0 inches/hour (in/hr) native soil infiltration rate".	2	Timothy Lowry	SPU	T		88
Appendix F - Page 22		Describe the combined sewer pipes that will need replacement to increase stormwater flow capacity where partial street improvements are needed under different alternatives.	2	Timothy Lowry	SPU	T		89
Appendix F - Page 28		If full or partial street improvements will require separation of stormwater from the combined system, describe how this will be accomplished.	2	Timothy Lowry	SPU	T		90
Appendix F	Figure 4.2-1	Describe any potential impacts to SPU DWW infrastructure as a result of the installation of new public storm drains.	2	Timothy Lowry	SPU	T		91
Appendix F	Figure 4.2-2	Describe any potential impacts to SPU DWW infrastructure as a result of the installation of new public storm drains.	2	Timothy Lowry	SPU	T		92
Appendix F - Page 39		Describe strategies to coordinate with SDOT/Street Car construction to reduce the impacts to SPU DWW infrastructure. Ex: pipe stubs might be installed at the time that the streetcar track is being installed to avoid re-digging at a later date and increasing the risk of damage to SPU assets.	1	Timothy Lowry	SPU	T		93
3.4-3		Explain how the site design will meet the updated City's Urban Forest Management Plan in the range of 30% forest cover which is closer to the proposed goals in the 20 year timeframe proposed for the development.	2	Timothy Lowry	SPU	T		94
3.4-3		Consider preserving as many existing trees as is possible to benefit from the GSI existing tree credit which is double the new tree credit. Given the soil may not be conducive to infiltration in many areas of the site, trees may be a significant component of the GSI stormwater management plan.	2 6-63	Timothy Lowry	SPU	T		95
general		Consider native plants wherever possible for habitat enhancement.	2	Timothy Lowry	SPU	T		96

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general		To achieve GSI to the MEF, follow or better DPD and City's tree retention policies.	2	Timothy Lowry	SPU	T	
Appendix G - Page 5		Consider designing tree groves to reduce stormwater drainage rate and provide community space and stormwater management.	2	Timothy Lowry	SPU	T	
Appendix G - Page 5		Define whether there are existing groves in the development area.	2	Timothy Lowry	SPU	T	
Appendix G - Page 5		Compare the survival likelihood of existing trees versus proposed trees.	2	Timothy Lowry	SPU	T	
Appendix G	Attachment 3	To maximize GSI to the MEF, update the Urban Forestry Services, Inc. Tree Evaluation using the standards set forth in the new Urban Forestry Management Plan.	2	Timothy Lowry	SPU	T	
Appendix G	Attachment 3	To maximize GSI to the MEF, show how each design alternative is influenced by existing trees. Iterate.	2	Timothy Lowry	SPU	T	
Appendix G	Figure A-1 and A-3[?]	Healthy habitat connectivity will improve soil and tree health and increase stormwater management uptake to benefit GSI to the MEF elements such as bioretention swales, tree preservation and green roofs. Also show immediate 1/2 mile upstream and 1/2 mile downstream hydrology. Provide an upstream and downstream analysis of critical areas including current hydrology, critical areas and habitat connectivity at a more detailed scale than the USGS and iMap provided as figure A1 and [not labeled] respectively. Include discussion of greenspace connection to Beacon Hill Greenbelt and Lake Washington Parks and Greenbelt. Healthy habitat connectivity will improve soil and tree health and increase stormwater management uptake to benefit GSI to the MEF elements such as bioretention swales, tree preservation and green roofs. Also show immediate 1/2 mile upstream and 1/2 mile downstream hydrology.	2	Timothy Lowry	SPU	T	
Appendix G	Figure A-3[?]	Label the iMap with a title, figure number and tie-in with table of contents/list of figures.	3	Timothy Lowry	SPU	E	
Appendix G	Figure A-1	Figure A-1 is shown twice in the report, Remove the redundant figure.	3	Timothy Lowry	SPU	E	
3.4-5		Clarify if the irrigation line is the sole source of the seep water as mentioned: The irrigation line has been discharging water and locally saturating the slope for an undetermined length of time. During the delineation, a shutoff valve was installed on the irrigation line. Because it could not immediately be determined that the irrigation line was the sole source of potential wetland hydrology, a preliminary delineation of the potential wetlands (Wetlands A and B) was completed based on existing conditions at the time of the site visit."	2	Timothy Lowry	SPU	T	
3.4-5		Describe the proposed wetland mitigation, "compensation for any impacts to these wetlands". This impacts the discussion of GSI to the MEF as some of the solutions include GSI techniques.	2 6-64	Timothy Lowry	SPU	T	

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3.4-11		Please describe how a four-fold reduction in tree coverage drew the conclusion, "The reduction in vegetated area that is proposed under Alternatives 1-4 would result in a small reduction of potential habitat for animals and, therefore, could result in fewer animals at the site; however, due to the small reduction and the general ability for animals in this area to adapt to urban environments, this impact is not considered significant."	2	Timothy Lowry	SPU	T	
3.5-9		Please describe, "District Infrastructure Systems for Energy, Water and Waste" as the elements selected impact GSI. Describe the connectivity to GSI.	1	Timothy Lowry	SPU	T	
3.8-16		Describe the interconnectivity between land use actions and GSI as related to open space for stormwater management via trees, bioretention swales and green roofs.	2	Timothy Lowry	SPU	T	
3.8-54		Determine if land use decisions that benefit GSI can provide incentives, such as parking reduction to preserve trees, wetland mitigation and green roof incentives.	2	Timothy Lowry	SPU	T	
3.10-106		Describe the impact of shadows on the evapotranspiration uptake in proposed bioretention systems and trees as it impacts the effectiveness of GSI.	2	Timothy Lowry	SPU	T	
3.13-16		Describe how the increase in roadway pollutant loading resulting from increased vehicle trip generation and parking demand as a function of density (residential and commercial) and time will be mitigated in the context of water quality. This is important as GSI infiltrating systems may need to be designed for water quality requirements where infiltration occurs into the native soils and local and downstream aquifers.	2	Timothy Lowry	SPU	T	
various		Could not find cited "Appendix O".	3	Timothy Lowry	SPU	E	
general		Clarify why the "Phase 2 Integrated Water Strategy (IWS) Assessment", prepared by Alliance Environmental and dated July 12, 2010 is not cited in the utilities section. Instead, a conventional analysis is presented. It is unclear which approach is to be pursued - conventional or alternative.	2	Timothy Lowry	SPU	T	
3.14-2		Include the cited document, "preliminary analysis was performed by SPU on July 15, 2009, to evaluate the capacity of the City of Seattle downstream combined sewer system with higher density redevelopment at the Yesler Terrace site."	2	Timothy Lowry	SPU	T	
1-42		- Urban Agriculture (1-42 and other sections). In general, we would be interested to see more detail on the baseline of urban agriculture that currently exists at YT, and more detail on how each suggested alternative would implement urban agriculture in the redevelopment. For example, we would be interested to see information about the current sq ft of activity, types of food being grown, and end uses for the food.	1	Joel Banslaben	SPU	E	

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1-42		- District Infrastructure (1-43 and other sections). In general, we would be interested to see more detail on the implementation of district systems in each alternative and their associated impacts. In addition, SPU provided comments on the YT District Study, were those comments reflected in the EIS (in light of EIS being released prior to submission of those comments)? Possibly better question is how is the District Study and EIS being integrated.	1	Joel Banslaben	SPU	E	
1-43		- Waste Management and Deconstruction (1-43 and other sections). Their is an assumption that buildings are contaminated and thus will not be able to be deconstructed or recycled. What are these assumptions based upon? Was any testing performed? Even in most structures their is potential for abatement of contaminated materials and then either salvaging or recycling materials.	2	Joel Banslaben	SPU	P	
1-43		The review process should apply the City of Seattle's Racial Equity Toolkit in evaluating options.	2	Sheryl Shapiro	SPU	P	
3.16		Yesler Terrace EIS Comments: Green Jobs					
3.16		This section does not address the potential for green jobs education, development and training for residents throughout the Yesler Terrace redevelopment process. The need and opportunities for the stated 39% of residents 17 and under is significant.	2	Sheryl Shapiro	SPU	EP	
3.16		This section does not address the potential for green jobs education, development and training for residents throughout the Yesler Terrace redevelopment process. The need and opportunities for the stated 39% of residents 17 and under is significant.	2	Sheryl Shapiro	SPU	EP	
3.16		Green jobs could be in the deconstruction of existing structures, as well as the sustainability plans for Yesler Terrace which include, but are not limited to, District and or on-site water/ energy systems and urban agriculture and green infrastructure (horticulture, landscaping, storm water, etc.)	2	Sheryl Shapiro	SPU	EP	
3.16		Jobs discussed are limited to office/hotel and neighborhood commercial/retail and neighborhood services.	2	Sheryl Shapiro	SPU	EP	
		No reference or acknowledgement is made of the comments provided by the Citizens Review Committee in several workshops regarding the importance of open space and gardening-areas that have potential for green jobs training and development.(See below for comments)	2	Sheryl Shapiro	SPU	EP	
3.16		Additional public engagement is necessary to capture and reflect the interests, concerns and participation form residents, beyond the Citizen Review Committee members.	2	Sheryl Shapiro	SPU	EP	
3.16							

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		7/31/08 Workshop Q: Favorite thing to do A: Gardening Q: Favorite Places A: Private gardens, P-Patch Q: The ideal future of YT includes: Community gardens, Public flower garden 7/31/08 Workshop Q: Favorite thing to do A: Gardening Q: Favorite Places A: Private gardens, P-Patch Q: The ideal future of YT includes: Community gardens, Public flower garden	2	Sheryl Shapiro	SPU	EP	127
3.16		8/5/08 Workshop Q: What ideas presented did you like? A: Farmers market; Solar energy generation and anaerobic digester Personal garden space, roof-top garden Rainwater collection to feed gardens and public water features	2	Sheryl Shapiro	SPU	EP	128
3.16	Table 1.1, Cumulative Impacts, Page 1-11	10/15/08 workshop Q: What health issue worries you? A: Fear of less open space Q: What should top priorities be for making future Yesler Terrace healthy? A: For healthy environment: Place to grow flowers, small trees, plants;	2	Sheryl Shapiro	SPU	EP	
Executive Summary	Table 1.1, Green House Gas Emissions, Page 1-12	Construction of utilities and on-going operations should be considered as part of the cumulative Impacts , along with transportation and other proposed development should all be part of cumulative impacts.	2	Joy Keniston-Longrie		E	129
Executive Summary	Table 1.1, Environmental Health, page 1-12	Be sure and include greenhouse gas emissions life-cycle from direct impacts as well as including utilities and other proposed infrastructure to support existing and/or new proposed development.	2	Joy Keniston-Longrie		E	130
Executive Summary	Table 1.1, Operations, Page 1-14	Be sure to include rodent and vector control, mosquito breeding and other potential communicable disease associated with demolition, construction and on-going operations of existing and/or proposed project.	2	Joy Keniston-Longrie		E	131
Executive Summary	Table 1.1, Operations, page 1-18	If the portions of the site are deemed unacceptable for residential uses under HUD noise criteria (including extraordinary noise attenuation mitigation, how does this pass social equity and environmental justice test and stated city goals and objectives?)	2	Joy Keniston-Longrie		E	132
Executive Summary	Table 1.1, Historic Resources, page 1-19	If "existing low-income housing residents are temporarily or permanently displaced", how does this meet HUD requirements, stated city goals/objectives and social justice/environmental equity requirements?	2 6-67	Joy Keniston-Longrie		E	133

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Executive Summary	Table 1.1, Operations Cumulative Impacts	If 'potential exists for structural instability/undermining ..to the nearby historic properties', what mitigation is proposed to protect these historic resources?	2	Joy Keniston-Longrie		E	134
Executive Summary	Table 1.1, Sewer System Impacts, page 1-23	The First Hill Street Car Mitigated Determination of Non-Significance did not address historic (or utility) issues associated with the Yesler Terrace Redevelopment. Please double check that MDNS to be sure there is not a gap of cumulative impacts and needed mitigation to avoid, minimize and/or mitigate impacts to Historic Properties.	2	Joy Keniston-Longrie		EP	135
Executive Summary	Table 1.1, Sewer System Impacts, page 1-23	It is important to include the downstream impacts of sewer capacity as well as potential increase in back-ups, flooding and/or combined sewer overflows due to generation of stormwater and wastewater from this new proposed development.	2	Joy Keniston-Longrie		ET	136
Executive Summary	Table 1.1, Operations Cumulative Impacts	It is important to understand down stream sewer system impacts to ensure that wastewater and stormwater generated from this new proposed development does not impact other diverse or low income areas downstream -- social and environmental justice issues..	2	Joy Keniston-Longrie		EPT	137
Executive Summary	Table 1.1, Air, page 1-34	The First Hill Streetcar Mitigated Determination of Non-Significance did not address historic (or utility) issues associated with Yesler Terrace Redevelopment footprint, it stated that would be covered in this EIS. Please double check the First Hill Streetcar MDNS, to be sure there are not gaps. If there are gaps, you will need to determine if the gaps need to be covered in Yesler Terrace Redevelopment EIS or in the First Hill Street Car Environmental review process.	1	Joy Keniston-Longrie		E	138
Executive Summary	Table 1.1, Air, page 1-34	If 'toxic air pollutants in the vicinity of Yesler Terrace that exceed health-based standards to the degree that there is a potentially elevated health risk in long-term residency', how will social equity and environmental justice requirements be met?	2	Joy Keniston-Longrie		E	139
Executive Summary	Mitigation Measures	If 'portions of Yesler Terrace redevelopment site are deemed unacceptable for residential uses under HUD noise criteria..' how will social equity and environmental justice requirements be met? Noise has long been documented as having a negative human health impacts.	2	Joy Keniston-Longrie		EP	140
1-38	Mitigation Measures	Include a plan to coordinate with SPU to ensure water mains are protected during construction and not impacted by vibration or construction activities.	1	Joy Keniston-Longrie		EPT	141
1-38	Mitigation Measures	An MOA with SPU on utility protection and mitigation (water main, sewers, stormwater and 'tunnels', needs to be developed as a mitigation measure to protect utilities and rate payers'.	1	Joy Keniston-Longrie		EPT	142
1-38	Mitigation Measures	Zinc and Copper mitigation strategies to minimize the risk that these toxic elements are entering the stormwater or wastewater system which have down stream impacts on water quality, sediment, habitat, plants and animals.	2 6-68	Joy Keniston-Longrie		EPT	143

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1-43	Mitigation Measures	District Infrastructure systems for energy, water and waste mentioned as mitigation measures are potentially very far-reaching and have not had the potential environmental impacts adequately addressed in this document. Additional major policy, design, operational and regulatory disclosure and discussion is needed before it can be assumed it is a mitigation measure for the project.	1	Joy Keniston-Longrie		EP	144
1-43	Mitigation Measures	If proposed mitigation measures include increasing on-site recycling, demolition etc of material, you need to be sure the environmental impacts are properly described in this document.	2	Joy Keniston-Longrie		E	145
1-44	Mitigation Measures	Need to add mitigation measures for rodent control during demolition or rodents will be an on-going problem on-site, as well as moving to neighboring areas to cause new problems and potential public health issues.	2	Joy Keniston-Longrie		E	146
1-51	Mitigation Measures	Demolition Plan and documentation would need to be at a minimum approved by the Washington State Department of Archeology and Historic Preservation.	2	Joy Keniston-Longrie		P	147
1-51	Mitigation Measures	Another mitigation strategy is to ensure Project Managers, Project Team & consultants need to trained to ensure proper design specifications and contract language are in-place prior to notice to proceed.	2	Joy Keniston-Longrie		T	148
1-52	Mitigation Measures	Need to add a mitigation strategy to ensure that wet utilities (water, wastewater or stormwater) do not break as a result of construction activities (vibration, and/or earthwork) which in turn could have a negative environmental impact on existing infrastructure and buildings -- historic as well as non-historic.	1	Joy Keniston-Longrie		E	149
1-60	Mitigation Measures	Add mitigation measure to develop a utility protection plan to identify existing infrastructure which could be vulnerable to damage as a result of certain type of construction activities (vibration, earthmoving, etc) along with a mitigation strategy to reduce risk and a back-up plan to manage the potentially high consequences should the proposed mitigation strategies fail.	1	Joy Keniston-Longrie		E	150
1-61	Mitigation Measures	A mitigation strategy needs to be added to ensure that downstream impacts of sewer capacity are analyzed to ensure Yesler Terrace does not have adverse environmental impacts off-site due to increase wastewater generation due to significant increase in density.	1	Joy Keniston-Longrie		E	151
1-64	Mitigation Measures	Add mitigation measure for rodent control.	2	Joy Keniston-Longrie		E	152
1-64	Mitigation Measures	Add mitigation measure for noise and odor control associated with solid waste.	2	Joy Keniston-Longrie		E	153
1-68	Section 2.5.2,Need	Add mitigation measure which includes a non-traditional communication plan to reach out to diverse communities who may not have English as a first language, and/or who may not be able to read or write, and/or are not accustomed to working in a bureaucratic process of EIS.	2 6-69	Joy Keniston-Longrie		P	154

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2-9	Existing Utilities	The description of "Aging Sewer ad water infrastructure' is misleading and inconsistent with SPU asset management approach of utility management.	1	Joy Keniston-Longrie		P	155
2-14	Existing Utilities	The description of "Aging Sewer ad water infrastructure' is misleading and inconsistent with SPU asset management approach of utility management.	1	Joy Keniston-Longrie		P	156
2-14	Existing Utilities	Characterization of 'lack of serration between the sewer and stormwater and uncontrolled overflows contributing to downstream...' are very broad and sweeping statements, which have significant policy and regulatory implications.	1	Joy Keniston-Longrie		EPT	157
2-15	Street Vacations	"Some minor ponding occurs at low points onsite due to unmaintained catch basins..." Are you referring to the private on-site storm system previously discussed in the document?	2	Joy Keniston-Longrie		E	158
2-20	Sustainable Features	Impacts of street vacations and utility impacts need to be more clearly identified and described.	1	Joy Keniston-Longrie		E	159
2-33	Redevelopment Alternatives	"Sustainable design is a guiding principle for Yesler Terrace...in the design of the street and infrastructure systems." The potential environmental impacts of the possible sustainable systems are not well articulated in this document. As the project evolves & the potential environmental impacts associated with the proposal are better understood, this EIS will need to be re-analyzed to see if those impacts were discussed in this document or a Supplemental DEIS may need to be developed and released (which translates to time, money and schedule impacts).	1	Joy Keniston-Longrie		EPT	160
2-61; 2-65; 2-69; 2-74; 2-77; 2-78	Off-Site Alternatives	Downstream impacts for wastewater and stormwater for each alternatives with pre-agreed to basin boundaries and modeling methodology needs to be conducted for potential environmental impacts -- as a support technical disciplinary report.	1	Joy Keniston-Longrie		EPT	161
2-81	Landslide Hazards	Due to the issue of not meeting HUD requirements for noise and air-quality of this existing site, was a potential land-exchange for a more suitable site explored to better meet social equity and environmental justices?	2	Joy Keniston-Longrie		EP	162
3.1-12	Groundwater	The potential environmental, health and safety risks and consequences of constructing in a 'Known and Potential Slide Area' need to be more clearly articulated and communicated so that the public understands what the risks and consequences are. These risks and consequences also need to be analyzed in the context of social equity and environmental justice. They also need to be articulated with the potential public safety risks/consequences to motorists on I-5.	1	Joy Keniston-Longrie		EP	163
3.1-13	Air Quality	How compatible is the proposed on-site stormwater and sustainable infrastructure with the high water table? Suggest a technical disciplinary report focused specifically on this to help inform the EIS.	1 6-70	Joy Keniston-Longrie		ET	164

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3.2-16	Groundwater	"The analysis of Toxic Air Pollutants (TAPs) concentration associated with roadways in the vicinity of the project site suggests that emissions from traffic sources affect large areas nearby to the degree that there is a <i>potentially elevated health risk in long-term residency near busy roads...</i> " needs to be analyzed in the context of social equity and environmental justice initiatives for compatibility with City policy, and federal requirements.	2	Joy Keniston-Longrie		EP	
3.3-3 & 3.3-5	Stormwater	The statement "... For this EIS a conservative assumption has been made that there is no infiltrating into native soils", seems to be incompatible with the mitigation proposal to use extensive on-site sustainable green infrastructure. As better information becomes available, this EIS will need to be re-evaluated to see if proposed sustainable green infrastructure impacts (construction, operations and maintenance) have been adequately covered, otherwise a supplemental EIS to this document may be required.	1	Joy Keniston-Longrie		T	
3.3-6	Stormwater	State policy of separation may not be most current policy.	2	Joy Keniston-Longrie		EP	
3.3-14	Mitigation Measures	Downstream impacts from proposed Yesler Terrace on the sewer system to other portions of SPU's and King County's systems and potential environmental impacts on other neighborhoods or business districts (back-ups, overflows, reduced ability for development) need to be included in the cumulative impacts section.	2	Joy Keniston-Longrie		EPT	
3.3-15	Climate Change	The ownership, operation, maintenance, along with design criteria, regulatory requirements and on-going associated capital and operating costs needs to be part of an MOA with SPU to help manage expectations of developer.	2	Joy Keniston-Longrie		E	
3.5-5	Greenhouse Gas Emissions	So how might climate change impact proposed project, especially the landslide prone areas and the capacity/suitability for on-site green infrastructure ability to manage increase storm intensity and durations? Both WDOE and the White House Council on the Environment recommend that this analysis be part of the EIS review. It is doubtful that existing city codes have been updated to meet added risk for climate change impacts during the life-cycle of this proposed project, therefore the EIS understates the potential environmental impact.	1	Joy Keniston-Longrie		E	
3.5-6	Greenhouse Gas Mitigation	It does not appear that the intent of City Council Ordinance on Greenhouse Gas Emissions, # 122574, has been met, as it does not appear that all of the potential greenhouse gas emissions sources have been accounted for (i.e. the embodied, energy and life-cycle) greenhouse gas emissions for the public utility relocations and/or upgrades were taken into consideration. It appears it only looked at buildings.	2	Joy Keniston-Longrie		E	

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Page No.	Exhibit No.	Comment	Priority 1-3	Reviewer	Agency	Comment Type	Action Taken by Tech Lead
3.5-9	Greenhouse Gas Mitigation	Before you credit yourself for a Greenhouse Gas Offset for 'District Infrastructure for Energy, Water & Waste' you need to perform an Greenhouse gas emissions for the construction and operations of the district infrastructure which includes embodied, energy and life-cycle greenhouse gas emissions. It is recommended that a technical disciplinary report be prepared focusing on this, and comparing it to the alternative of the greenhouse gas emissions with the existing energy, water and waste lines of business to base the conclusion of the most sustainable on facts.	1	Joy Keniston-Longrie		E	
3.5-9	Environmental Health	Before you credit yourself for a Greenhouse Gas Offset for 'Natural Drainage & Green Roofs' you need to perform an Greenhouse gas emissions for the construction and operations of the infrastructure which includes embodied, energy and transportation green house gas emissions and compare to base case. Suggest a technical disciplinary report be prepared on this, including environmental impacts so that mitigation measures can be based on facts.	2	Joy Keniston-Longrie		E	
3.6	Environmental Health	Add public health impacts of rodents to the environmental health section, and proposed mitigation strategies.	2	Joy Keniston-Longrie		E	
3.6	Environmental Health	Add the environmental health impacts to humans exposed to excessive noise for residential areas similar to the existing and expected noise levels expected for this site, and proposed mitigation strategies.	2	Joy Keniston-Longrie		E	
3.6	Tables 3.7-3; 3.7-5; 3.7-6; 3.7-7; 3.7-8	Add human health impacts associated with elevated "Toxic Air Pollutants" discussed under air, and proposed mitigation strategies.	2	Joy Keniston-Longrie		E	
3.7, Noise	Significant Unavoidable Adverse Impact	There are is a high percentage of existing noise levels which do not meet HUD requirements and are considered "Unacceptable" according to HUD noise standards. Proposed mitigation does not appear to bring the noise levels to meet HUD standards. This situation leads to questions regarding site suitability under HUD criteria, as well as social equity and environmental justice issues per city and federal requirements.	2	Joy Keniston-Longrie		E	
3.7, Noise	3.9-32	Given the facts stated in the DEIS, it is unclear how the conclusion that there is "No significant unavoidable adverse impacts would be anticipated from the proposal" was derived. What about the acute and chronic exposure of the people who will be living here?	2	Joy Keniston-Longrie		E	
3.9, Policies	3.9-53	Policy E7 - "Control the impacts of noise, odor....in order to protect human health" does not seem to be supported by the Section 3.7 of the DEIS.	2	Joy Keniston-Longrie		E	
3.9, Policies	Utility Cumulative Impacts	Policy 2- Utilities & Right of Way and Street Vacation -- elements of how decisions regarding street vacation and impacts to utilities are made should be part of the mitigation MOA	1	Joy Keniston-Longrie		P	

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Yesler Terrace Redevelopment Draft Environmental Impact Statement, October 2010

COMMENT FORM

Seattle Public Utilities

Document:

Yesler Terrace, DEIS, October 2010

Mike Brennan, Sahba Mohandessi, Ingrid Wertz, Eric Thorberg, Frank

Consolidated SPU Comments:

McDonald, Vicky Beaumont, Timothy Lowry, Joel Banslaben, Sheryl Shapiro, Joy Keniston-Longrie

Comment Type:
 E: Environmental Impact
 P: Policy Issue for a MOA
 T: Technical Issue to be resolved in design

Priority:
 1. Critical issue requiring inter-agency discussion
 2. Factual or substantive error, issue or omission that should be corrected
 3. Editorial suggestion to improve readability or other idea

Page No.	Exhibit No.	Comment	Priority 1-3	Reviewer	Agency	Comment Type	Action Taken by Tech Lead
3.14-12	Alternatives 1&2	Due to existing sewer capacity constraints in this basin, it is not a safe assumption to make that "...no significant cumulative utility impacts would be anticipated from these projects, in combination with the Yesler Terrace Redevelopment."	1	Joy Keniston-Longrie		EPT	
3.14-10		The proposal for separating stormwater and than conveying to the combined system needs to coordinated with SPU design team.	2	Joy Keniston-Longrie		EPT	

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Response to DEIS Letter 10
Seattle Public Utilities

1. Comment noted. Responses to each individual comment are listed below. Several potential issues raised in these comments could be addressed through a Memorandum of Agreement between SHA and Seattle Public Utilities (SPU), rather than through the environmental review process.
2. For purposes of this EIS analysis, the energy analysis provided in **FEIS Section 3.5** and **FEIS Appendix E** represents a conservative scenario, assuming the construction of all electric building energy systems. This energy analysis concludes that under this scenario no significant impacts to the existing electrical infrastructure would be expected with the proposed redevelopment. These calculations did not take into consideration any potential mitigation efforts to reduce the energy use of the redevelopment, such as LEED® building techniques, a potential district energy system or energy conservation measures, even though these features could be incorporated into the final development.

As stated in DEIS page 2-33 and 3.5-9, sustainable design is a guiding principal for Yesler Terrace and an array of sustainable features are being considered for incorporation into the final development. The specific sustainable features that would be incorporated into the redevelopment that could potentially reduce energy use, greenhouse gas emissions, water use and other impacts on the natural environment have not been determined at this time. These features would be determined at the time that specific development is proposed in the future and would serve to reduce overall impacts from what has been analyzed in this EIS.

Separate from this EIS analysis, SHA issued a report entitled, "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics, in December 12, 2010. This analysis is intended to support future decision-making by providing a discussion of the potential sustainability elements that could be incorporated into the final development and a comparative analysis of the relative reductions that could be realized with different features. This analysis was for informational purposes and did not provide an analysis of the Preferred or DEIS Alternatives; therefore, the analysis has not been incorporated into this EIS.

3. Comment noted. SHA will coordinate with the City regarding the condition of existing utilities. A Memorandum of Agreement could be executed between SHA and SPU to help manage expectations and uncertainties as the project continues through environmental review, design, construction and operation.
4. Comment noted.
5. The City of Seattle Race and Social Justice Initiative is aimed at ending institutionalized racism and race-based disparities in City government. The racial equity toolkit is used by City departments to analyze the race and social justice implications of budget, program and policy proposals. As a City tool to be applied to City Departments, this is not necessarily an appropriate mechanism to be applied to this EIS analysis.

6. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
7. Comment noted. SHA will coordinate with the City regarding ownership of this stormwater drainage main.
8. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
9. Comment noted. See the response to Comment 7 of this letter.
10. A list of specific BMP examples was included in DEIS Appendix F. A clarification is provided in **FEIS Chapter 7, Errata**.
11. Permeable pavement *surfaces* have been excluded from the EIS analysis due to the presently unknown infiltration properties of the site soils. As soil conditions and proximity to critical areas permit, porous pavement surface could be selected during the design phase as a Green Stormwater Infrastructure (GSI) strategy to reduce effective impervious area. For further information, please see **FEIS Chapter 4, Updates to the DEIS Analysis**, regarding the approach to GSI to the Maximum Extent Feasible.
12. Comment noted. King County Code, Chapter 28.84 Water Pollution Abatement, section 28.84.050 Sewage disposal rules and regulations, paragraph G.1. states, "New local public sewers or private sewers and extensions of existing sewers shall be designed as separate sewers and storm drains, except where the local public agency can demonstrate the necessity for a combined sewer extension." As such, the stormwater analysis assumed separate stormwater and sewer systems would be required for the proposed Yesler Terrace Redevelopment.
13. Comment noted. The only discharge location available for temporary dewatering is the combined sewer, which could be at capacity. Additional storage of construction dewatering with flow control could be required. This mitigation measure is reflected in **FEIS Chapter 7, Errata** and has been added to **FEIS Section 3.3, Water Resources**, for the Preferred Alternative.
14. Comment noted. See the response to Comment 7 of this letter.
15. Comment noted. Green roofs have been added to the list of GSI options for the Preferred Alternative, and this change is reflected in **FEIS Chapter 4, Updates to the DEIS Analysis** and **FEIS Chapter 7, Errata**, for the DEIS Alternatives.
16. Comment noted. See the response to Comment 12 in this letter.
17. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
18. Comment noted. SHA will coordinate with the City regarding the condition of these public water mains.
19. Per a phone call with Mike Brennan, January 19, 2011, Mike Brennan through discussion with Andrew Lee, SPU Manager, determined that Yesler Terrace is not a contributing factor to the City of Seattle's King Street combined sewer overflow (CSO), or any other City of Seattle CSO.

20. Uniform fire flow required from a fire hydrant was used for analyzing water mains for all of the DEIS alternatives. DEIS Appendix L Public Utility Technical Report: on page 20, "Table 3.1.1 Basis of Design for Water Main" indicates required fire flow of 2000 GPM and minimum system pressure of 20 psi.
21. Comment noted. The referenced report was reviewed as part of preparation of the Earth Technical Report (DEIS Appendix D). The drainage tunnels and borings near S Jackson Street are documented in the SDOT landslide folios that were reviewed; the presence of the tunnels and the connection of the 8th Avenue S/Washington Street tunnel to the I-5 drainage system are discussed in Section 2.5.4 of the Earth Technical Report.
22. Comment noted. This environmental health-related mitigation measure refers to management of dewatering water extracted from temporary excavation dewatering systems that may be required for construction of certain underground structures and utilities. Please refer to DEIS Sections 3.6.2 and 3.6.3 for a further discussion of the potential environmental health-related impacts and mitigation measures associated with excavation dewatering water.
23. Comment noted. This standard practice would be followed.
24. Comment noted. This revision is reflected in **FEIS Chapter 7, Errata** and has been added to **FEIS Section 3.3.3** for the Preferred Alternative.
25. Comment noted.
26. Comment noted. The following statement is included in **FEIS Chapter 7, Errata** and in **FEIS Chapter 2**: "Stormwater runoff from the entire site would be conveyed using man-made systems including GSI to the public combined sewer system."
27. Comment noted. A clarification is provided on page 20 of DEIS Appendix F - Water Resources Technical Report; add the following after the sixth sentence of the third paragraph, "The construction operator would need to apply for coverage under the NPDES Construction General Permit for Alternative 1-4 and the No Action Alternative." A change is provided on page 39 of the Appendix F - Water Resources Technical Report; add the following paragraph after the fourth paragraph, "The construction operator would apply for coverage under the NPDES Construction General Permit" (see **FEIS Chapter 7, Errata**). This permit would also be required for the Preferred Alternative, and has been added to the list of permits in the **FEIS Fact Sheet**.
28. Comment noted. A change is provided on page 39 of DEIS Appendix F - Water Resources Technical Report, move the eighth paragraph on page 39 to after the fifth paragraph on page 40. A change is provided on page 3.3-14 of the DEIS, move the eighth paragraph on page 3.3-14 to after the fourth paragraph on page 3.3-15 (see **FEIS Chapter 7, Errata**).
29. Comment noted. A clarification is provided for the DEIS, on page 3.3-14 the second sentence of the eighth paragraph is hereby modified to read as follows: "Zinc and copper source controls would extend to rooftops, which would be constructed of inert materials so that water quality treatment facilities for metals removal would not be required." A clarification is provided for the DEIS Appendix F - Water Resources Technical Report on

page 39 the second sentence of the eighth paragraph is hereby modified to read as follows: "Zinc and copper source controls would extend to rooftops, which would be constructed of inert materials so that water quality treatment facilities for metals removal would not be required" (see **FEIS Chapter 7, Errata**). A mitigation measure addressing potential zinc and copper impacts is included in DEIS and **FEIS Sections 3.3.3**.

30. Comment noted. A change is provided on page 40 of the DEIS Appendix F - Water Resources Technical Report, move the seventh paragraph on page 40 with the heading called, "Other Possible Mitigation Methods," to after the second paragraph on page 40. A change is provided on page 3.3-15 of the DEIS, move the sixth paragraph on page 3.3-15 with the heading called, "Other Possible Mitigation Methods," to after the first paragraph on page 3.3-15 (see **FEIS Chapter 7, Errata**).
31. Comment noted. See the response to Comment 18 of this letter.
32. Comment noted. The increase in additional data may only change the outcome by less than 10 percent and, therefore, the additional research and calculations was, in the opinion of the EIS stormwater consultant, not necessary for the EIS level of effort.
33. Comment noted.
34. Comment noted. Please see the response to Comment 17 of this letter regarding coordination with the streetcar.
35. Peak Hourly Demand was estimated for each proposed block as equivalent residential units (ERU) using the Equation 5-1; page 58, Water System Design Manual, Washington State Department of Health's (DOH), December 2009. Alternative 1, 1-A, 2, 3 and 4 indicated peaking factors ranged from 2.1 to 2.9. The table had an error in maximum daily demand (MDD) and peak hourly demand (PHD) for Existing /No Action Alternative, and those were revised. On page 3.14-5 of DEIS, Table 3.14-1 Summary of Water Demand, the 4th row of Existing Condition / No Action Alternative, in columns of MDD and PHD are here by modified to read as follows: 167,000 gpd for MDD and 561 gpm for PHD (see **FEIS Chapter 7, Errata**).
36. The replacement should be an 8-inch main in E Fir Street. Call-out of the proposed replacement in DEIS Appendix Figure 3.1-1 was revised. On page 26 of DEIS Appendix L, Public Utility Technical Report, Figure 3.1-1, the proposed water main called out 12-inch connecting to 12th Avenue in north of the East of Boren Sector is here by modified to read as follows: 8" W (8-inch watermain); see **FEIS Chapter 7, Errata**.
37. The SW Sector is outside the limits of construction of the streetcar. For the sectors within the Streetcar limits of work, coordination with the streetcar would be conducted to provide stubs and or sleeves at the time of the streetcar installation to limit future disturbance to streetcar service or rework. See also the response to Comment 17 of this letter.
38. Comment noted. See the response to Comment 17 in this letter regarding coordination with the streetcar.

39. The text was revised. On page 20 of Appendix L, Public Utility Technical Report, in 4th line of Section 3.1.1 is here by modified to read as follows, "To simulate peak hourly demand (PHD) and maximum day demand (MDD) conditions, Water System Design Manual, WA DOH (the manual) was referenced." See **FEIS Chapter 7, Errata**.
40. See the response to Comment 35 in this letter.
41. For fire flow analysis, the maximum day demand (MDD) and peak hourly demand (PHD) were considered per Water System Design Manual, WA DOH (on page 46, "6.3 Fundamental Design Principle for Physical Capacity Analysis). The physical capacity analysis is based on the water system's ability to meet the MDD for the entire water system. It must also verify that adequate distribution system pressure can be maintained under PHD and MDD plus fire flow conditions where fire flow is provided (WAC 246-290-230)." The model analysis for pipe sizing conservatively maintained 20 psi residual pressure and 2000 GPM of fire hydrant flow using the worst case time period during PHD. See response to Comment 20 of this letter.
42. Comment noted. Where appropriate, clarifications and corrections have been made to both the DEIS text and the Public Utilities Technical Report (see **FEIS Chapter 7, Errata**).
43. The 12-inch storm drain is noted on DEIS page 3.3-7 for Alternative 1, 1A, and 4 in the NW Sector. SHA will coordinate with the City regarding ownership of this line.
44. It is acknowledged that the first segment of pipe south of 9th Avenue is an 8-inch pipe. The capacity constrained pipe is only the 12-inch pipe. The pipe would be abandoned and stormwater flow would be re-directed to the new combined sewer pipe in 8th Avenue with the proposed redevelopment.
45. Comment noted. SHA will coordinate with the City regarding the ownership of this line.
46. Comment noted. SHA will coordinate with the City regarding the ownership of this line.
47. It is acknowledged that the first segment of pipe south of 9th Avenue is an 8-inch pipe. The capacity constrained pipe is only the 12-inch pipe. The pipe would be abandoned and stormwater flow would be redirected to the new combined sewer pipe in 9th Avenue with the proposed redevelopment.
48. Comment noted. SHA will coordinate with the City regarding the ownership of this line.
49. On DEIS page 3.15-54, under paragraph 1, it is noted that SHA may not choose to provide waste and recycling collection for the redevelopment, depending on logical and economic conditions. SHA would, therefore, contract with other waste management collection services, such as City of Seattle Contracted Haulers.
50. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
51. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
52. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.

53. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
54. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
55. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
56. Comment noted. This change is reflected in **FEIS Chapter 7, Errata**.
57. Comment noted. These additional “Other Possible Mitigation Measures” have been added to **FEIS Chapter 7, Errata** under 3.15.5, Solid Waste.
58. Comment noted. These additional “Other Possible Mitigation Measures” have been added to **FEIS Chapter 7, Errata** under 3.15.5, Solid Waste.
59. See the response to Comment 49 in this letter.
60. See DEIS Chapter 3.14. Utility descriptions are provided starting on page 3.14-5 for water and page 3.14-9 for combined sewer.
61. See **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of green stormwater infrastructure (GSI) to the maximum extent feasible (MEF).
62. The opportunities noted in this section include options beyond the GSI MEF, as required by SPU. GSI MEF is noted in the appropriate bulleted items. See the response to Comment 61 of this letter above.
63. Comment noted. This information is included in “Yesler Terrace Sustainable District Study,” by CollinsWoerman and Gibson Economics, dated December 12, 2010. Also see **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF in relation to water resources.
64. See the response to Comment 63 in this letter.
65. SHA is coordinating with King County regarding Combined Sewer Overflows. Implementation of GSI is encouraged by King County to reduce stormwater flows. SHA and King County plan to share flow monitoring data in order to develop a hydraulic model.
66. Continuous modeling has been performed on a block-by-block basis for each alternative so that stormwater GSI to the MEF can be evaluated for any combination of alternatives. See page 3.3-5 fourth paragraph of the DEIS and Section 4.2.1 of the DEIS Appendix F - Water Resources Technical Report for a description of the continuous hydrologic model and assumptions.
67. As specific zones of perched groundwater are identified during the design phase of the project, specific GSI elements could be designed with an impermeable liner to address perched groundwater. Also see **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF.

68. See DEIS Section 3.3, Water Resources, 3.13, Transportation, and 3.14 Utilities, and **FEIS Sections 3.3, 3.13 and 3.14** for additional information on proposed utility and transportation improvements.
69. See DEIS Section 3.3, Water Resources, 3.13, Transportation, and 3.14 Utilities, and **FEIS Sections 3.3, 3.13 and 3.14** for additional information on proposed utility and transportation improvements.
70. Comment noted. See DEIS Section 3.3, Water Resources, and **FEIS Section 3.3** for additional information on potential water quality impacts.
71. See DEIS Section 3.14, Utilities, and **FEIS Section 3.14**, for additional information on proposed sewer system improvements.
72. A detailed description of the proposed parks and open space areas is provided in DEIS Section 3.15.1 and in **FEIS Section 3.15.1**. Discussions regarding impervious to pervious surface ratios and Green Stormwater Infrastructure are provided in DEIS Section 3.3 and this **FEIS Section 3.3**.
73. Integrated Pest Management (IPM) can be a component of landscape management plan as part of the Seattle Green Factor required as part of Ordinance 122311. IPM reduces impacts to water quality and human health, in part, by limiting use of chemicals as part of maintenance of landscaping. Potential effect of IPM on water quality and human health is an indirect impact. IPM would be developed as part of project landscape design plans.
74. Comment acknowledged. The close proximity of the new onsite residential uses to nearby schools such as Bailey-Gatzert Elementary could result in reduced vehicle trips. Any resulting impacts to water quality from this reduction in vehicle trips would be positive.
75. Comment acknowledged. As noted in the DEIS, (Section 3.15.6, Community Services) the redeveloped Yesler Terrace site would provide more space for neighborhood service uses than under existing conditions. Also, it is anticipated that neighborhood commercial space provided with redevelopment under Alternatives 1-3 and the Preferred Alternative could include small to medium retail uses such as grocery, dry cleaners, restaurants and book stores. The addition of such amenities to the site could reduce the need for residents to travel offsite in order to access such services. Reduced vehicle trips and consequently reduced pollution and greenhouse gas emissions could result.
76. Comment noted. SHA may consider providing green jobs as part of the Yesler Terrace redevelopment.
77. See **FEIS Section 3.14, Utilities**, Affected Environment for additional information on the condition of existing sewer and water infrastructure.
78. See the response to Comment 65 in this letter.
79. For the DEIS and this FEIS, pedestrian paths and other various park surfaces were considered to be impervious for the stormwater analysis. Exact amounts of pedestrian

paths have not been determined at this point in the redevelopment process, and were, therefore, not accounted for in the analysis. As soil conditions and proximity to critical areas permit, porous pavement surface could also be selected during the design phase as a GSI strategy to reduce effective impervious area. Also see **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF.

80. Public open space, such as that proposed with the Yesler Terrace Redevelopment, could provide areas for GSI facilities, consistent with the City Code. Also see **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF.
81. Information regarding the amount of GSI required to provide flow control for the DEIS Alternatives is summarized in DEIS Section 3.3.2 and for the Preferred Alternative in **FEIS Section 3.3.2, Water Resources**.
82. General engineering characteristics, including qualitative descriptions of the permeability of some of the surficial soil units present at the site, are summarized in DEIS Section 3.1.1; additional details are included in the Earth Technical Report (DEIS Appendix D). Site-specific exploration and field testing of soil permeability would be conducted as part of the design of the infiltration systems used at the site.

Infiltration into native soils for the purposes of stormwater modeling and planning in the DEIS and this FEIS was assumed to be 0 in/hr, which is a conservative assumption. During the design phase, it may be determined that infiltration could be used in certain areas of the site. Also see **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF.

83. A discussion of slope stability considerations associated with redevelopment adjacent to or within existing slide-prone areas on the DEIS site is presented on DEIS Page 3.1-12; additional details are included in the Earth Technical Report (DEIS Appendix D). Also see the response to Letter 2, Comment 9.

During the design phase, specific GSI facilities could be designed to include an impermeable liner within the vicinity of critical areas (i.e. steep slopes). Also see **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF."

84. A general discussion of mitigation measures that would be used to protect existing structures and utility infrastructure during site redevelopment is summarized in DEIS Section 3.1.3; additional details are included in the Earth Technical Report (DEIS Appendix D).
85. See DEIS Appendices F and O for depictions of private and public infrastructure under existing conditions and with Alternatives 1-4 and the No Action Alternative; see **FEIS Appendix K** for depictions of private and public utility infrastructure with the Preferred Alternative.
86. See the response Comment 85 in this letter.

87. Page 24 of Appendix D was included in the DEIS submittal; it is possible that this page was missing in the commenter's document.
88. See **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF.
89. The following sentence has been added after the second paragraph on page 22 of DEIS Appendix F - Water Resources Technical Report and the second paragraph on page 3.3-6 of the DEIS Section 3.3, "See Section 3.3.2 of Appendix L - Public Utilities Technical Report for a discussion of combined sewer improvements required for each alternative." (see **FEIS Chapter 7, Errata**). A summary of combined sewer changes is also provided for each Alternative in Section 4.2.3 of DEIS Appendix F.
90. Specific plans for stormwater drainage/combined improvements for each DEIS Alternative are described in Section 4.2.3 of DEIS Appendix F, and for the Preferred Alternative in **FEIS Section 3.3, Water Resources**.
91. Impacts to SPU DWW within the site are described in Section 4.2.3 of DEIS Appendix F. See Section 3.3.2 of DEIS Appendix L - Public Utilities Technical Report for a description of proposed combined sewer changes for each of the EIS alternatives and Figure 3.2-1 and 3.2-2 in DEIS Appendix L.
92. See the response to Comment 91 in this letter.
93. See the response to Comment 17 in this letter regarding coordination of proposed Yesler Terrace utilities with the streetcar.
94. See the response to Letter 2, Comment 2.
95. The following mitigation measure has been added to **FEIS Section 3.4, Plants and Animals**.
- "GSI Design should consider the benefits of Seattle's Green Stormwater Infrastructure (GSI)/Green Factor program, which favors installation of medium/large and large trees over small trees, shrubs, and groundcovers. Installation of medium/large and large trees could result in exceeding the required 1:1 mitigation ratio for exceptional trees."
96. Incorporating native plants is included as a mitigation measure on DEIS page 3.4-14.
97. Tree retention policies would follow SMC 25.11.090, which states that exceptional trees and trees over 2 feet in diameter that are removed in association with development shall be replaced by one or more new trees. Because trees are important to the ecosystem and the health, safety, and welfare of the public and because it is anticipated that regulatory requirements for trees will become more prevalent in the future, options to mitigate beyond the 1:1 ratio would be outlined for final design.
98. Specific landscape design would be determined by final design and City code requirements. Additional mitigation and design techniques have been provided in **FEIS Section 3.4.3, Plants and Animals**.

99. The tree inventory completed by Urban Forestry Services, Inc. for the DEIS (see DEIS Appendix G) and the addendum prepared for this FEIS (see **FEIS Appendix D**) do not indicate the presence of groves on the Yesler Terrace site.
100. See the response to Letter 2, Comment 2.
101. The technical information within the tree inventory completed by Urban Forestry Services, Inc. for the DEIS (see DEIS Appendix G) and the addendum prepared for this FEIS (see **FEIS Appendix D**) assisted in determining practical and feasible solutions to preserving, avoiding, and/or minimizing impacts to existing exceptional and valuable trees. In addition, potential future landscape designs are discussed as a way to mitigate for trees that may be destroyed as a result of construction activities. All of this satisfies the goals set forth within the City's 30-year Urban Forest Management Plan.
102. An evaluation of how the DEIS Alternative would impact the existing exceptional and valuable trees can be found in Section 3.4.2 of the DEIS. An analysis of the Preferred Alternative impacts and a comparison to the DEIS Alternative impacts is provided in **FEIS Section 3.4.2, Plants and Animals**.

Please also see the response to Letter 2, Comment 2.

103. Comment noted. Figures included in DEIS Appendix G show surface hydrology within 1/2 mile of project site. SMC 25.09.330(B) describes critical areas application submittal requirements and includes identification of critical areas within 25 feet (100 feet specific to riparian corridors and wetlands) of a site's property boundary. A site reconnaissance was completed to identify critical areas in the project vicinity. Greenspace connections, specifically habitat corridors, between the referenced resources do not exist.
104. DEIS Appendix G text refers to iMap included in Attachment 1. iMap in Attachment 1 identifies project area and contains King County iMap labels.
105. Figure A-1 is only presented once in Appendix G available for download from the project website.
106. As stated in **FEIS Section 3.4.1**, additional site investigation of the potential wetland areas was completed by Landau Associates on March 2 and March 18, 2011 to review site hydrology, and is summarized in **FEIS Appendix D**. The wetland delineation determined that the two areas have wetland hydrology, soil conditions and vegetation. Information on these potential wetlands has been submitted to the U.S. Army Corps of Engineers (USACOE) for a determination as to their status. In March 2011, the USACOE made a preliminary determination that these wetlands "may be" waters of the US and, therefore, under the USACOE's jurisdiction. A final determination regarding the status of these potential wetlands will be completed after the issuance of this FEIS.
107. Specific mitigation strategies have not been identified, but if needed, would include any one or combination of the options listed. GSI is an option for mitigation; however, achieving GSI to the MEF is a function of stormwater design needs independent of the mitigation need for potential wetland impact. Any mitigation required could be accommodated by GSI designed to the MEF as part of site stormwater design; additional GSI would not be designed for the sole purpose of wetland mitigation.

108. The impacts to significant habitat (i.e., exceptional trees) are relatively minor, and remaining habitat is not significant habitat (i.e., rare, uncommon, or exceptional plant or wildlife habitat per SMC 25.05.675.N.2.c). Canopy coverage goals are recognized, but not adopted, by the City. Please also see the response to Letter 2, Comment 2.
109. See **FEIS Chapter 4, Updates to the DEIS Analysis**, for a discussion of the relationship between the "Yesler Terrace Sustainability District Study" and the proposed Yesler Terrace stormwater control system, including the use of GSI to the MEF.
110. Please refer to the detailed description of the proposed Green Stormwater Infrastructure facilities provided in **FEIS Chapter 4, Updates to the DEIS Analysis**.
111. Please refer to the detailed description of the proposed Green Stormwater Infrastructure facilities provided in **FEIS Chapter 4, Updates to the DEIS Analysis**.
112. The impacts of shadows on GSI was not included in the factors associated with sizing the GSI facilities, per the City of Seattle Code.
113. The following sentence has been added after the third sentence of the fourth paragraph on page 15 of DEIS Appendix F - Water Resources Technical Report, "Areas of the proposed site that may be classified as "High-Use" based on increased traffic loading or where flow from pollution-generating impervious surfaces (PGIS) would be concentrated, would likely require pretreatment before discharge to GSI facilities" (see **FEIS Chapter 7, Errata**).
114. Comment noted. The reference to "Appendix O" has been replaced with "Appendix L" in the third paragraph on page 3.3-2, the first paragraph on page 3.3-7, the fourth paragraph on page 3.14-4, the fourth paragraph on page 3.14-6, the fourth paragraph on page 3.14-7, the fifth paragraph on page 3.14-8, the fourth paragraph on page 3.14-10 and the fifth paragraph on page 3.14-11 (see **FEIS Chapter 7, Errata**).
115. This study was reviewed; however, the DEIS and this FEIS are based on not providing rainwater harvesting. See **FEIS Chapter 4, Updates to the DEIS Analysis**, for a discussion of the relationship between the District Sustainability Study and the proposed Yesler Terrace stormwater control system, including the use of GSI to the MEF.
116. Sahba Mohandessi at SPU is the source of this document.
117. Please see the response to Letter 2, Comment 3.
118. Please see the response to Letter 10, Comment 2.
119. A Hazardous Materials Assessment was performed by Pacific Rim Environmental, Inc. in 2010. A Demolition Assessment was also performed by Construction Group International, LLC in 2010.
120. Comment acknowledged. Please refer to the response to Comment 5 of this letter.
121. Comment acknowledged. Please refer to the response to Comment 5 of this letter.

122. Comment acknowledged. SHA may consider providing green jobs as part of the site redevelopment.
123. Comment acknowledged.
124. Comment acknowledged.
125. Comment acknowledged.
126. Comment acknowledged. Multiple opportunities have been afforded to Yesler Terrace residents to be involved in the EIS process. As detailed in DEIS Section 3.17, Environmental Justice and DEIS Appendix B, SHA and the City of Seattle Human Services Department (acting on behalf of HUD) conducted an EIS scoping process for the Yesler Terrace Redevelopment project. Scoping included hand-delivery of the Determination of Significant/Notice of Intent (DS/NOI) and Request for Comments on the Scope of the Yesler Terrace Redevelopment Project EIS to the current occupants of each of the units on the Yesler Terrace site. The DS/NOI included notification of a public open house to provide the public an opportunity to become more familiar with the proposal and a public scoping meeting to provide the opportunity to comment orally on the scope of the EIS. An EIS Public Scoping meeting was held on April 29, 2010, at which translation services were provided for each of the primary languages spoken by residents of Yesler Terrace. At the meeting, residents were afforded the opportunity to provide oral comments on the scope of the DEIS either privately to a court reporter or publicly in front of the group.

Similar outreach efforts and opportunities to participate in the process were extended to Yesler Terrace residents during the DEIS comment period. See **FEIS Section 2.2** for a summary of the DEIS comment period.

127. Your comments/summary of workshop comments are noted for the record.
128. Your comments/summary of workshop comments are noted for the record.
129. Utility and transportation impacts are embedded into the greenhouse gas calculations. As noted on the DEIS on page 3.5-8, “greenhouse gas emissions and energy use associated with the above-mentioned offsite actions would contribute to the cumulative carbon footprint of the City of Seattle, but not significant cumulative impacts are anticipated.”
130. The greenhouse gas emissions analysis provided in DEIS Section 3.5 and **FEIS Section 3.5** both include direct life-cycle emissions analysis as well as utilities (energy) impacts from the proposed redevelopment.
131. See the response to Letter 10, Comment 73.
132. With respect to noise conditions on the site, no significant noise impacts are expected as a result of redevelopment under the Preferred Alternative (i.e. due to increased traffic on area roadways or due to heating, venting and air-conditioning and mechanical equipment associated with new buildings). However, as discussed in **FEIS Section 3.7, Noise**, the site suitability analysis indicates that certain residential buildings under the

Preferred Alternative would be located in areas classified as “unacceptable,” under HUD noise criteria (i.e., areas with sound levels above 75 dBA). As noted in FEIS Section 3.7, under the Preferred Alternative, implementation of appropriate noise control mitigation measures, including the required/proposed mitigation measures listed in **FEIS Section 3.7.3**, would be necessary to provide interior sound levels that are both consistent with HUD criteria and appropriate for a livable environment. As detailed in this section, buildings subjected to exterior sound levels above 65 dBA Ldn would require acoustical design and construction techniques and materials intended to reduce interior levels to 45 dBA Ldn or less. In addition, for those portions of the site in which residential uses are planned in areas classified as “unacceptable,” under HUD noise criteria, a City of Seattle Human Services Department (HSD) approval of a noise waiver would be required on behalf of HUD prior to application for HUD financing for the project. With the implementation of such measures, an appropriate livable environment would be ensured, and no significant environmental justice impacts would be anticipated. See **FEIS Section 3.7.3** and **FEIS Section 3.17.2** for additional information.

133. Please see the Tenant Relocation Plan in DEIS and FEIS Sections 2.8.4 and 3.16.3. Also refer to **FEIS Chapter, Key Topics**, for further discussion on tenant relocation and replacement housing.
134. Mitigation measures for protection of historic resources from construction impacts are identified in DEIS Section 3.11.3 and **FEIS Section 3.11.3**.
135. The Yesler Terrace Redevelopment does not provide mitigation for First Hill Streetcar construction. Coordination of utility services with the streetcar would be provided. Please also refer to the response to Comment 17 of this letter.
136. See DEIS Chapter 3.14 and DEIS Appendix O - Utilities Technical Report, and **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the potential impacts of the proposed redevelopment on downstream stormwater/sewer systems. The potential impacts of the Preferred Alternative on these systems are also noted in **FEIS Summary Table 1.1**.
137. See the response to Comment 136 in this letter.
138. The Yesler Terrace Redevelopment would not provide mitigation for First Hill Streetcar construction. However, coordination of utility services with the streetcar would be provided. Also see the response to Comment 17 in this letter.
139. As stated in the DEIS and this **FEIS Section 3.2**, there are existing air quality issues on the Yesler Terrace site and site vicinity due to the proximity of the site to I-5. Redevelopment of the Yesler Terrace site would not result in significant changes to the existing conditions. The redevelopment would increase the population exposed to these existing conditions including residents of all unit types (including market rate); no disproportionate adverse impacts to extremely low income residents would result from the proposed actions. Also, SHA could incorporate the use of additional filters on building air intake units to partially reduce exterior-to-interior infiltration of particulate matter.
140. Comment acknowledged. Please refer to the response to Comment 132 of this letter.

141. SHA could coordinate with SPU during permitting regarding the identification and protection of any utilities that could be impacted by construction of the proposed redevelopment.
142. Comment noted. Please see the response to Comment 141 of this letter.
143. Comment acknowledged. Please see the response to Comment 29 of this letter.
144. Please see the response to Letter 11, Comment 2.
145. Your comment is noted. Please see the response to Letter 2, Comment 62.
146. Comment noted; provisions for pest control would be included in an appropriate section of the plans for site redevelopment.
147. As indicated in **FEIS Section 3.11**, no designated or eligible historic resources are assumed to be demolished; therefore, no demolition plan or documentation would need to be approved by the Washington State Department of Archaeology and Historic Preservation.
148. Please see the response to Comment 147 of this letter.
149. Please see the response to Comment 141 of this letter.
150. Comment noted. Specific utility protection plans could be developed during the permitting process. Construction methods could be agreed to between reviewers, inspectors and developers. For example, emergency contact information could be listed on plans and at job site. SPU contact information could be listed to respond to the need for valve closure. At the time of permitting, if SPU has a concern regarding certain existing water lines, they could have an inspector onsite during construction activity for emergency utility shut-off, as necessary. SHA would coordinate further with SPU on this matter.
151. Mitigation measures to address the potential impact of the proposed redevelopment on sewer capacity are listed for the DEIS Alternatives in DEIS Section 3.14.3 and for the Preferred Alternative in **FEIS Section 3.14.3**.
152. See the response to Letter 10, Comment 73 regarding pest control.
153. Odors generated by household composting bins or onsite composting using earth bins would be minimal under expected normal conditions. The proposed project mitigation measures listed on page 1-64 of the DEIS referencing potential onsite composting of some solid waste to eliminate it from the waste stream being removed from the site would not be expected to result in significant odor impacts.
- No noise impacts from existing onsite activities related to solid waste storage/pickup were identified at Yesler Terrace, and no additional noise impacts would be expected in the future. The proposed project mitigation measures referencing potential onsite composting of some solid waste to eliminate it from the waste stream being removed from the site would not be expected to result in significant noise impacts.

154. Comment acknowledged. As per the Council on Environmental Quality (CEQ) Regulations for implementing the National Environmental Policy Act, the Purpose and Need statement in an EIS should “briefly specify the underlying purpose and need to which the agency is proposing the alternatives including the proposed action.” (40 CFR Section 1502.13). The ‘purpose’ of the Yesler Terrace Redevelopment Proposal is to redevelop the Yesler Terrace community into a mixed-income, mixed use community that meets the objectives, as defined in Chapter 2, Section 2.4 of the DEIS. The ‘Need’ for the proposal is based on the determination that the existing public housing community is no longer a cost-effective or physically efficient way of providing quality affordable housing to its residents. It is not proper to identify or define mitigation measures as part of the “Need” which explains the “Purpose” of the Yesler Terrace Proposal.

See the response to Comment 126 of this Letter for further information on public involvement that has occurred as part of the EIS process, including translation services offered to residents of the site.

155. Comment acknowledged. SHA will coordinate with the City regarding the condition of the water/sewer infrastructure.
156. Comment acknowledged. SHA will coordinate with the City regarding the condition of water/sewer infrastructure.
157. See response to Comment 12 in Letter 10 for discussions on the requirement for separation of storm and sewer systems.
158. Correct, this sentence refers to the private onsite system.
159. A summary analysis of the project’s consistency with the City’s adopted street and alley vacation policies is provided in DEIS Section 3.9, Relationships to Plans, Policies, and Regulation. The comprehensive transportation analysis provided in DEIS Section 3.13 and DEIS Appendix N includes the street vacations. The Utilities section (DEIS Section 3.14 and Appendix O) and Water section (DEIS Section 3.3 and Appendix F), as well as Section 3.14 and 3.3 of this FEIS provide the utility impacts (water, sewer, and stormwater) of the proposed actions.
160. Comment acknowledged. Impacts of district infrastructure systems have not been included in this EIS, but are discussed in the report titled, "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics, dated December 12, 2010.

The EIS documents what are believed to be the worst case environmental impacts associated with the redevelopment alternatives. In most cases, the assumptions and methodology used for impact analysis is based on the use of traditional systems and designs. It is expected that the use of district systems, strategies and designs would reduce environmental impacts of the proposal over traditional systems, strategies and designs. It is understood that future specific development proposals would be evaluated to determine if they fall within the range of the impacts evaluated in the EIS. If future proposals would result in environmental impacts that are determined to be outside this range, then further environmental review and/or mitigation could be necessary.

161. As noted on page 3.3-15 and 3.14-2 of the DEIS, page 40 of the Water Resource Technical Report (DEIS Appendix F) and page 13 of the Utilities Technical Report (DEIS Appendix O), a hydraulic analysis of drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment to determine if improvements are necessary to the City's drainage and wastewater infrastructure. Improvements could include upsizing of the combined sewer pipe downstream of the Yesler Terrace Redevelopment.
162. As noted in DEIS Section 2.10, "no undeveloped sites of this size, particularly in proximity to the downtown area, are available within the City of Seattle to provide an alternative site for this project." Further information is also provided in **FEIS Section 3.7** and **FEIS Chapter 4, Updates to the DEIS Analysis**, to explain how approval of a noise waiver could occur for those residential portions of the project located in areas classified as "unacceptable" under HUD noise criteria. As noted in these sections, as part of its planning for the redevelopment of Yesler Terrace, SHA considered whether there are other available sites on which it would be practical or desirable to build similar housing. However, SHA determined that such an approach would not be feasible due to the inability to find a similarly-located site that could provide the same range of benefits to the residents, in terms of proximity to jobs, services, public transportation facilities, and educational opportunities. Therefore, the focus has been on redeveloping the Yesler Terrace site.
163. Comment noted. Design and construction of structures and site infrastructure in the known and potential slide areas along the southern boundary of the site is primarily a civil engineering issue. Construction in this slide-prone area is feasible, as evidenced by the presence of I-5 and the various structures along S Jackson Street. As discussed on in the DEIS on page 3.1-12 and the Earth Technical Report (DEIS Appendix D), site redevelopment within and adjacent to the slide-prone area would need to comply with City requirements for stabilization of areas disturbed or affected by the proposed redevelopment. Temporary environmental and health and safety risks during construction would be managed by use of measures that are common components of site earthwork activities associated with slope stabilization.
- As noted in DEIS Section 3.1.3 and restated in **FEIS Section 3.1.3**, all buildings constructed on the site would be built with appropriate foundation support systems, which would be determined during the design and permitting of specific infrastructure and building projects. As well, site-specific analyses of development planned adjacent to or within the steep slope/slide-prone areas in the southern portion of the site would be conducted during the design and permitting. These analyses would identify appropriate methods of slope stabilization and other measures to prevent potential landslide impacts. With the implementation of such measures, no significant impacts as related to development adjacent to or within the steep slope/slide-prone areas would be expected, and therefore no disproportionate or adverse impacts to minority or low income populations would be expected.
164. GSI could be incorporated into the proposed stormwater control system onsite, because the water table is between 8 and 15 feet below ground surface (see the Geotechnical Report in DEIS D for details).
165. Refer to Comment 139 of this letter.

166. Comment noted. The use of GSI, even with no native soil infiltration, could still provide many other benefits, such as: habitat, the opportunity for evapotranspiration process, water quality in some cases, and aesthetics, in addition to storage/flow control and removal of some volume of stormwater from the City's piped infrastructure. The results of the preliminary hydrologic modeling indicate that it would be possible to use GSI facilities with as little as 0 in/hr of infiltration to provide flow control for the entire site by using amended soils and other means. The feasibility to use GIS will be determined in coordination with SPU. See **FEIS Chapter 4, Updates to the DEIS Analysis**, for additional information on the use of GSI to the MEF.
167. See the response Comment 12 in this letter regarding the requirement for separation of stormwater and sewer systems.
168. See the response to Letter 10, Comment 161.
169. Comment noted. SHA will coordinate further with SPU on these matters. A Memorandum of Agreement could be executed between SHA and Seattle Public Utilities to help manage expectations and uncertainties as the project continues through environmental review, design, construction and operation.
170. As stated in **FEIS Section 3.1**, under the Preferred Alternative the steep slope/landslide area in the SW Sector would be graded and redeveloped with new uses. As part of the proposed redevelopment activities, substantial slope stabilization and drainage improvements would be constructed in the slide prone areas addressing the existing slope stabilization issues. No analysis of the long-term climate change impacts on this area is required.
171. The comments are correct in noting that infrastructure and construction emissions were not assessed in the GHG analysis. The details of the project needed to perform such calculations are not available at the planned action stage, especially for project-level construction emissions. Any calculations would therefore be highly speculative, and probably inaccurate.
172. Please refer to the response to Comment 171 of this letter.
173. Comment noted. The mitigation measures identified in DEIS and **FEIS Section 3.5**, are potential mitigation measures that could be incorporated into future design efforts to reduce the overall carbon footprint of the redevelopment. As no significant impacts are identified in DEIS and **FEIS Section 3.5** for greenhouse gas emissions, climate change and energy; no mitigation measures are required and no credit for the offsets that could be realized by these measures has been assumed.
174. See the response to Letter 10, Comment 73, regarding pest control.
175. DEIS and **FEIS Section 3.6, Environmental Health**, analyzes impacts from contamination and hazardous waste materials. A complete analysis of noise impacts under the Preferred and DEIS Alternatives is provided in DEIS and **FEIS Section 3.7, Noise**.

176. DEIS and **FEIS Section 3.6, Environmental Health**, analyzes impacts from contamination and hazardous waste materials. A complete analysis of air quality impacts under the Preferred and DEIS Alternatives is provided in DEIS and **FEIS Section 3.2, Air Quality**.
177. Please see the response to Comment 132 of this letter.
178. Please see the response to Comment 132 of this letter.
179. Please see the response to Comment 132 of this letter.
180. Comment noted. SHA and SPU will coordinate further on this matter.
181. Comment noted. It is assumed that each project would be required to provide mitigation in accordance with City of Seattle requirements. Therefore, no cumulative significant unavoidable adverse impacts would be anticipated.
182. Comment noted. See the response to Comment 12 in this letter.

Seattle Displacement Coalition

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Interfaith Task Force on Homelessness **creating the political will to end homelessness in king county in ten years**

December 9, 2010

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Re: Our Comments on the Yesler Terrace Redevelopment DEIS

Dear Officials,

The Seattle Displacement Coalition is a 33 year old city-wide low income housing and homeless non-profit organization here in Seattle whose membership is made up of residents of Seattle and representatives of various church, community, and social service organizations within our community.

Our membership also includes residents of Seattle Housing Authority (SHA) buildings including residents of the 580-unit Yesler Terrace Public Housing Project. As such, we are directly affected by the proposed redevelopment of Yesler Terrace and the accompanying zoning and land use changes that SHA is considering to accommodate their plans.

The Interfaith Task Force on Homelessness was officially convened in December 2001 and has partnered with the Seattle Displacement Coalition, the Church Council of Greater Seattle, the Archdiocesan Housing Authority, and other organizations. The organization works regionally to bring leadership and members of faith communities together to do advocacy for increased public funding for low income housing and homeless programs. The group also advocates at state, county, and municipal levels to promote legislation that prevents housing losses due to displacement and gentrification. Our members and

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supporters include people who live in Seattle and in the area where Yesler Terrace is located.

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To remain consistent with requirements for full analysis of significant environmental impacts under both NEPA and SEPA and in order to ensure decision-makers full disclosure of those impacts as well as necessary mitigation measures to address those impacts, it is necessary to revise/amend the DEIS to include the following levels of analysis when the final EIS is drawn up:

1. There are significant flaws in the DEIS that pertain to each alternative that has been analyzed. The assessment of impacts associated with each alternative assumes no net loss of public housing on the redeveloped site - specifically units serving the array of public housing eligible households now living on the site whose incomes are at or below 30 percent of area median, especially low income families with children. As has been the case for decades, these are the households now served at Yesler Terrace. The average income of households at Yesler Terrace is about 18% of median – far below even the 30% threshold. As contained in the DEIS, SHA has conveyed the impression in all of the alternatives that there will be no loss of housing on site serving this low income group.

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On the contrary, SHA has made it abundantly clear there will be fewer public housing units serving this “extremely” low income population on the redeveloped site. In fact, there will be a dramatic reduction – perhaps a reduction by half – in the number of public housing units serving this group regardless of which alternative they pursue (other than the no action option). The DEIS contains absolutely no assessment of the direct, indirect, and cumulative effect of this loss as it would pertain to the many environmental elements that must be analyzed in the DEIS under each of the options.

To restate, the DEIS only includes analysis of each option under the assumption that there will be an equal or greater number of units serving this population on the redeveloped site, which is in contradiction to SHA’s stated position on its plans for the site.

In several recent forums representatives of SHA, including Director Tierney, have flatly refused to provide a pledge that all the public housing on site serving public housing eligible households would in fact be replaced on site in the new Yesler Terrace development. Most recently before a November 8th 2010 briefing given to the Seattle City Council, Director Tierney again was not willing to make such a pledge that all public housing serving the broad cross section of public housing eligible households (meaning those – especially families - with incomes below 30 percent of median) would be replaced on site.

In fact, the materials he provided to the Council on the 8th, including a power point (see reference link #1 below) display - see page six – indicates that SHA will replace only a portion on site with the rest to be replaced “close by”. As to how many units will be replaced off-site or how far away is “close by” no SHA representative has specified.

We’ve also attached excerpts from a memo (see reference link #2 response number one below) that Director Tierney forwarded to the City Council on November 15th further

confirming that some of the public housing units will be replaced off-site. While he does not say how many will be lost on site, he makes it clear he wants the option of off-site replacement open to them and states explicitly that they will proceed at Yesler Terrace in manner just like their past HOPE VI redevelopments.

In each of those four HOPE VI projects (Holly Park, Roxbury, High Point, and Rainier Vista), only half the 2000 units that existed on those sites were ever replaced on the redeveloped sites. SHA alleged that the other half of the former units were replaced off site but most of the units they credit as off-site replacement units actually were built by non-profit entities in the area using tens of millions of existing levy, state trust fund dollars, low income tax credits and other finite local sources already earmarked for the region. In other words, it simply was a case of robbing Peter to pay Paul. Those dollars otherwise would have been used to expand Seattle and the areas stock of extremely low income units.

SHA simply assigned themselves credit for those off-site 'replacement' units after making a small contribution to their non-profit 'partners' that actually built the units. To restate, the bulk of the cost of creating those units was covered or rather "paid for" from existing levy, state, and other local dollars. The result was a drain of millions in limited state and local housing revenues going toward replacement units that otherwise would have been used to expand the stock of this much needed housing serving those at or below 30 percent of median.

Further, the so called off-site replacement units for these four projects required and expenditures of millions in extra housing dollars to purchase of land that otherwise would have been used to expand this city's stock of low income units. Had all the replacement units been built on site, this expenditure and opportunity (for use of that land to expand our supply of units serving this group) would not have been sacrificed. Many more extremely low income families could have been served.

(See reference #2 at end of this letter, Nov 15th Director Tierney comments where he references methods of financing saying he does not want to be tied down or restricted in their use of state trust fund and city levy dollars for Yesler Terrace redevelopment. He say's they used little of these funds in their previous HOPE VI projects. Millions were used for those projects – both the on and off-site replacement units draining the city and state of precious limited housing resources. This DEIS should spell out exactly how much was used in trust fund, levy and 9% low income tax credits for all of their previous HOPE VI projects as well as other finite sources already dedicated to the area in order to give decision makers some idea of what likely will be tapped again for this project)

For the period since 1997 – the period these four projects have been under construction, and Rainier Vista is still not completed - a significant percentage of the vacancies occurring in what remains of SHA's public housing inventory have been filled by those displaced and relocated from these four sites. SHA has effectively been forced to restrict access to public housing for more than a decade, sometimes cutting off all applications, and left to fill vacancies on their remaining stock exclusively with households formerly located at these four redeveloped HOPE VI sites. This has effectively backed up SHA's

waiting lists and forced many needy eligible families to look elsewhere including out of the city (which also carried significant transportation impacts).

There also were increased relocation expenses paid out for those displaced, especially including from federal sources. Displaced families in some cases received vouchers and were forced into substandard privately owned units far from family, friends, and services they depended upon. This caused an unnecessary exhaustion of federal housing vouchers going to displaced tenants rather than to serve those on SHA's long waiting lists.

Those four HOPE VI projects thus led to a greatly diminished supply of this critical type of housing serving those most in need in our city. The direct, indirect, and cumulative effects as stated above (particularly but not exclusively related to the socio-economic environment) were enormous. There also was an enormous fiscal impact to building replacement units off-site – an extra drain of SHA, City, State, and Federal dollars and available land – to tune of tens of millions of dollars.

According to the King County Housing Benchmarks Report, in all of King County, there are only about 300 unsubsidized rentals priced at levels affordable to those with incomes below 30 percent of median. By contrast there are over 100,000 households with incomes at or below this level. About 40,000 of those households live in Seattle. This means that any reduction in the stock of public housing or even temporary loss of units that clogs waiting lists carries with it enormous social and economic impacts.

The loss of these public housing units and subsequent higher end “mixed income” redevelopments also set in motion displacement and gentrification on properties and in the neighborhoods which surrounded those HOPE VI developments. There was a dramatic indirect and cumulative effect on rents, rates of demolition, and condominium conversions associated with each of these developments. The demographics of these neighborhoods has changed and continues to change as a result of these SHA projects with low income and minority households replaced by higher income largely white households.

The Yesler Terrace DEIS fails on all counts to assess or offer mitigation for any and all of these real impacts accompanying a net loss of on site public housing units at Yesler Terrace – a condition SHA acknowledges will be an outcome regardless of the redevelopment alternative they choose to pursue.

At the very least in order for full disclosure of impacts associated with their proposal, the DEIS must be more specific about SHA's plans regarding the extremely low income units – where and how many will be replaced on site and where and how many will be replaced off-site and at what cost and with what funding sources for both on and off-site units. This should be stated for all of the alternatives included in the EIS. Absent this, there is no possible way of understanding a host of direct, indirect and cumulative impacts (especially socio-economic effects) associated with the project both with respect to costs and impacts associated with on site development and what will happen off site in the immediately neighborhood.

Such an analysis must be included which assumes a reduction on-site of public housing units especially given SHA has stated that this will be the case regardless of the alternative they pursue. In addition, they have explicitly said (see our attached referenced material for proof especially Tierney's Nov. 15th comments) they will pursue a plan at Yesler Terrace similar to what they pursued at the other garden communities. Those plans resulted in a net loss of one half the public housing units on those sites and a host of impacts such as those we've sighted above.

Unless SHA is willing to explicitly state how many public housing units will be replaced on site serving the same income group and do so for all the alternatives being studied (with accompanying impacts clearly identified accordingly for all options), we recommend that for purposes of the EIS analysis, it shall be assumed that under all the alternatives, it be assumed that only one half the existing public housing units will be replaced on site consistent with SHA's redevelopment of its other garden communities.

(Let's assume for the sake of argument that SHA is seriously considering full replacement on site of all the public housing they will remove at Yesler Terrace even though this directly contradicts what SHA has placed on the record in public and before the City Council. This still would not relieve SHA from a legal obligation to include in the EIS – a complete assessment of the impacts accompanying a project that did not include full replacement on site of the existing public housing units. This is especially true given the fact, that there is no preferred option even included in this environmental document (this fact alone raises its own legal questions). In which case, and given that SHA has said precisely the opposite – that they intend to replace units off-site- there is an absolute legal obligation to include a detailed level of analysis in the EIS which assumes a net loss on site of public housing units especially units serving families at or below 30 percent of median now residing on site.)

This assessment must be included for each alternative and it should include an assessment of the direct, indirect, and cumulative effects that will accompany a net loss of half of low income units on site such as the effects we've cited above including socio and economic effects, fiscal effects (including a clear description of the additional financing and revenues they would be seeking under each alternative to build replacement units off-site and land that will be used and its price), effects on land costs and values resulting from those off-site plans, effects on surrounding housing and housing prices, transportation, population ie how it will effect the demographic make up of the surrounding community, how it will affect waiting lists, etc. This analysis also should include an examination of what happens to the displaced populations, where they go, what services they need, and are they going to be available in areas where they are displaced.

2. This analysis must also include an assessment of the indirect and cumulative effect a mixed income project of this scale will have on prices and rents, including market rate units on site and especially units that now exist off-site in the surrounding neighborhood and city wide as well as an assessment of current need for this housing at each income level. Also, an analysis is needed of how a loss on site of public housing units serving public housing eligible families will affect demand for the limited supply of these

desperately needed units, and how it will affect those rents and prices city-wide and especially in the immediate neighborhood.

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3. In addition to the information already contained in the “no action” alternative, more detail must be added to the analysis of this option. There must be especially greater detail provided on the element of this option that involves renovation/modernization. More description is needed of renovation and modernization and its accompanying impacts such as the cost of that alternative when compared to the other alternatives and its impacts on the built, physical, and social-economic environment. Such an option would assume preservation of the existing unit count and mix, type and depth of housing subsidy. The number of public housing units serving public housing eligible residents in this alternative should remain essentially unchanged from the current level. As part of this process, a plan with designs should be provided for construction and described for the decision makers with at least the level of detail provided for the other options.

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Site and infrastructure improvements would be identified as part of this alternative and it should be accompanied with a list of all remodel, renovation, major repairs, and alteration work performed at Yesler Terrace over the last twenty five years to the units and overall site with reports or references to reports identifying current condition of the units and infrastructure..

This information including the cost of this option is needed to provide a baseline that decision-makers will need to understand the true cost of all other alternatives under consideration. It also would answer the question of whether there is any basis to the frequently used and unsubstantiated claim by SHA that the current Yesler Terrace buildings are blighted and beyond renovation.

SHA has offered no proof nor has it referenced any documents in the DEIS to substantiate a claim of blight or that the units or infrastructure have outlived their useful life. This is a key criteria decision makers must use when determining whether various sources of city, state, and federal funding can be tapped for such a project or whether they are even necessary for the project.

Engineering and architectural reports required by HUD to justify that the buildings at Yesler Terrace are so obsolete as to require demolition must be included as an appendix to the draft EIS. Any appendices, technical memoranda, or other supporting documentation must also be included. In addition, a list of all remodel, renovation, major repairs, and alteration work performed at Yesler Terrace over the last twenty five years must be provided, in the form of a spreadsheet. The spreadsheet must include the date that the work was performed, the total development cost and the construction cost, and a brief description of the work.

4. For the EIS to claim, as it does in section 1.3, that the options considered are “representative”, while completely ignoring whole-site modernization, is remarkable, to say the least, especially considering the large number of and wide variety of substantial renovation / whole-site housing modernization projects that have been completed by SHA and many other housing authorities and non-profit developers in the City and throughout the northwest (and throughout the country) over the last thirty years. It can be

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said that the Pacific Northwest has some of the best development, design and construction talent and expertise in the country in this field. Such a project would include but not be limited to modernization of all units and buildings, including additions where appropriate; abatement of hazardous materials (which would be required prior to demolition in the four schemes discussed in the EIS); codes upgrades; accessibility improvements; infrastructure replacement where required; and landscape improvements; as well as sensitive insertion of new structures where appropriate. For the EIS to be considered truly “representative” of the alternatives, it must include a thorough analysis of a whole-site modernization / substantial renovation project.

5. When the “no action” option is fully and completely described including its financial cost and its other impacts, then each of the other redevelopment options should be more fully developed, and most importantly, those alternatives should include a estimate of total cost plus a breakout of what funding sources and resources are likely to be tapped/needed to complete that option. Further, if additional land is needed to ensure completion of the off-site units under a given option, then that and other added cost associated with building replacement units off-site should also be included. Funding sources for off-site activity should also be identified.

If Housing Levy funds, state or county funds, or Federal funds, including Section 8 project-based and LIHTC are used to fund construction of the replacement units built on or off-site, then these funds would not be available to construct new housing elsewhere. While this may be considered a “financial” as opposed to “environmental” impact, it is clear that depletion of such funds to replace demolished housing instead of construct new housing would have a serious negative impact on housing affordability throughout the region. This is clearly a serious negative socio-economic and environmental justice impact under NEPA, and under the City’s SEPA guidelines, and must be addressed in the EIS. For each of the options, use of such funds must be enumerated in spreadsheet form and discussed in terms of the impact on the availability of these funds for construction of subsidized housing elsewhere in the city and in the region.

Comparison to the baseline “no action” option then should be made with clear charts and spreadsheets for decision-makers. This is necessary to inform decision makers of revenue balances and impacts associated with each option on our limited low income housing funding sources. It is information critical to understanding the effect of each option on our city’s ability to maintaining and maximizing resources available to expand our stock serving these very low income populations in great need in our community.

For each option considered, spreadsheets must be presented enumerating the following: Total number of housing units, unit mix (studio, one bedroom, two bedroom, etc), unit sizes, open space per unit (deck or ground-related), ground-related open space per unit, ground-related units, unit type (townhouse, one-story walk-up, ground-related flat, elevator access apartment, etc.), accessible unit mix. In addition, information in the form of spreadsheets must be provided to enumerate which unit types are subsidized and the type of subsidy provided (Public Housing, Project-based Section 8, Senior Housing, LIHTC, combinations of the former, etc.)

6. More analysis is needed of indirect and cumulative environmental impacts on the surrounding neighborhood set in motion and resulting from the Yesler Terrace Project and the various options under consideration. The project would dramatically increase densities under all but the no action option. Major upzones, alley vacations, and a planned development is slated for the site under all the last two options. What is conspicuously absent is a level of analysis to understand the significant impacts on the immediate neighborhood associated with these major land use changes and changes to level of allowable density and types of uses planned for the site.

With respect to the area immediately east of the site, SHA has been acquiring property, negotiating to acquire even more sites, and even displacing residents already from existing buildings it has acquired. This activity is pursuant and directly related to their plans at Yesler Terrace. They've applied for grants, and have already laid out plans for these areas that will be set in motion in tandem with their plans for the Yesler Terrace site itself. This EIS must include a much more detailed delineation of these plans off-site and their environmental impacts. And it should include a detailed examination as to the direct, indirect, and cumulative effect of these plans when combined with their major onsite plans. The offsite plans in fact are set in motion only if Yesler Terrace proper is redeveloped so environmental law requires such a level of detailed analysis for this off-site activity as well. We're really talking about not only the development of Yesler Terrace but plans for development east of the site – an area with 2-3 times the acreage as on-site.

For example there is no adequate estimate of current housing and land use conditions and demographics (socio-economics) of the surrounding area, and then no assessment at all of the potential risk to those existing low income properties and land uses in the surrounding areas associated with on and off-site plans. There are no estimates of housing that may be lost due to gentrification forces set in motion by the project, no risk assessment associated with each of the redevelopment option from lower density to higher density alternatives – impacts on the surrounding community – its stock of housing that may be removed due to demolition, higher rents etc, set in motion under each option. This level of analysis is typical of other EIS's but in this EIS, it's not even acknowledged. These cumulative effects on transportation demand, parking, view blockage and other elements of the environment also are given scant or inaccurate attention in light of these larger plans beyond the Yesler Terrace site.

7. New buildings in each of the redevelopment option will likely be constructed to Built Green, LEED Certified, or higher standards. However, merely claiming that new construction is more energy efficient per unit does not provide a complete analysis of the energy and resource use impacts of a proposal. Also to be taken into account are the total life-cycle energy use, obviously larger for a significantly denser development, as well as the energy embodied in manufacturing new construction materials, the energy used to transport them to the site, and the energy used in construction of the new project. Therefore, the only way to compare the alternatives, including the “no action” option, would be to prepare a complete life cycle energy use assessment for each one, including an assessment of embodied energy associated with demolition and construction of new buildings. The point is that the reader is left with the impression that the list of

sustainable features of the proposed alternatives makes them somehow more “sustainable”, in terms of energy use, than the no-action alternative or (see above) the whole-site modernization project. That isn’t necessarily the case, and only a detailed energy analysis can demonstrate that.

8 cont

8. Phasing: There needs to be a much more thorough elaboration of how SHA under each of the alternatives intends to ensure a process of phasing that does not leave whole blocks and tracts as vacant expanses of dirt for extended periods either on site or immediately off-site (on areas off-site where SHA also plans redevelopments contingent on their on-site plans) and under each option. Huge tracts have remained for years in an undeveloped state at each of their previously redeveloped HOPE VI sites. SHA’s HOPE VI Rainier Vista project is perhaps the most notable example, where some 8 years after plans were announced and at least five years after the existing public housing units were removed, half the site still has not been developed. At that site, SHA has not yet even fulfilled their on-site public housing replacement obligation. Such site clearance harkens back to the urban “removal” strategies of the 60’s employed by the federal government simply leaving entire tracts empty and affordable housing gutted in these communities. SHA has not adequately described and should commit to a plan that ensures no appreciable gap - if any at all - between the time of housing removal and housing replacement of the public housing units – whether the units are replaced on or off-site. The DEIS does not provide detail or adequate plans to mitigate these impacts, nor does it describe the negative impacts if this gap is long. This is of particular concern, given that, as noted in the DEIS, it could take up to twenty years to complete the project. If all the units are demolished at the outset, worst case, then those residents will need to be relocated to other very low income units throughout the area, effectively removing those units from the housing stock temporarily... for up to twenty years. That’s the worst case, but the DEIS gives us no idea of what SHA would do to prevent this from happening. The cumulative impact on the City’s housing resources could be enormous, far worse than Rainier Vista, where half the site has remained abandoned for at least five years.

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9. The DEIS fails to adequately consider the historic significance and landmark status of the current Yesler Terrace. A project’s historic status is measured against the following criteria, 1) Is it more than 25 years old and does it *"have significant character, interest or value, as part of the development, heritage or cultural characteristics of the City, State or Nation?"* 2) Is it associated in a significant way with an historic event, which has had a significant effect on the community, city, state or nation? 3) Is it associated in a significant way with a significant aspect of the cultural, political or economic heritage of the community, city, state or nation? 4) Does it embody the distinctive visible characteristics of an architectural style, period or method of construction? It is an outstanding work of a designer or builder? 5) Is it is an easily identifiable feature of its neighborhood or the city due to the prominence of its spatial location; contrasts of sighting age or scale? and 6) Does it contribute to the distinctive quality or identity of its neighborhood or the city?

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Yesler Terrace – the current site and housing units – easily fulfills all these landmarking criteria. The EIS fails to accurately or adequately document this fact.

Sufficient original building fabric is present to convey YT's historical and architectural significance. While the east portion - about a quarter to one third of the project - was removed to make way for I-5, the character of the garden community layout remains. Thus, YT still conveys what was at the time a groundbreaking more human-scaled and healthful approach to public housing than was being developed at the time. Likely, due to all the demolitions under HOPE VI and other HUD programs, YT is now one of the oldest remaining models of this type in the country, possibly the oldest, though it's impossible to know without a thorough review of the existing stock nationally. It's possible that YT is one of the most historic housing projects in the country now, far more so than is understood, simply because it's one of the only ones left standing.

Yesler Terrace was the first integrated public housing development in the nation, making it profoundly significant locally and nationally. It's also one of the first of the garden communities in the country, possibly one of the only early models - if not the only one - remaining in the country.

If Jesse Epstein, founder of the Seattle Housing Authority and creator of the Yesler Terrace layout and housing model, were more of a national figure, and it could be argued that he should be by virtue of having built the first integrated public housing project in the nation, then Yesler Terrace would have more national significance in this respect. He should be seen as nationally significant civil rights leader and an urban planning visionary at the level of a Clarence Stein or Robert Moses. Still he remains one of the State's most historic figures, and even at the state and city level, should be recognized with more prominence than he has been. Designation for Yesler Terrace is consistent with and serves that purpose.

There are claims that Yesler Terrace also the first wood-framed public housing project in the country (See "History Link" article discussing this). If this is the case, then it adds to YT's historic status. Also, if it is the first wood-framed public housing project of any size and significance, then this could be evidence that it's the first low-rise project of its type. On this basis alone, Yesler Terrace should be preserved.

Getting back to YT being the first integrated public housing project in the country, this is of course profoundly significant, enough to qualify the project for landmark status. BOLA, SHA's landmarks consultant, acknowledges that it's the first integrated project, but they don't go into detail on how this came to be. The EIS should elaborate and provide these details. Who in Washington D.C. was involved in those decisions? What was the history leading up to the decision? A report on historic character of Yesler Terrace should summarize that history as well. When it does, its significance on this level will be made even more clear.

If landmark status should be assigned to one of the earliest models of HUD's vision to build lower-rise, more healthful and human scale public housing - as embodied in the "garden community" principals being forwarded by renowned planners of the time, such as Clarence Stein, doesn't it make sense to assign such status to such a development that was also - profoundly significant in its own right - the first

integrated public housing development at the time? Not to mention that Yesler Terrace could possibly be one of the only remaining examples of these early models, given how many have been torn down under HUD's HOPE VI program over the last ten years? Is there even a list of these early projects and their current status? The DEIS should include this kind of information and provide a much greater level of detail in this regard as to its historic significance.

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Yesler Terrace also is listed on the Washington State Heritage Register as a landmark. More details about why it is listed here should be provided in the DEIS as well.

10. The non-energy-related sustainability standards which any new buildings will be designed to meet will likely be used to promote SHA's preferred option (regardless of which redevelopment and higher density option it chooses). Therefore, the direct and indirect environmental benefits of the "no action" alternative and a whole-site modernization option must be considered in detail as a means of providing a complete comparative picture of these other options. If a redevelopment and higher density development option is built to green standards as is suggested in the DEIS, it may still be more energy consumptive and create a larger carbon footprint, whether "green roofed" or not, than no-action or modernization options which conserve existing buildings and their embodied energy spread thru a longer lifespan than these denser so-called green options.

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A list of such benefits of the modernization and no-action options would include but not be limited to preservation of existing Public Housing; preservation of the historic resource; preservation of local low income housing development funds for use in other areas of the City and region; preservation of existing open space; preservation of tree canopy (there is in the DEIS a wholly inadequate discussion of environmental impacts associated with removal of most of the existing tree canopy) and other existing habitat; elimination of all impacts associated with demolition of buildings; and elimination of all impacts associated with constructing new buildings (including materials used, resources depleted to manufacture building materials, energy used to construct buildings, energy used to transport building materials to the site, pollution impacts during construction, etc.

The DEIS must provide a more thorough elaboration of the no action and whole-site modernization options' effects on these green and environmental variables (such as impacts on climate change, carbon reduction, etc) not yet provided in order to provide this basis for comparison.

11.) The DEIS appears to inflate the amount of open space that will be provided under the each of the redevelopment options, especially when compared to the no action alternative. The DEIS for example does not include an assessment of how much open space will be taken up with rooftop gardens and other spaces not accessible to most people. Absent the park space identified as the "commons" how much open space also will be available elsewhere on site? How far will residents have to walk from their place of residence to the commons or nearest children's' play area? How does that compare to the status quo? Also, the DEIS describes the backyard spaces as "private" and semi-private in the current Yesler Terrace and then does not include all that space in the

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calculation of open space. This artificially reduces the amount of true open space that currently exists on site and makes it appear to be less than what would exist under each of the redevelopment options. How much space is taken up in backyard, courtyards and space between units in those courtyards? This should be added into the calculation of open space under the status quo, while a calculation should also be provided of how much so called open space under each option will be given over to rooftop and/or more semi or private space.

Sincerely,

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References:

1. Link here to PDF File: Powerpoint from SHA presented Nov. 8 to City Council – See page six indicating it is SHA’s intent to locate a portion of public housing replacement units off-site.

http://clerk.ci.seattle.wa.us/~public/meetingrecords/2010/cbriefing20101108_3b.pdf

2. Excerpts taken directly from SHA Director Tierney’s November 15th letter to City Councilmembers (full letter accessible through Councilmembers):

Question 1 – regarding where Yesler housing will be replaced

*When the Yesler Terrace Guiding Principles were drafted, most Citizens Review Committee members (all but two) agreed that housing should be replaced on the site **or in the immediate neighborhood**. All of the alternatives being studied through the EIS process include replacing all units on site. We expect that the vast majority of the existing 561 units will be replaced on the site. However, we believe it would be unwise at this point to make a specific commitment about exactly how many of these units will be replaced on site in order to remain flexible for opportunities that may arise as we go forward.*

In previous redevelopments we have preserved similar housing patterns (i.e. mix of bedroom types) and have tailored the new rental housing to meet the needs of a range of demographic groups, from low-income seniors to families to people with disabilities. We plan to do the same at Yesler Terrace.

We do not expect that the cost of replacing units in the neighborhood is substantially higher than replacing them on the current site. Land values on- or off-site are comparable.

Question 2 – regarding how housing at Yesler Terrace will be financed

We hope any and all financing options will be available for rebuilding Yesler Terrace. Traditionally we have not used substantial amounts of Housing Levy funding or Housing Trust Fund monies, but we do not believe it is in the public interest to rule these sources out. This issue came up about six months ago as the City Council considered the administrative plan for the most recent Housing Levy. The Council chose then not to categorically restrict Seattle Housing Authority’s access to Levy funds. As you know, we have also contributed 500 Housing Choice Vouchers for use with Levy funds both in the current levy and in the prior one.

While we have made use of Low Income Tax Credits, we have generally used the less competitive four percent credits as opposed to the nine percent credits used by nonprofits. Often, the fact that we offer Project-based Vouchers to our partners helps them to compete more successfully for tax credits.

The larger question here is how we all, as the Seattle community, can pool our resources to create the best low-income housing possible for the residents who need it. Creating artificial constraints about which organization can use which funding source, or seeking to maintain rundown housing beyond its useful life, does not create great communities or meet the needs of low-income residents over the long term.

Question 3 – regarding apartment buildings acquired east of Yesler Terrace

Seattle Housing has acquired two apartment buildings and one commercial building east of Yesler Terrace. The Ritz, which provides 30 units of low-income housing at 1302 East Yesler Way, was acquired in 2003. At that time, it was about to be in foreclosure. We have completed a tax-credit supported rehab of The Ritz and it remains in service as low-income housing. Because it is already serving low-income people and will do so into the future, we do not intend to count this as replacement housing for Yesler Terrace units.

The building at Twelfth and Yesler contained some illegal apartments above the retail property. Neither we nor the City ever considered them as viable low-income housing. We bought this building, along with others on Twelfth Avenue, to ease the blighted conditions caused by them in the neighborhood. It has recently been demolished and awaits funding for further housing and mixed-use development.

The Baldwin (31 housing units at 124 13th Ave) was in significant disrepair when we purchased it in 2007. While it was considered “market-rate housing,” it was serving lower-income residents. We took The Baldwin off line last year due to serious roof and heating system failures, and relocated those tenants. We hope to rehab it and have applied for funds through the Choice Neighborhoods program. We intend to use this as early replacement housing for Yesler Terrace. We expect to replace The Baldwin’s original “market-rate” units with apartments that will serve low-income residents with incomes between 50 and 80 percent of AMI.

November 15, 2010

Response to DEIS Letter 11
Interfaith Task Force on Homelessness

1. Comment acknowledged.
2. As stated in the DEIS Section 3.16, **FEIS Chapter 2** and **FEIS Section 3.16**, all 561 extremely low income units are proposed to be replaced within the site boundary. No offsite replacement (outside of the FEIS boundary) is proposed under the Preferred Alternative.

No net loss of low income housing is proposed. Specifically, no reduction is proposed by SHA in the number of extremely low income households (earning less than 30 percent of the average median income) currently served by the development. Under DEIS Alternatives 1-3, as well as and the Preferred Alternative, an increase in the number of low income housing units onsite over and above the one-for-one replacement of existing units is assumed. The Preferred Alternative, for example, includes an additional 1,240 low income units. In total, approximately 36 percent of the overall housing units would be subsidized housing units under the Preferred Alternative (1,801 units out of 5,000 overall units), serving various categories of low income individuals/families.

Since issuance of the DEIS, further analysis has determined that phasing of replacement housing for the existing 561 onsite housing units would be facilitated by expanding the site area. For purposes of the FEIS analysis, the 2.3-acre East of 12th Sector was added to the FEIS Site boundary (see **FEIS Figure 2-4** for an illustration of the FEIS sector boundaries). It is assumed that temporary or permanent relocation within the site boundary would reduce the disruption to existing residents and would help to maintain community cohesion.

Your comments regarding the redevelopment of other SHA housing developments are noted.

Any analysis of the funding sources for the proposed redevelopment activities is outside the scope of this FEIS.

Please refer to **FEIS Chapter 5, Key Topics**, for further discussion regarding tenant relocation and replacement housing as well as potential indirect land use impacts. See also **FEIS Section 3.16, Socioeconomics**, for additional detail.

3. As noted in the DEIS and **FEIS Section 3.16.2**, the redevelopment could have an effect on real estate prices and values in the surrounding area. Residential and commercial properties could appear more desirable, resulting in an increase in demand for housing and other uses in the site vicinity. This could also result in increases in property values, and rental rates and taxes over the long term. This could potentially decrease affordability for some residents and businesses, however it is also important to note that such impacts could also occur for reasons independent of the proposed Yesler Terrace redevelopment. Refer to **FEIS Chapter 5, Key Topics**, for further discussion of potential indirect land use impacts to Little Saigon.

Also, as discussed above, all of the existing 561 very low income units are proposed to be replaced onsite under the Preferred Alternative, within the FEIS site boundary; no impacts to the demand for the supply of this type of housing are anticipated as a result of redevelopment. Additional levels of low income housing would also be provided, over and above the one-for-one replacement of existing units. Please refer to the response to Comment 2 of this letter and **FEIS Chapter 5, Key Topics**, for a discussion regarding tenant relocation and replacement housing.

A city-wide analysis of housing issues is beyond the scope of this EIS; housing supply, rents and prices on a city-wide basis would be determined by a myriad of factors that go well beyond the redevelopment of Yesler Terrace. Such an analysis would be speculative relative to an individual project.

4. Separate from the EIS, a Renovation Cost Analysis was completed on November 19, 2010 by a team led by CollinsWoerman and comprised of six additional technical consultants (document available on the SHA website). The purpose of this report was to establish baseline costs to renovate the existing residential structures and make minor improvements to achieve a forty-year life at the Yesler Terrace site. Construction cost estimates to replace the existing residential structures, as well as make major site improvements were also identified for comparison purposes. The report included cost studies, a hazardous materials assessment, a demolition assessment, a building structural assessment, a building mechanical and plumbing assessment, and a site work assessment. Per this analysis, many of the units exhibit significant deterioration of both interior and exterior elements, including siding failures, mold, and water damage, as well as code compliance issues, such as lack of ventilation and compliance with the Fair Housing Act. Overall, a determination of severe distress² was made for the site. Renovation of the existing residential buildings at Yesler Terrace was determined to be prohibitively expensive.
5. Your comment is noted. Please see the above response to Comment 4 of this letter.
6. Any analysis of the specific funding sources for the proposed redevelopment activities is outside the scope of this FEIS. Specific funding sources for future phases have not been determined at this time.
7. In DEIS and **FEIS Section 3.8**, an analysis of the direct, indirect and cumulative impacts of the proposed land uses to existing onsite and offsite land uses under the Preferred and DEIS Alternatives 1-4 is provided. DEIS and **FEIS Section 3.10**, provide an analysis of the compatibility of the proposed onsite height, bulk and scale increases with the existing offsite development levels.

Please refer to **FEIS Chapter 5, Key Topics**, for a description of the expanded FEIS site boundary and a discussion of tenant relocation and replacement of existing housing units. All of the existing extremely low income units are proposed to be replaced onsite;

² Severe physical distress is defined by HUD as that which “requires major redesign, reconstruction or redevelopment, or partial or total demolition, to correct serious deficiencies in the original (including inappropriately high population density), deferred maintenance, physical deterioration or obsolescence of major systems, and other deficiencies to the physical plant of the project.”

therefore, no direct impacts to the existing housing stock are anticipated. Please also refer to **FEIS Chapter 5, Key Topics** and **FEIS Section 3.16** for additional discussion about potential indirect land use impacts.

As noted in **FEIS Chapter 2**, two properties in the East of 12th Sector are not currently owned by SHA. A partnership or other transaction would need to occur to accommodate the Proposed Actions in the East of 12th Sector; preliminary discussions with the property owners/agencies have been initiated. See **FEIS Section 3.8.2** regarding the potential displacement of these two existing uses and planned uses for these sites/buildings.

The offsite impacts to transportation, parking, views and other elements are fully discussed in both the DEIS and FEIS.

8. Please see the response to Letter 10, Comment 2.
9. Comment acknowledged. SHA is committed to minimizing extended delays between demolition of public housing and commencement of redevelopment.
10. As stated in DEIS Section 3.11 and this **FEIS Section 3.11**, both the City of Seattle Landmarks Board and the State Historic Preservation Officer (SHPO) determined that the Yesler Terrace site as a whole was not eligible for nomination as a Seattle Landmark or to the National Register of Historic Places, respectively, due to the low level of architectural integrity of the buildings. However, the Yesler Terrace Steam Plant has been designated as a Seattle Landmark, and the SHPO determined that this building was individually eligible for nomination for the NRHP as an intact example of its building and construction type. The Preferred Alternative assumes the Yesler Terrace Steam Plant would be adaptively reused in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*.

Listing in the Washington Heritage Register is strictly an honorary designation and raises the public awareness about historic and cultural values. See **FEIS Section 3.11** for an update to the Section 106 review by the State Historic Preservation Officer.

11. Comment acknowledged. The No Action Alternative assumed the existing onsite buildings, roadways and utilities would be renewed and replaced over time as failures occurred. The No Action Alternative was analyzed in the DEIS at the same level of detail as DEIS Alternatives 1-4 for all elements of the environment.
12. As stated in DEIS Section 3.15.1.1, there are currently 22.3 acres of parks and open space available on the Yesler Terrace site, of which 8.7 acres is private open space (in the form of private yards available only to individual tenants) and 1.4 acres is a steep slope area that is unusable for recreational purposes. Therefore, of the existing 22.3 acres of existing open space on the Yesler Terrace site, only 12.2 acres is available for use by residents and/or the public in the form of public or semi-private open space. This existing public open space includes the Yesler Community Center, the SHA playfield, sector parks, pocket parks, lawns, walkways and other open space areas between buildings. Semi-private open space includes the shared fenced yards and common spaces open only to residents.

The description of the amount of parks and open space facilities assumed to be developed under the Preferred Alternative (in **FEIS Section 3.15.1.2**) and for DEIS Alternatives 1-4 (in DEIS Section 3.15.1.2), includes only public and semi-private open space and does not include private open space or open space not at ground level (such as balconies, rooftop gardens, upper level courtyards, etc.). Private open space provided under the EIS Alternatives would be in addition to the amounts stated in the EIS analysis. Public open space would be provided in the NW, NE, SE, SW and East of Boren Sectors that would be available for use by the public and residents. Semi-private open space would be available within all sectors and would be accessible only to residents of the development.

Under all alternatives, the amount of public and semi-private open space available to residents and the public would increase from existing conditions, whereas the amount of private space in the form of individual yards would decrease from existing conditions. For instance, under the Preferred Alternative, 17.2 acres of public and semi-private open space would be provided onsite (not including the assumed private open space that would be in addition to this amount), representing an increase of 5 acres from the 12.2 acres of public and semi-private open space currently provided. This increase in public and semi-private open space would improve the accessibility and quality of open space and park opportunities for both onsite residents and the general public.



December 13, 2010

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Re: Comments on Yesler Terrace Draft Environmental Impact Statement

Dear Ms. VanDyke:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement (EIS) for the redevelopment of Yesler Terrace. Neighborhood House has enjoyed a long and positive relationship with the Seattle Housing Authority (SHA) beginning with the establishment of our education and social services in Yesler Terrace in the 1950's. Throughout the years, we have partnered with SHA on numerous endeavors to benefit the residents of public housing and have always appreciated the spirit of shared goals and common values when it comes to the health and well being of low-income families. Our joint development of the High Point Neighborhood Center serves as a recent example of the level of our mutual commitment and strong partnership.

Today, Neighborhood House operates a Head Start preschool and social services in Yesler Terrace in two buildings to the south of East Yesler Way. We also house our administrative offices in the Jessie Epstein Building on 9th and Spruce along with NeighborCare Health and the YWCA.

With the redevelopment plans, we see the need for our continued presence in Yesler Terrace and perhaps a broader role in addressing the social and economic needs of low-income individuals and families who will live in this community. We are committed to continuing our current programs, funding permitting, and to constantly seek resources to bring additional services that address the needs of this community. As we provide a similar range of services in the other family communities (NewHolly, Rainier Vista and High Point), we want to maintain our administrative offices here in Yesler Terrace.



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6-110

Yesler Terrace Residents

SHA has a long history of managing major redevelopment projects and we would encourage you to continue to apply this learning to Yesler Terrace. The level of fear and anxiety among residents is a constant theme in these redevelopment projects and we encourage SHA to continue to work closely with Yesler Terrace residents to address their concerns and communicate clearly and consistently, the impacts, ramifications and mitigation plans that accompany relocation activities.

2

Historic Preservation

Yesler Terrace has a long history and there are many positive aspects of this community that could be lost in redevelopment. The fact that this was the first racially integrated public housing development in the nation and continues to be an integrated community is a testament to the vision and courage of Jessie Epstein. We are pleased that the EIS speaks to this and support efforts to acknowledge and memorialize the history of Yesler Terrace in the final redevelopment. We would encourage SHA to commit resources and look for other opportunities above and beyond exhibits and artwork to chronicle and celebrate the history of Yesler Terrace and Jessie Epstein.

3

Community Facilities

The landmarks board declared the Steam Plant as an historic landmark on October 6, 2010. The EIS includes a street grid for Alternatives 2 (Medium Density) and Alternatives 3 (High Density) that retains the Steam Plant. We supportive of efforts to retain buildings with unique character and supportive of SHA's efforts to find funding that could re-purpose the Steam Plant for a Head Start preschool and other community services.

4

As mentioned earlier, Neighborhood House and two other non-profit community based organizations occupy the Jessie Epstein Building. While we understand the various factors that SHA must apply to a decision about existing buildings, we hope that you will take into consideration the financial and operational impact on our organizations should the Epstein Building be demolished. It is currently used to its maximum efficiency and contributes to the variety of architectural features of this community.

5

With further regard to space for community services, the EIS included the following in the five alternatives:

6

"Displacement of Existing Uses - Non-Residential - All other existing non-residential tenants leasing space on the Yesler Terrace site would be temporarily or permanently displaced. Permanent displacement could occur due to potential changes in SHA's rental policies/rate or other economic factors. Some tenants could move directly into redevelopment neighborhood services/ commercial or office space without being temporarily displaced."

We hope that SHA will work closely and consistently with all of the current "on-site" community partners to address their space needs and develop mitigation strategies that preserve these programs and activities. We believe that the residents of Yesler Terrace have benefitted from the wide array of services that community partners are able to bring into the community. While the EIS mentions

28,000 square feet of community space for a variety of uses, we are concerned that this may be underestimating the community's needs given the potential ten fold increase in population.

6
cont

We would encourage SHA to locate community facilities in close proximity to one another. This will make it easier for residents to access multiple services and promote better service integration among providers.

The EIS does not mention how those spaces might be financed, or acknowledge that the operating expense for social service providers are currently low/and or subsidized by SHA and that there will be a significant cost increase to providers, if SHA charged to providers the full cost of operating modern buildings. While recognizing that SHA may no longer be able to subsidize space at current levels, there may be alternative financing strategies that pre-pays or buys down the cost of ongoing occupancy costs for these valuable community partners.

7

Noise

The EIS recognizes noise as a problem. Noise levels in many areas (from Interstate 5 and Boren) will be above HUD approved levels and will require waivers from HUD. SHA suggests many ideas for mitigation. Given the assumption that substantially more school age children will live in the redeveloped community and the well-documented impacts of noise on learning, SHA should do everything possible to mitigate the impact of noise on children through location of family housing within the community but away from the noisiest areas, working the City on ways to reduce noise on streets like Boren and noise reducing building design.

8

Community and Private Gardens

The EIS mentions the community gardens and private gardening, without acknowledging the remarkable nature and scale of this endeavor on the part of public housing residents. Much of the gardening takes place in private yards. The EIS frames the layout of the current community mostly in negative terms, such as security risks, but does not acknowledge the challenge that will exist in replacing even some of the private gardening that is unique to this public housing community. Will there be enough Public P-Patches and rooftop gardens? At a time when we are trying to encourage everyone to eat better, the significance of this community's accomplishment needs to be recognized, celebrated and incorporated into the redeveloped community.

9

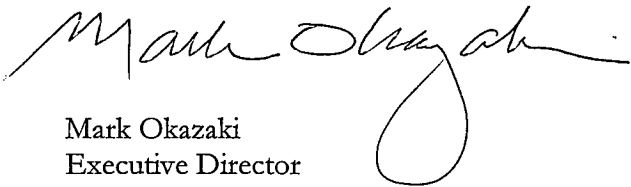
Little Saigon

Finally, the EIS describes the up side of redevelopment on Little Saigon in terms of increased patronage from more affluent Yesler Terrace residents but assumes that any down side development pressures on Little Saigon would be similar to what would have happened without this project. We respectfully disagree. We believe that a project of this scale will accelerate development and gentrification to the detriment of small business owners and could ultimately erode the fabric of a thriving ethnic community. We strongly encourage SHA to work with the Vietnamese business owners and community to develop mitigation strategies that address these concerns with the goal of preserving the ethnic heritage and vibrancy of Little Saigon.

10

We look forward to working with SHA on the redevelopment of Yesler Terrace and are available to provide more detailed information on the issues that we have raised in our comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Okazaki". The signature is fluid and cursive, with a large loop at the end of the last name.

Mark Okazaki
Executive Director

Response to DEIS Letter 12
Neighborhood House

1. Comment noted. As stated on page 3.15-58 in DEIS Section 3.15.6, SHA anticipates that the community service providers/organizations currently providing services to residents onsite (including Neighborhood House) would be offered the opportunity to relocate onsite or return to the redeveloped community, as space becomes available. The Preferred Alternative includes a greater amount of neighborhood services space (65,000 SF) than the DEIS Alternatives (50,000 SF).
2. Comment noted. SHA has worked closely with Yesler Terrace residents in the past and will continue to do so in addition communicating clearly so that impacts from redevelopment activities and tenant relocations understood by those affected.
3. Comment noted. See the response to Letter 11, Comment 10.
4. As stated in **FEIS Chapter 2** and **FEIS Section 3.11**, the Preferred Alternative assumes the Yesler Terrace Steam Plant building would be adaptively reused in order to accommodate additional neighborhood services uses.
5. Comment acknowledged. As noted in Chapter 2 of the DEIS, Alternatives 1-3 assume removal of the Jesse Epstein building, with replacement of an equivalent amount of community services space throughout the redeveloped site. Alternative 4 assumes that the Jesse Epstein building would be retained.

SHA will consider the potential impact that removal of the Jesse Epstein building could have to Neighborhood House and other commercial services tenants of building. As noted in the DEIS, it is possible that some organizations could move directly into redeveloped space without having to move offsite.

See **FEIS Chapter 2** and **FEIS Section 3.15.6** for additional information on community services space replacement under the Preferred Alternative. As detailed in these chapters, an increase of approximately 15,000 SF of community services space (or 65,000 SF total) is assumed for the Preferred Alternative as compared to the DEIS Alternatives and existing conditions (50,000 SF total).

6. Comment acknowledged. As noted in **FEIS Chapter 2** and **FEIS Section 3.15.6**, an additional 15,000 SF of community services space is assumed for the Preferred Alternative as compared to the DEIS Alternatives. Also, as stated on page 3.15-58 in Section 3.15.6 of the DEIS, SHA anticipates that the community service providers/organizations currently located onsite (including Neighborhood House) would be offered the opportunity to return to the redeveloped community, if space is available. Please see the response to Letter 5, Comment 5 for additional information regarding the Social Infrastructure Plan which provides recommendations for necessary services and associated future square footage needs.

Please also see **FEIS Table 2-2** for the distribution of community services space throughout the site sectors. As noted, community services space would be concentrated in three sectors on the site including the NW, SW and NE Sectors.

7. Comment acknowledged. SHA will continue to identify partnerships that would potentially help offset occupancy costs for community services.
8. Comment acknowledged. The final site plan for the Preferred Alternative of the redevelopment has considered existing and projected future sound levels. To the degree practical within the requirements of the project, site design features would be used to take advantage of the barrier effects of buildings and distance from major roadways to control transmission of traffic noise levels to some exterior areas to reduce noise to levels suitable for outdoor residential uses. The final site layout would also strive to ensure that the most noise-sensitive uses (e.g., parks) are not located in the loudest areas of the site. In instances where potentially noise-sensitive buildings would be located in areas with high sound levels, construction materials and techniques would be used to ensure that interior sound levels comply with HUD's noise standards for interior uses. Unfortunately, reducing street and highway noise is beyond the control of SHA.
9. See the response to Letter 2, Comment 3.
10. Refer to **FEIS Chapter 5, Key Topics**, as well as **FEIS Section 3.16.2** for information on the potential for indirect land use impacts to the Little Saigon neighborhood.

December 13, 2010

Ms. Stephanie Van Dyke
Development Director
Seattle Housing Authority
120 Sixth Ave. N.
P.O. Box 19028
Seattle, WA 98109

RE: Yesler Terrace Draft EIS Comments

Dear Stephanie:

We are writing to comment on the Draft Environmental Impact Statement (DEIS) for the Yesler Terrace Redevelopment Project.

We have comments on both the adequacy of the DEIS and the proposed mitigations proposed by SHA. An overall suggestion is the need for SHA to ensure implementation by hiring an on-site mitigation compliance officer. We have organized our comments under the same subhead organizational topics used in the DEIS.

1

Earth

- The DEIS references a temporary erosion and sedimentation control plan (TESCP), which lists measures including temporary sedimentation ponds. Given the proximity of small children to the construction site, the DEIS mitigation plan should include child safety measures wherever such ponds exist, including proper fencing and warnings.

2

Air Quality

- In addition to the requiring that equipment and trucks should be maintained in optimal operational condition, SHA should require that all off and on-road vehicles meet 2007 EPA standards for diesel emissions.
- Controls should be created for construction workers parking offsite. This is necessary in order to alleviate congestion, parking problems, and pollution in neighborhoods surrounding the project.
- Require use of an on-site environmental monitor in order to safeguard conformity to project requirements.

3

4

5

Water Resources

- Construction will be affecting the habitat of rodents and feral animals located on the project site. Therefore, measures need to be taken regarding proper rodent control that will limit resident exposure to animals fleeing destruction of their habitat and decrease the spread diseases carried by such animals. 6
- Physical inspection of pavement and other areas that drain into storm drains throughout and surrounding the project area for signs of fluid leaks from construction equipment and trucks. 7

Plants and animals

- Replacement trees need to provide an equivalent air quality benefit as the ones removed and incorporate adequate long term maintenance plans. 8
- As part of the planned mitigation regarding elimination of invasive plant species, the infestation of Himalayan blackberries on southern end of property should be particularly addressed. 9

Climate Change, Greenhouse Gas Emissions and Energy

- **District Infrastructure Systems for Energy, Water and Waste** - On site: ensuring the preservation of existing bus stops or equivalent replacement bus stops, and addressing the possible impacts of increased rider cost to use the First Hill streetcar as an alternative. Coordination with Metro for alternative bus routes and maintenance of comparable service during all phases of construction. 10
- **Building Design**- Installation of HEPA filters on all units built by SHA ought to be required to mitigate the exposure to diesel emissions that are a consequence of project proximity to freeway. The large health disparity between future property owners and renters necessitate this additional remedy. All low -income units must fully utilize low toxics materials, low-energy and water-conserving amenities such as dual flush toilets. 11
- SHA needs to analyze the carbon impacts that will result from the construction and operation of the redeveloped Yesler Terrace, including transportation and the built environment. It is clearly inadequate to conclude that one of the largest redevelopment projects in Seattle in recent years will not have significant adverse impacts on greenhouse gases. 12

Environmental Health

- **Steam Plant**- Appropriate notice must be given to all residents, provided in the top seven languages spoken on site, and a community meeting must be convened to discuss health impacts of toxics found onsite, and notice should be provided to community of any toxic materials release resulting from preservation/stabilization activities. 13
- The DEIS does not adequately identify the environmental justice health impacts of air quality issues on low-income residents. The SHA needs to look into the disparate impact on low-income people and their varied access to health care, etc. 14

Noise	
<ul style="list-style-type: none"> • Instead of “exploring” mitigations options in this section, more significant noise mitigation measures as outlined should be required. 	15
Land Use	
<ul style="list-style-type: none"> • A building height cap of 85 feet for development near the southern boundary of the project must be implemented in order to be compatible with height/bulk/scale of Little Saigon future development. 	16
Aesthetics/ Light and Glare/Shadow	
<ul style="list-style-type: none"> • A building height cap of 85 feet at southern boundary of the project must be implemented in order to be compatible with height/bulk/scale of Little Saigon. 	17
Aesthetics- Light and Glare	
<ul style="list-style-type: none"> • Adequate lighting should be installed in such a manner as to maximize the safety of pedestrians and residents. 	18
Transportation	
<ul style="list-style-type: none"> • Relocated bus stops should be sited no further than 1/8 mile from current stop locations. Any additional costs for accessing transit services such as a shift to utilizing the potentially more expensive First Hill streetcar should be covered by SHA during and after construction. 	19
<ul style="list-style-type: none"> • controls should be created for construction workers parking offsite. This is necessary in order to alleviate congestion, parking problems, and pollution in neighborhoods surrounding the project. 	20
<ul style="list-style-type: none"> • Potential Intersection Mitigation - The following high-traffic intersections should be analyzed and included in this section: 12th and Jackson, 12th and Main, 12th and Boren. 	21
<ul style="list-style-type: none"> • The DEIS should analyze the impact of the projected budget cuts affecting King County Metro service in 2012 and its impact on Route 27 service. 	22
<ul style="list-style-type: none"> • TMP should include charging stations for electric vehicles. 	23
<ul style="list-style-type: none"> • Sharing of office parking should be expanded to allow Little Saigon customers access to office parking closest to Southern boundary of project. 	24
Utilities	
<ul style="list-style-type: none"> • If residents experience an increase in utility fees, a transition plan should be created so as to gradually incorporate increases. 	25
Public Services	
<ul style="list-style-type: none"> • DEIS should incorporate an analysis of open space in surrounding neighborhoods which could impact placement of open spaces within project. 	26
<ul style="list-style-type: none"> • Due to the increase in total number of residents under various proposals, at least one additional community police officer should be hired. 	27

- As many service providers as feasible should maintain their location at Yesler during redevelopment. | 28

Socioeconomics

- An analysis ought to be conducting concerning the negative impact on commercial rental affordability in Little Saigon that the project could have. | 29
- The temporary relocation of residents must be avoided. Construction should be phased so as to allow residents to remain on-site and move only into newly constructed residencies. | 30
- There are significant avoidable adverse impacts of relocating a community. This effect was made clear in study conducted by researchers at the University of Washington.¹ The next iteration of the DEIS must reassess the conclusion that there are no significant unavoidable adverse impacts. | 31
- Residents should receive reimbursement for ALL moving expenses. | 32
- SHA should contract with an agency like HomeSight to identify whether individuals can qualify for home purchases including such options as IDAs, co-ops, co-housing or land trusts, | 33

Environmental Justice

- Again, issues of direct concern and their disparate impact on low-income residents were not studied thoroughly by SHA. There is a great need to look into disparate impact on **low**-income people and their varied access to health care, etc. | 34

¹ [http://evans.washington.edu/files/High Point Final Report June 2 2009.pdf](http://evans.washington.edu/files/High_Point_Final_Report_June_2_2009.pdf)

Response to DEIS Letter 13
Puget Sound SAGE

1. Comment noted.
2. Comment noted. Common provisions for controlling unauthorized access to potentially dangerous areas within a construction zone would be used during site redevelopment.
3. Comment acknowledged. This level of specificity is beyond the purview of the EIS process to consider accurately for a planning-level review. This sort of requirement along with others intended to reduce emissions from diesel-powered equipment could be considered for inclusion in agreements established with construction contractors. Broad application of such controls would reduce emissions, but also could be overly burdensome on construction contractors for activities located far from potentially sensitive receivers.
4. Comment acknowledged. Please see the response to Letter 9, Comment 3.
5. Comment acknowledged.
6. See the response to Letter 10, Comment 73, regarding pest control.
7. Inspection of facilities is provided in the Stormwater Operation and Maintenance Plan identified on page 40 of the Water Resource Technical Report (DEIS Appendix F).
8. Federal, state, and city regulations do not include provisions for quantifying air quality benefits from trees. The City's Urban Forest Management Plan includes air quality in the determination of the environmental and economic benefits of Seattle's tree canopy. Tree replacement is provided to the extent practical to help meet the goals of the City's Urban Forest Management Plan and to achieve Green Stormwater Infrastructure to the Maximum Extent Feasible. Mitigation measures for all alternatives include establishment of a landscape maintenance program during and after construction, as referenced in Appendix G of the DEIS.

See also the response to Letter 2, Comment 2.
9. The need to remove invasive species, and specifically the Himalayan blackberry located in the SW Sector, is identified in DEIS Section 3.4.2 and as a mitigation measure in DEIS Section 3.4.3.
10. Please see the response to Letter 9, Comment 25. Any future need for modifications to bus routes or bus stop locations would be determined by King County Metro, based on the factors they typically consider when making such decisions. Please note, the fares for the Seattle Streetcar are comparable to Metro fares, and each system accepts transfers from the other.
11. Comment acknowledged. SHA could possibly incorporate the use of additional filters on building air intake units to at least partially reduce exterior-to-interior infiltration of

particulate matter. Specific designs have not yet been determined, and there is no requirement to use such measures as mitigation because there has been no demonstration of a potential impact other than the relatively elevated levels of fine particulate matter near busy roadways. It is worth noting that the exterior of all buildings on the site would be more or less similarly exposed to emissions from nearby traffic sources, regardless of the income status of the inhabitants.

12. The greenhouse gas emissions analysis provided in this EIS (in DEIS and **FEIS Section 3.5** and DEIS Appendix E), does consider impacts that would result from construction and operation of the Yesler Terrace redevelopment, including transportation and the built environment. The greenhouse gas emissions analysis is considered a “worst-case” scenario in that it does not consider the incorporation of any sustainable features that could reduce emissions such as LEED building techniques or vehicle trip reductions.

As is acknowledged in DEIS Section 3.5.2, under Cumulative Impacts, the greenhouse gas emissions from this development would contribute to the cumulative carbon footprint of the City. The description of the significant unavoidable adverse impacts in regards to climate change and greenhouse gas emissions has been revised to provide clarification:

Declaring the impacts of climate change and greenhouse gas emissions significant or not significant implies the ability to measure incremental effects of global climate change. The body of research and adopted regulations necessary to connect individual land uses, development projects, operational activities, etc. with the broader issue of global warming do not currently exist. Scientific research and analysis tools sufficient to determine a numerical threshold of significance have not been established at this time and any conclusions regarding impact significance would be speculative. As discussed in the DEIS, SHA is considering opportunities to employ sustainable development strategies, when feasible, to reduce greenhouse gas emissions and to reduce the carbon footprint of the Yesler Terrace Redevelopment.

This updated language is also noted in **FEIS Chapter 4, Updates to the DEIS Analysis**.

13. As stated in DEIS Section 3.6, no toxic materials have been identified on the Steam Plant site. The DEIS analysis indicates that further testing of the residual materials within the smokestack and the smokestack itself would be required prior to commencement of any rehabilitation activities. A hazardous materials survey would be conducted at the Steam Plant to determine whether hazardous materials are present and whether there would be any potential health risks to workers/tenants, the proper disposal site, and to inform a site specific health and safety plan to minimize the potential for exposure. The survey results could then be used for noticing, if required.
14. Please refer to the response to Letter 10, Comment 139.
15. In **FEIS Section 3.7**, the list of mitigation measures has been updated to identify new mitigation measures and to more clearly identify which measures are required.
16. Comment acknowledged. The Preferred Alternative assumes building heights in the portion of the SE Sector south of Washington Street adjacent to the Little Saigon

neighborhood, would be limited to 160 feet; the maximum heights proposed under the DEIS Alternatives range from 180-240 feet in this part of the site. The reduction in proposed building heights adjacent to the Little Saigon neighborhood would serve as mitigation for the potential for significant impacts identified for DEIS Alternatives 1-3 due to height differences between onsite and offsite uses in this area (see **FEIS Section 3.8, Land Use**, and **3.10.1.2, Aesthetics**, (Height, Bulk and Scale) for additional details).

17. Comment acknowledged. Please see the response to Comment 16 of this Letter.
18. As noted on page 3.10-104 of the DEIS and restated in **FEIS Section 3.10.2.3**, pedestrian-scale lighting would be provided consistent with code, function and safety requirements under both the DEIS Alternatives and the Preferred Alternative.
19. Please see the response to Comment 10 of this letter.
20. Please see the response to Letter 9, Comment 3.
21. As shown in DEIS Table 3.13-8 and DEIS Table 3.13-9, all three intersections noted in the comment were included in the DEIS analysis: 12th Avenue S/Boren Avenue S as intersection #13, 12th Avenue S/S Main Street as intersection #14, and 12th Avenue S/S Jackson Street as intersection #15.
22. Please see the response to Letter 9, Comment 25.
23. While electric car charging stations would not serve the TMP goal of reducing the number of vehicles or vehicle commute trips, the suggestion is noted as a possible measure that could be implemented to encourage sustainable transportation.
24. The DEIS recommends sharing of office parking with residential and other commercial development on weeknights and weekends in order to reduce the overall parking supply that would be needed. Recommendations for specific agreements that could potentially be made with adjacent developments are outside the scope of the EIS and would be at the discretion of the property owner(s) at the time that parking occupancies resulting from specific developments would be determined.

Also, please note that the office parking in all alternatives (including the Preferred Alternative) would be located in the NW Sector, which would not necessarily provide convenient access for Little Saigon customers.
25. Comment acknowledged.
26. In DEIS Section 3.15.1.1, a detailed description of the existing onsite and offsite parks and open space areas is provided. In DEIS and **FEIS Section 3.15.1.2**, an analysis of the impacts of redevelopment on existing onsite and offsite parks and open space resources is provided.
27. Please see the response to Letter 7, Comment 2. Also, as noted on page 3.15-49 of the DEIS and in **FEIS Section 3.15.4**, the design and physical layout of the site under redevelopment is intended to improve safety conditions. Under the Preferred Alternative, the circulation infrastructure across the site would be reconfigured to remove

dead end streets and sidewalks in order create better connections to the surrounding neighborhoods. The potential for an additional community police officer would be determined as the site develops, and negotiated with SPD on a year-by-year contract.

28. As noted on page 3.15-58 of the DEIS, during construction, it is possible that some social service organizations and programs located on the site could move directly into redeveloped space without having to move offsite.

As well, as noted in **FEIS Section 3.15-6**, under the Preferred Alternative it is assumed that the Steam Plant in the NW Sector would be adaptively reused, potentially for community service uses. Some organizations and programs could move directly into this building without having to leave the site. It is also possible that some organizations and programs would need to relocate offsite, as described in DEIS Section 3.15.

29. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding the potential for indirect land use impacts to the Little Saigon neighborhood.
30. Comment noted. Please see the response to Letter 11, Comment 9, and **Chapter 5, Key Topics**.
31. Your comment is acknowledged. Please refer to the mitigation measures described on pages 3.16-36 through 3.16-38 in Section 3.16, Socioeconomics of the DEIS. No significant unavoidable adverse impacts are anticipated with implementation of appropriate mitigation measures.
32. Your comment is acknowledged. Please refer to the mitigation measures described on pages 3.16-36 through 3.16-38 in Section 3.16, Socioeconomics of the DEIS. As discussed, SHA would comply with the federal Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (URA) with respect to the relocation of residents during the construction process under Alternatives 1-4. URA requirements include providing reimbursement for moving expenses. As part of the relocation assistance package, an SHA relocation team would assist residents with their moves, reimburse the resident for the cost of the move, and/or provide a fixed moving expense and relocation allowance. Residential relocation benefits under the Preferred Alternative would be as described for Alternatives 1-4 above. Refer also to **FEIS Chapter 5, Key Topics**, for further information the replacement of existing units under the Preferred Alternative.
33. Comment acknowledged.
34. The Environmental Justice section is limited to analysis of the redevelopment's potential to result in disproportionately high and adverse human health impacts to minority and/or low income populations.



P.O. Box 1032 • Seattle, WA 98111 • wavachamber@wavachamber.org

To: Stephanie Van Dyke
Development Director
Seattle Housing Authority
120 Sixth Avenue N
P.O. Box 19028
Seattle, WA 98109-1028

Dannette R. Smith
Acting Director
City of Seattle Human Services Dept
700 Fifth Ave, Suite 5800
P.O. Box 34215
Seattle, WA 98124-4215

Attn: Stephanie Van Dyke/Dannette R. Smith

Subject: WAVA Chamber of Commerce Response to Yesler Terrace DEIS

Dear Ms. Van Dyke and Ms. Smith

The following is our response to the Yesler Terrace Redevelopment Draft Environmental Impact Statement. We find that the mitigation proposal put forth by the Seattle Housing Authority (SHA) has some serious deficiencies and we request that SHA addresses these concerns to the community's satisfaction.

Socioeconomics

- We find it appalling that SHA can come to the conclusion that no significant adverse impact to community cohesion, public well being, population, employment and housing to the area
- We request that analysis be done to determine the impact such a large project will have on the small business character of Little Saigon. Will mom-and-pop businesses still be able to survive when this site is fully built out? Will this area still be affordable to small businesses? These and other issues concerning compatibility is not included in this DEIS

1
2

Land Use

- SHA’s proposed height in areas adjacent to Little Saigon is unacceptable. SHA must create a cap at 85 ft at southern boundary abutting Little Saigon to be compatible with height/bulk/scale . | 3
- The WAVA Chamber has requested that the Seattle City Council cap height in Little Saigon to 85 ft for the Livable South Downtown zoning changes. We believe that the recommended height of 150 ft is out of scale with not only the small business character of Little Saigon but also the single/multi-family character of the Central Area. | 4
- We request that SHA create an open space/parks buffer zone between the northern boundary Little Saigon and the southern boundary of Yesler Terrace to better transition between the proposed tall buildings on the northern portion of the Yesler Terrace site. | 5

Transportation

- Need to restudy intersections in Little Saigon- 12th and Jackson, 12th and Main, 12th and Boren. | 6
- As a mitigation measure, Yesler Terrace off-street parking supply closest to the southern boundaries of the site should be made available to Little Saigon customers | 7
- Set controls on offsite parking for construction workers to avoid congestion, parking problems, and pollution in other neighborhoods | 8
- Bus services should be maintained no further than 1/8 mile from current stop locations. Any additional costs for accessing transit services such as a shift to utilizing the trolley should be covered by SHA during construction. | 9
- Need to take into account the projected budget cuts affecting metro in 2012 and it’s impact on Route 27 service. Impact needs to be analyzed | 10
- TMP should include charging stations | 11

Public Services

- Should incorporate analysis of open space in surrounding neighborhoods which could impact placement of open spaces within project | 12
- Increase to two community police officers at Yesler | 13
- Some service providers should maintain their location at Yesler during redevelopment. | 14

Tenant Relocation Plan-Temporary Relocation

- There are significant avoidable adverse impacts. Need to reassess their analysis that there aren’t avoidable impacts | 15
- Tenants should only have to just move once during redevelopment process | 16
- Significantly impacts the community cohesion of the neighborhood | 17
- Reimbursement for ALL moving expenses | 18

Air Quality		19
▪ (after first bullet 1-38) Meet 2007 diesel standards		19
▪ Set controls on offsite parking for construction workers to avoid congestion, parking problems, and pollution in other neighborhoods		20
▪ On site environmental construction monitor		21
▪ (1-39) inspection of toxics dumped on the street from construction equipment		22
Environmental Health		
▪ Steam Plant- appropriate notice to all residents in top seven languages spoken on site and community meeting to discuss toxics found outlining the health impacts of toxics found.		23
▪ Need to address EJ argument- wasn't studied thoroughly. Need to look into disparate impact on low -income people and their varied access to health care, etc.		24
Noise		
Should require instead of explore for all of these		25
Aesthetics/ Light and Glare/Shadow		
▪ (second bullet)Cap at 85 feet at southern boundary abutting Little Saigon to be compatible with height/bulk/scale		26
Aesthetics- Light and Glare		
▪ Lighting should be place in a manner that maximizes safety for pedestrians and residents.		27
Tenant Relocation Plan-Temporary Relocation		
▪ There are significant avoidable adverse impacts. Need to reassess their analysis that there aren't avoidable impacts		28
▪ Tenants should only have to just move once during redevelopment process		29
▪ Significantly impacts the community cohesion of the neighborhood		30
▪ Reimbursement for ALL moving expenses		31

We ask that you give our concerns your strongest considerations and we looking forward to your reply.

Sincerely,

Quang H. Nguyen
 Founder/Board Member
 Washington Vietnamese American Chamber of Commerce

Response to DEIS Letter 14

Washington Vietnamese American Chamber of Commerce (WAVA)

1. Comment acknowledged.
2. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding potential indirect land use impacts.
3. Please see the response to Letter 13, Comment 16.
4. Please see the response to Letter 13, Comment 16.
5. Comment noted. The Preferred Alternative does not assume that an open space/parks buffer is provided in this area.
6. Please see the response to Letter 13, Comment 21.
7. Please see the response to Letter 13, Comment 24.
8. Please see the response to Letter 13, Comment 20.
9. Please see the response to Letter 13, Comment 19.
10. Please see the response to Letter 13, Comment 22.
11. Please see the response to Letter 13, Comment 23.
12. Please see the response to Letter 13, Comment 26.
13. Please see the response to Letter 13, Comment 27.
14. Your comment is noted. As discussed on page in DEIS Section 3.15.6 Public Services (Community Services), the Yesler Community Center would be retained under all of the redevelopment alternatives (DEIS Alternatives 1-4). Programs based in the Yesler Community Center would continue to be available and accessible throughout the redevelopment construction process. Other programs/services could be either temporarily or permanently relocated from the site. While it is possible that during construction, some social service organizations and programs could move directly into redeveloped space without having to move offsite, the extent of such arrangements cannot be determined at this stage in the planning process.

The Yesler Community Center would also be retained under the Preferred Alternative, and other programs/services could be either temporarily or permanently relocated from the site in a manner similar to that described for Alternatives 1-4 above. However, the Steam Plant would be retained under the Preferred Alternative for community services uses (approximately 8,500 sq. ft.); therefore, some service providers could likely move directly into the Steam Plant without having to leave the site. See **FEIS Section 3.15.6** for additional information.

15. Please see the response to Letter 13, Comment 31.
16. Your comment is acknowledged. No specific sequence of development has been detailed at this time. However, under the Preferred Alternative it is likely that the East of Boren Sector, and possibly portions of the East of 12th Sector would be developed first to provide early replacement housing. As well, an additional phasing priority has been added to the Development Phasing Criteria: "Maximize onsite relocations to minimize disruption to existing tenants." This change is reflected in **FEIS Chapter 7, Errata**. Temporary and/or permanent relocation within the site boundary would be expected to alleviate disruptions to existing residents and community bonds. See **FEIS Chapter 5, Key Topics**, for additional information.
17. Please see the response to Comment 16 of this letter.
18. Please see the response to Letter 13, Comment 32.
19. Please see the response to Letter 13, Comment 3.
20. Please see the response to Letter 13, Comment 4.
21. Please see the response to Letter 13, Comment 5.
22. Please see the response to Letter 13, Comment 5.
23. Please see the response to Letter 13, Comment 13.
24. Please see the response to Letter 13, Comment 34.
25. Please see the response to Letter 13, Comment 15.
26. Please see the response to Letter 13, Comment 16.
27. Please see the response to Letter 13, Comment 18.
28. Please see the response to Letter 13, Comment 31.
29. Please see the response to Comment 16 of this letter.
30. Please see the response to Comment 17 of this letter.
31. Please see the response to Comment 18 of this letter.



Yesler Terrace Community Council
 102 Broadway
 Seattle Washington 98104

December 13, 2010

Comments on the Yesler Terrace Redevelopment DEIS

I could really use an extension on the comment deadline. I wasn't able to get access to a copy of the document I could sit down with and read through (thanks to Thomas Whittemore of the Department of Neighborhoods) until last Friday, so haven't been able to discuss comments with the rest of the YTCC leadership team. The Community Council should probably have paid for a copy of the draft EIS.

I have read – too quickly – and not thoroughly enough – the full document summary and key parts of the supporting document.

YTCC input:

Because there has not been time to go over the response with the leadership team, I am enclosing a copy of the letter we sent to the Board more than a year ago with questions on redevelopment. It covers our major organizational concerns, and asks some questions not yet thoroughly answered in the Draft EIS .

Personal Comments (and some expansion on YTCC issues).

I'm also enclosing my personal notes and comments on the summary – these comments are very much my own, and very much a draft.

I have also read and support John Fox's comments from the Seattle Displacement Coalition.

Comments on the summary on subjects which are not referenced in the July 2009 letter to the Board have not been formally discussed by YTCC leadership. – If I'd had earlier access to the document in a readable form, you would have my comments and Council comments instead of an old letter and some notes.

Kristin O'Donnell

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YTCC

Yesler Terrace Community Council
102 Broadway
Seattle Washington 98104

To The Board of Commissioners, Seattle Housing Authority:

Please consider our requests and comments on the Yesler Terrace redevelopment process. We developed these requests during the July 21 general meeting of the Council, an intervening committee meeting and the July 28 meeting of the YTCC Leadership Team. We incorporated material from a series of community-based 2008 workshops, notes from a series of home visits and comments at CRC meetings.

This is **not** a minority report on the CRC report, which covers quite well what the CRC did during the past year. This **is** our current list of items that still need to be considered, committed to, and confirmed if we are going to have a community that works well for extremely low-income tenants, for the Housing Authority and for Seattle. We do realize that many of these commitments will depend on availability of funding – but we also know that the Board, and SHA staff must look for, and ask for, the funding.

Requests for Board action are boxed – comments are below each request.

We thank you for your careful and thoughtful work in developing and passing the Daycare Provider Resolution last month, for your willingness to attend workshops and meetings in the Yesler neighborhood, for your consideration in agreeing to hold Board Meetings where Yesler Terrace is a major agenda item in our community and for your commitment to replacing all Yesler Terrace extremely low-income apartments on-site. We look forward to continuing to work with you and the SHA staff to develop agreements to insure the livability of the current and future Yesler Terrace.

And are we looking forward to redevelopment? Most of us are not. We regret that redevelopment may mean public land sold to private developers. We will miss the luxury of private yards or balconies, views, and neighbors who don't look down on us because we have less money, combined with nearness to jobs, health care and transportation. But if redevelopment will happen, we want it to be the best it can be. We do look forward to continued work with you and Housing Authority staff to get there.

Thank you for your attention.

Yesler Terrace Community Council Leadership Team
August 4, 2009

1. Things we would like you to consider:

A. We want the Board, SHA staff and the next-phase CRC to commit to considering very carefully whether the amount of density proposed will really create a safe, pleasant and attractive neighborhood where people will want to live and work.

The CRC has not yet considered how many housing units, how much office space how much – and what kind of business and commercial space would work best for the neighborhood.

Yesler Terrace now is approximately as dense as the NewHolly and Rainier Vista HopeVI communities, and less dense than High Point.

Very dense extremely low-income housing has not worked well in other cities. “Model Communities” in Saint Louis and Chicago are famous for the wrong reasons.

High density has not worked well here. SHA’s largest senior buildings have more crime and shorter waiting lists than other senior buildings.

The risks of higher crime rates go up in more dense communities.

It is harder to supervise children effectively in high density neighborhoods. Shops in community may make it easier for kids to get into trouble. Stores should be located at edges of community, on 12th Avenue or in commercial buildings near the hospital, not near the Yesler Community Center.

It is harder to know neighbors so when there are people who aren’t from the neighborhood it will be less obvious.

Office space may not be used at night. Those empty streets and buildings are less safe with fewer people watching the streets.

We are concerned about increased traffic problems:

More residents, more offices, and more stores mean more cars. We will need more parking!

Downtown density needs downtown traffic control. We need signaled crosswalks at every corner.

Unless all intersections are signaled, fewer dead-end streets may tempt drivers to short-cut through the secondary streets to avoid lights. This means increased traffic in a residential community.

B. We want the Board, SHA staff and the CRC to consider other ways mixed uses and mixed-income housing will affect the financial and human health of the community.

Are Seattle families who can choose where to live ready for this level of density? If they are not the redevelopment plan is in trouble.

Will extremely low-income and other low income sections of Yesler Terrace be integrated with higher income housing? On the same block? In the same building? On the same floor?

Will higher income units be built for families with children? What would it mean for the neighborhood if the only kids in the community were from extremely low-income families?

Will seniors and people with disabilities living alone be in the same area as families?

Will there be housing appropriate for frail elders?

C. We want the Board, SHA staff and the CRC to study less dense alternatives with lower scale design and/or mix of designs. Considering options that differ substantially will allow the community, staff and Board to better understand what amenities we’d gain vs. what we’d lose in terms of economies of scale, total number of public housing eligible families served, funds to support other SHA housing etc.

Will the City, the downtown establishment and surrounding neighborhoods support very high density and commercial development at Yesler Terrace – an area outside downtown where such density is expected? Opposition from these interests after commitments and costs have been incurred may be costly – remember the Goodwill project on Dearborn.

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2. Commitments we would like now:

A. We want the Board/SHA to commit to phasing redevelopment to minimize off-site relocation. If off-site relocation is unavoidable, it must be as close to Yesler Terrace as possible, and length of time off-site must be minimized. Moving assistance must be provided for leaving and return.

7

Yesler Terrace's closeness to medical care, employment and other resources – and its existence as a supportive and caring neighborhood make it important for most of us to stay nearby.

B. We want the Board/SHA to commit to continued funding needed social services including public safety in Yesler Terrace before, during and after redevelopment.

8

Availability of services helps families succeed in housing.

C. We want the Board/SHA to commit to continuing support before, during, and after redevelopment (interpretation, supplies, printing, Community Builder assistance) for YT extremely low income residents to organize around issues which affect us.

9

Hope VI subsidized residents don't have the level of support from SHA that Yesler Terrace now has. SHA supports and recognizes Homeowner's Associations but no longer provides Resident Participation Funds to support organizing of extremely low income residents in HopeVI communities.

D. We want the Board/SHA to commit to not demolishing Yesler Terrace before there is a plan – and funding – to replace it quickly.

10

We don't want to end up like East Rainier Vista --- three plus years of bare earth --- or Model Cities, on the hill east of us, which took more than thirty years from demolition to new building, and is still not completely filled in. Housing is needed.

E. We want a commitment and plan from the Board and Staff to maintain Yesler apartments in livable condition until redevelopment.

11

It may be a long time before funding is available for redevelopment --- if redevelopment happens in phases, it will be a much longer time before it is completed. Slow response to repair requests is already an issue. We don't want deferred maintenance to be an excuse for premature demolition. Housing is needed. There is a long waiting list.

F. If individual units are deemed "beyond renovation" according to City Housing and Building codes, we want the Board/SHA to commit to including residents displaced from these units under commitments to the right to return and on-site or near-by relocation..

12

If a maintenance plan and commitment is in place, this should be rare.

G. We want the Board/SHA to commit to developing a plan to minimize the number of vacant and off-line apartments in YT during the redevelopment and relocation process.

13

Many vacancies make the neighborhood less safe. Long-term vacancies also mean that people are waiting longer for housing. Units waiting for demolition were leased to a transitional housing agency before the Community Center was built.

H. We want the Board/SHA to commit to developing a fair and reasonable means of billing for rent plus utilities. We prefer that bills not be separated, and we need a way to standardize billing amounts through the year.

14

Separate billing for water and electricity in HopeVI communities has meant rent plus utilities costs exceed 30% of income for many households. SHA residents cannot access many utility assistance programs, and using some programs limits access to others. Seattle City Light Budget Billing equalizes bill amounts, but then Project Share can't be used.

I. We want a commitment and a plan from the Board/SHA staff to give priority to Yesler Terrace residents in Redevelopment related hiring, including youth employment projects.

15

Outreach and training will be needed.

3. Commitments we want for the Redeveloped Community:

- A. We want a commitment from Board and SHA staff that:
1. Gardens, access to views and parks will be equally available to extremely low-income residents.
 2. Garden space will be available for everyone who wants a garden.
 3. Play areas will be accessible without crossing streets.
 4. Balconies and terraces will be provided.

16

With the densities now considered, a redeveloped Yesler Terrace will have far less outdoor space for gardening, for play, and for just being outside. Views and sun will be blocked by taller buildings. More mature trees will be gone. We will lose a lot, and want access to what replaces a little bit of it.

- B. We want the Board/SHA to commit to redeveloping Yesler Terrace with quality materials.

17

Broken heating systems in New Holly, faulty window frames in High Point, broken cabinets in Rainier Vista and a privately owned condo complex up the hill on Yesler that is less than ten years old, is vacant and has to be extensively renovated -- these things should not happen. Build the new community to last.

- C. We want the Board/SHA staff to commit to providing energy efficiency in replacement housing construction and appliances.

18

It lowers utility bills – and is good for the environment.

- D. We want the Board/SHA to commit to providing adequate soundproofing in replacement units.

19

The freeway and the helicopters and sirens from Harborview make the community very noisy. Noise from neighbors in multi-story buildings with shared walls will also need to be moderated.

- E. We want the Board/SHA to commit to replacement units with no less floor space than current units – we would like more.

20

We want an additional bathroom in three and four bedroom units. We are concerned with occupancy standard that requires opposite-sex children to share a bedroom. Bedrooms need to accommodate two twin beds with room for a dresser and with floor space for the occupants to move around. The third bedroom in 3 bedroom units now is very small. In fact it is smaller than current city code requires. It needs to be larger if it is supposed to house 2 people, No low ceilings! We also want cross-ventilation and sunlight access.

- F. We would like the Board/SHA to commit to providing affordable access to current media – television, internet, etc.

21

Media access is needed for school, for news, for job search and is becoming standard in new apartments and condos. The digital divide makes getting out of poverty more difficult.

- G. We want the Board/SHA to commit to continuing to provide housing at Yesler Terrace for heads of household who are full time students.

22

Judge Sonia Sotomayor tells of doing her homework at the kitchen table in a Bronx project apartment with her brother and her mother, a single parent who was going to nursing school in order to make a better living for her family. The scene has been replicated often in Yesler Terrace apartments during the last 69 years. It needs to continue – parents need education too..

Response to DEIS Letter 15
Yesler Terrace Community Council

1. Comment noted. The DEIS comment period extended for 8 weeks from October 19th through December 13th, which is longer than the 45-day comment period required by NEPA. While the attached letter from the Yesler Terrace Community Council to the SHA Board of Directors on August 4, 2009 is not considered a direct comment on the Yesler Terrace Redevelopment Proposed Actions outlined in the DEIS, we have responded to each of the comments within this YTCC letter below.
2. Comment noted.
3. Comment noted.
4. Comment noted. See the Transportation analysis (**FEIS Section 3.13, Transportation**) for additional detail regarding traffic.
5. Comment noted. Extremely low income and other levels of low income units would be distributed across the site. It is unknown at this time how this distribution would occur, i.e., in the same building or in the same block. The market rate units may include some larger units to accommodate families with children. Replacement units would include family housing.
6. Lower density alternatives to the Preferred Alternative were analyzed in the DEIS. Alternatives 1, 1A and 4 considered lower building heights and density.
7. Please see the response to Letter 11, Comments 2 and 9 and **FEIS Chapter 5, Key Topics**, for further information on tenant relocation and potential tenant relocation impacts.
8. While SHA provides a limited number of social services that are limited to funding availability, the majority of social services at Yesler Terrace are provided by non-profit social service providers that maintain separate funding sources from SHA.
9. As long as HUD continues to provide funding, SHA would provide Resident Participation Funds to all duly elected public housing councils, including the Yesler Terrace Community Council. If the Yesler Terrace Community Council no longer exists in its current form, SHA would seek to support whatever new structure emerges.
10. See response to Comment 7 of this letter.
11. SHA does not anticipate any change to the current approach to maintenance at Yesler Terrace.
12. As noted in DEIS Section 3.16.3 and restated in this FEIS, all residents living at Yesler Terrace at the time of relocation would have the option of returning to the redeveloped community. SHA will honor its commitment to provide an opportunity for Yesler Terrace

residents who have not been evicted for legal cause from their interim housing to return to the redeveloped community.

13. Please see the response to Comment 7 of this letter.
14. Billing systems are beyond the scope of the EIS.
15. SHA will continue implementation of Section 3 employment policies to provide access to low income residents to jobs within SHA and on SHA construction projects.
16. Specific locations of garden spaces and play areas would be addressed in the design phase. Specific building designs, including the potential for balconies and terraces, would also be addressed in the design phase.
17. Specific building materials and components would be addressed in the design phase.
18. Energy efficiency of building construction and appliances would be addressed in the design and construction phase. See the response to comment 118 in Letter 10 regarding efficiency and sustainability analyzed within the Sustainable District Study.
19. See **FEIS Section 3.7.3** for noise mitigation measures. Specific noise-proofing measures would be determined by HUD through the design phase.
20. This issue is beyond the scope of the EIS; however, the public housing replacement units would be designed and built to both Department of Housing and Urban Development and local building code standards.
21. Affordable access to current media is beyond the scope of the EIS.
22. The redevelopment of Yesler Terrace would serve a range of needs. The range identified in the EIS is intended to reach as many individuals as possible. SHA would honor its commitment to provide an opportunity for Yesler Terrace residents living at Yesler Terrace at the time of relocation to return to the redeveloped community

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:52 AM
To: Fiske Zuniga, Anne; Moore, Ryan A.; Van Dyke, Stephanie A.
Subject: FW: Yesler terrace

-----Original Message-----

From: David alb right [mailto:dalbrightvideo@gmail.com]
Sent: Sunday, December 12, 2010 10:31 AM
To: #Yesler EIS Comments
Subject: Yesler terrace

Hi I'm writing in support of option 3 for the yesler terrace redevelopment. It's just the kind of development we need in just the right location. | 1

David Albright
www.dalbright.com

Response to DEIS Letter 16
David Albright

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:52 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: Leave Yesler Terrace alone

From: Linda Averill [mailto:avlinda587@gmail.com]
Sent: Sunday, December 12, 2010 9:29 AM
To: #Yesler EIS Comments
Subject: Leave Yesler Terrace alone

Yesler Terrace is rich in history, being the first, or one of the first multi-racial housing developments in the country. It is a unique and wonderful community within the Seattle Central district area. And it is home for the residents. I live not far from there in the Judkins Park area, and it has been heavily "densified" over the last five years. Give this area a rest for a while. We have condominiums standing empty near my house. The Pontedera can't sell 'em. Hands off Yesler Terrace. Preserve and expand public housing.

Linda Averill
900 Hiawatha Place South
Seattle, Wa 98144
206-328-2509

Response to DEIS Letter 17

Linda Averill

1. Comment acknowledged. Redevelopment of Yesler Terrace under DEIS Alternatives 1-3 and the Preferred Alternative would allow additional low income housing to be developed on the site, over and above the one-for-one replacement of the existing units. See DEIS Section 3.16.2 and **FEIS Section 3.16.2** for the total number of low income units assumed to built under each of the redevelopment alternatives.

Please also refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding tenant relocation, relocation assistance and replacement units.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 8:27 AM
To: Moore, Ryan A.
Subject: FW: Turn it into parkland

-----Original Message-----

From: John Bailo [mailto:jabailo@texeme.com]
Sent: Monday, December 06, 2010 5:43 PM
To: #Yesler EIS Comments
Subject: Turn it into parkland

The best thing that Seattle downtown could do is to raze a lot of the current old buildings including Yesler terrace.

New uses would include greenspaces, parks, walkways and also free parking garages.

Poor people should not live in the most expensive real estate in the world.

In Tumwater right now, they are selling 3-bedroom homes for \$170,000.
Brand new. That's \$650 a month. Even a dual minimum wage family can make that. That's where the residents should move.

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Response to DEIS Letter 18
John Bailo

1. Comment acknowledged.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:51 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: Yesler Terrace Redevelopment Feedback

From: Jared B. [mailto:jar2ed2@gmail.com]
Sent: Sunday, December 12, 2010 8:11 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace Redevelopment Feedback

In order to protect the diverse mix of socioeconomic backgrounds in central Seattle, redevelopment of Yesler Terrace must include one-to-one replacement of those with very low income. This project will be a success if it not only increases the density of the area, and number of citizens able to utilize sustainable transit options, which are continually increasing, but also protect a vibrant mixture of citizens from diverse backgrounds. A diversity of skills and experiences is vital to a vibrant community, and Seattle continue to show that its Housing Authority is forward-thinking with a plan that sets the minimum low income housing units at current Yesler Terrace Housing levels.

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Sincerely,
Jared Behrend
457 13th Ave.
Seattle, WA 98122

Response to DEIS Letter 19

Jared Behrend

1. Comment acknowledged. The project would include a one-to-one replacement of existing units and all residents living at Yesler Terrace at the time of relocation would have the option of returning to the redeveloped site as new units become available. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding tenant relocation, relocation assistance and replacement units.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 8:32 AM
To: Moore, Ryan A.
Subject: FW: Yesler Terrace

From: Drew Collins [mailto:drewcoll@gmail.com]
Sent: Tuesday, December 07, 2010 8:19 AM
To: #Yesler EIS Comments
Subject: Yesler Terrace

Hi,

After reviewing plans for Yesler Terrace, I wholly support option 3, the highest density option. It makes no sense to do anything less than high density so close to downtown. You don't want YT's density to become outdated again.

| 1

Remove more parking if you can do it while you are rezoning the neighborhood.

| 2

Best,
Drew Collins
University District, Seattle, WA

Response to DEIS Letter 20
Drew Collins

1. Comment acknowledged. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

2. The parking rates used in the DEIS were developed using a combination of information from SHA, the project architect, the project's economic consultant, and traffic consultant. The rates were developed specifically for the mix of low income and market rate residential units. It is noted in Section 3.13.2 of the DEIS that the parking rates were intended to represent a worst-case parking need for the project so that the maximum impacts of this parking could be analyzed and assessed. The parking rates have been reduced in the Preferred Alternative in response to comments. Please refer to **FEIS Chapter 5, Key Topics** for further information.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:51 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: Public Comment

From: kellend@cs.washington.edu [mailto:kellend@cs.washington.edu]
Sent: Sunday, December 12, 2010 6:24 PM
To: #Yesler EIS Comments
Subject: Public Comment

Hello,

I think Option 3 is the best choice for the new Yesler Terrace. The 5,000 units of mixed income housing has the potential to greatly benefit the city. The added office and commercial space would spur economic development. My only concern with this option is the 6,300 parking space. YT's location is highly transit accessible, so perhaps some of the parking space could be better used otherwise.

Thanks,
Kellen Donohue

Response to DEIS Letter 21
Kellen Donahue

1. Comment acknowledged. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.
2. Please see the response to Letter 20, Comment 2.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 9:54 AM
To: Moore, Ryan A.; Van Dyke, Stephanie A.; Fiske Zuniga, Anne
Subject: FW: comment on Yesler Terrace DEIS

-----Original Message-----

From: Joshua Daniel Franklin [mailto:joshuadfranklin@gmail.com]
 Sent: Tuesday, December 07, 2010 9:27 AM
 To: #Yesler EIS Comments
 Subject: comment on Yesler Terrace DEIS

Hello,

Thank you for your work on the Yesler Terrace DEIS. I am strongly in favor of the redevelopment of the site, but would like to see more emphasis on housing units over office space. There is already a large imbalance of housing units vs jobs in the center city; it would especially be nice to see more market-rate housing aimed at 80-120% AMI households which includes salary levels of many civil servants such teachers, librarians, transit operators, fire fighters, and police. A few such projects such as the Alcyone Apartments (Vulcan/Harbor Properties), where I live, have been very successful. I am also concerned about the large amount of parking proposed and would like to see limits of no more than 1 parking space per 500 sq ft of office.

You might consider partnering with senior and low-income organizations to support each other, such as is done in the Hope House intergenerational community:

http://mithun.com/news/article/hope_house_video_aging_community/

Perhaps this could even be done in phases, gradually creating housing for existing and new residents without displacement of the community.

I would also appreciate more detail about how this plan will implement Seattle's Goal HG5 – "Promote households with children and attracting a greater share of the county's families with children". As you may know, Vancouver BC has succeeded at this goal in its high-density developments through its "High-Density Housing for Families with Children" design guidelines, which encourage elements such as large entryways and easy access to outdoor playspace such as semi-private courtyards. Not surprisingly, a recent survey of residents found that "living in a low-maintenance home with a short commute allows for more family time." Roughly 25% of Vancouver families with children live in high-density housing, far above what is available in Seattle. Unfortunately many recent developments here put studio or loft apartments on the ground floor, which are less suitable for families than multibedroom apartments.

Several resources that have been helpful to me on this issue:

* "Reversing the Trend: Strategies to Make Center City Seattle Livable and Attractive to Families with Children" 2006 MUP thesis by Dara O'Byrne (including an extensive literature review), available online at the Seattle Center City for Families website.

http://www.seattle.gov/DPD/Planning/Center_City/CenterCityforFamilies/default.asp
http://www.seattle.gov/DPD/static/Dara%20Thesis_LatestReleased_DPDS015636.pdf

* "Kids in Cities" May 2007 research from IIT Institute of Design <http://www.ceosforcities.org/work/kidsincities>

* "Courtyards of Copenhagen: How the Danes make urban living family friendly"
http://daily.sightline.org/daily_score/archive/2008/03/20/the-courtyards-of-copenhagen

* Drivers of Apartment Living in Canada for the Twenty-First Century
http://www.gwlrealtyadvisors.com/gwlra/CNTAsset/Drivers_of_21st_century_apartment_living%5B1%5D.pdf

* Child-friendly Design Resources from the 2007 Portland Oregon Courtyard Housing Design Competition
<http://www.courtyardhousing.org/references.html>

Thank you for your time,
Joshua Daniel Franklin
301 Minor Ave N Unit 303
Seattle, WA 98109

Response to DEIS Letter 22
Joshua Daniel Franklin

1. Comment acknowledged. In comparison to the DEIS Alternatives, the Preferred Alternative redevelopment scenario contains a higher ratio of housing as compared to office space. Under the Preferred Alternative, approximately 900,000 SF of office/hotel space and 5,000 housing units are assumed to be provided. This level of office/hotel development is similar to DEIS Alternatives 1 and 2, the lower density and medium density DEIS Alternatives, which assumed approximately 800,000 SF and 1,000,100 SF of office/hotel development, respectively. The total number of housing units under the Preferred Alternative is the same as was assumed for Alternative 3, the highest density DEIS Alternative. Refer to **FEIS Section 2.5.3** for additional description of the Preferred Alternative.
2. Refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding parking assumptions under the DEIS Alternatives and the Preferred Alternative.
3. As with previous SHA HOPE VI redevelopments, SHA would partner with senior housing providers to identify opportunities for developing senior housing at Yesler Terrace.
4. Many aspects and characteristics of the redeveloped community under the DEIS Alternatives and the Preferred Alternative would be beneficial to and could serve to attract families with children. This would include the provision of some ground-level housing units, improvements to existing public open space, increases in the amount of usable public open space, and improvements to pedestrian safety and walkability. Under all alternatives, the amount of public and semi-private open space available to residents and the public would increase from existing conditions. This increase in public and semi-private open space would improve the accessibility and quality of open space and park opportunities for both onsite residents and the general public. See DEIS Section 3.15.1 and **FEIS Section 3.15.1** for more information on parks and open space under the alternatives. Please see the response to Letter 42, Comment 2 for further information about the pedestrian circulation concept.

The above identified characteristics together with the inherent advantages associated with the location of the site could also be expected to attract families with children. With respect to the site location, Yesler Terrace is within walking distance of an elementary school (Bailey-Gatzert) and is located in close proximity to downtown Seattle where numerous public amenities are available such as public parks, museums, the Seattle Public Library, etc. The Yesler Community Center is also located internal to the site, and supports many activities and programs for children. The center's facilities include a gym, playground and classrooms. The Center also houses after-school programs, tutoring, a computer lab and teen activities.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:50 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: Yesler Terrace Feedback

From: Jonathan Fuchs [mailto:jonathan.fuchs@gmail.com]
Sent: Sunday, December 12, 2010 11:14 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace Feedback

Hello,

I'd like to offer my comment on the Yesler Terrace redevelopment project. From what I have read, it seems apparent that high density zoning with particular awareness given to low-income housing needs is the idea situation. Of the options i have seen, number 3 seems to be the strongest. If anything, I would call it lacking: Given that we have a rare opportunity to recreate such a large section of Seattle so close to the city, we should set loftier goals:

- Can we create low income housing without the stigma? Somewhere that Seattle's impoverished residents can be proud to live?
- Can we create a neighborhood that discourages car use? A place where average Seattleites don't need cars?
- Can we do something that doesn't feel bland? Can we favor architectural significance over generic corporate sculpture art?
- Can we create a model of what we want Seattle to be? Something that we'll be proud of in 50 years?

I hope we step up for this project.

Thank You,

Jonathan Fuchs

1608 15th Ave
 Seattle WA 98122
jonathan.fuchs@gmail.com
 206 852 2798

Response to DEIS Letter 23
Jonathan Fuchs

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative. Design guidelines would be developed during the Development Plan process that would be intended to ensure that the aesthetic quality of subsidized housing is equitable to market rate housing to reduce disparity between the low income and market rate housing. DEIS and **FEIS Section 3.13** analyze features and programs that could be implemented as part of redevelopment to discourage car use and capitalize on the site's proximity to transit and downtown Seattle. A discussion of the Urban Design Approach for the Yesler Terrace Redevelopment is provided in DEIS Appendix Q. As stated previously, specific design guidelines would be developed as part of the Development Plan and would be intended to establish a vibrant, urban neighborhood, as is stated in the DEIS Section 2.4, Objectives of the Proposal.

Moore, Ryan A.

From: Jery Fuller [jerful@gmail.com]
Sent: Saturday, December 11, 2010 2:29 PM
To: #Yesler EIS Comments
Cc: mike.o'brien@seattle.gov; mike.mcginin@seattle.gov; carbina.resendez@seattle.gov; WalkAndBike@Seattle.gov
Subject: Yesler Terrace DEIS Feedback - Please reduce "high car use" parking development

Dear SHA, SDOT, Mayor, and Concilmember,

I am a citizen of Seattle who frequently travels near and through the Yesler Terrace site by foot, transit, and bicycle. I have reviewed the Draft Environmental Impact Statement that was prepared by SHA. I am impressed with the thoroughness and quality of the document. I strongly support higher density development, however, I am very concerned about the impacts to transportation and safety by the redevelopment options, particularly to walk/bike/ride users.

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As a bicycle user and pedestrian along the 12th Ave, S Jackson, and south Broadway corridors, I am very concerned for my personal safety and the safety of my fellow walk/bike/ride users by adding up to five times as much car traffic in the area, and the "high car use" development would hinder efforts to promote alternatives to driving in affected neighborhoods. I believe the ideal Yesler Terrace Redevelopment would be a "high density / low car use" option, as opposed to a "high density / high car use" option proposed in the DEIS.

SHA: Please strongly consider eliminating or greatly reducing the off-street parking development for Yesler Terrace. The Yesler Terrace location is one of most transit-, bicycle-, and pedestrian-friendly locations in the Northwest United States. Eliminating or greatly reducing off-street parking would promote the City of Seattle's stated goals to reduce climate change impact, increase pedestrian and bicycle safety, and reduce single-rider car commutes. The Seattle City Council has shown strong willingness in the past year to reduce "minimum parking requirements," and I understand you will need to approach the city council for rezoning regardless.

3

SDOT: Please work with SHA to more thoroughly study the negative effects on the possible 6,000+ parking space development at Yesler Terrace on car traffic, bicycle use, First Hill Streetcar performance, and pedestrian / bicycle safety. The SHA proposed "high density / high car use" alternative increases vehicle trips in the area from 2,420 vehicles per day, to over 15,000 vehicles per day in the area. Please see Yesler Terrace DEIS section 3.13.

4

Mayor Mike McGinn / Councilmember Mike O'Brien: Please review the Yesler Terrace DEIS transportation section 3.13 and its negative impacts to First Hill, South Downtown, Pioneer Square, North Beacon Hill, and the International District. The proposed "high car use" redevelopment alternatives will likely cause more detrimental effects to transportation in these areas than the Viaduct replacement project (deep bore tunnel), with a possible increase from 2,420 vehicles per day, to over 15,000 vehicles per day in the area.

5

Thank you very much for reviewing.

Sincerely,
 Jery Che Fuller
 Seattle Resident

Response to DEIS Letter 24

Jery Che Fuller

1. Comment noted.
2. Comment noted.
3. Comment noted.
4. Comment for SDOT staff is noted. Comments from The Seattle Department of Transportation (SDOT) regarding the DEIS and SHA's comment responses are provided in Letter 9 of this FEIS.
5. Comment for Mayor Mike McGinn and Councilmember Mike O'Brien is noted. Comments from City of Seattle staff regarding the DEIS and SHA's comment responses are provided in Letters 2-10 of this FEIS.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 8:28 AM
To: Moore, Ryan A.
Subject: FW: Input for Yesler Terrace

-----Original Message-----

From: Matt.P.Gangemi@uscg.mil [mailto:Matt.P.Gangemi@uscg.mil]
Sent: Monday, December 06, 2010 5:04 PM
To: #Yesler EIS Comments
Subject: Input for Yesler Terrace

I vote for option 3.

Seattle needs a significant increase in density if we want to curb sprawl and prepare for a world with expensive oil. I'd actually go further than option 3. Yesler Terrace is the perfect location for density - right near downtown for access to jobs and services, and near public transit. Assuming developers meet #3's criteria regarding neighborhood services and other requirements, why limit growth at all? I'd allow an unlimited height and density.

1

-Matt Gangemi

Response to DEIS Letter 25
Matt Gangemi

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 8:27 AM
To: Moore, Ryan A.
Subject: FW: YT

From: Graham Golbuff [mailto:mr.grahamtastic@gmail.com]
Sent: Monday, December 06, 2010 9:13 PM
To: #Yesler EIS Comments
Subject: YT

Option 2 or Option 1 please (O2 preferred). Increase density and efficiency, reduce displacement. Thanks for your hard work. | 1

-Graham Golbuff
206-817-7123

Response to DEIS Letter 26
Graham Golbuff

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 11:52 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: increase the number of low-income units

-----Original Message-----

From: Brie Gyncild [mailto:brie@wordyfolks.com]
 Sent: Tuesday, December 07, 2010 11:41 AM
 To: #Yesler EIS Comments
 Subject: increase the number of low-income units

I'm no expert at urban development or how best to make use of housing resources, so I don't have a strong opinion about which of the options you're considering for Yesler Terrace is the best. However, I do have very strong feelings about the lack of affordable housing in this city, especially for those with limited -- or nonexistent -- incomes. For that reason, I urge you to ensure that not only are no units of low-income housing lost in the redevelopment of Yesler Terrace, but that the number of low-income units increases substantially, and that, in particular, units are available for those in the "extremely low" and "very low" income categories. It's our obligation as a community to ensure that all are housed within the community.

Additionally, I want to say that I'm excited by the possibilities of low-income housing as part of an active and vital community. Too often, we have built isolated "projects," far from amenities and from people with middle-class and higher incomes. Studies I've read show that integrating income groups leads to more opportunity for all - making upward mobility a real possibility for generations that would otherwise be condemned to cycles of poverty. I also think it's vitally important for people who are fortunate to have more money to interact regularly with those who have the least. Mixed-income housing, combined with retail and other commercial space, can provide the exposure people need in order to gain an understanding of the very real challenges others face and to be able to act with compassion.

Though I'm not thrilled about the new height possibilities, I do think realigning the streets in that area makes a lot of sense. As a walker, I've become lost and confused wandering that area on my way downtown from the central area. Where we have the opportunity to make the streets more intuitive in our city, especially as it improves access to transit, I think we should do it.

Again, my primary objective in writing this is to emphasize the need to include more low-income residential units in the new development.

Thank you,

brie

Brie Gyncild
 1407 15th Avenue
 Seattle, WA 98122
 206-325-3743

Response to DEIS Letter 27

Brie Gyncild

1. Comment acknowledged.
2. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion of the provision of low income housing units on the site.
3. Comment noted. As stated in Chapter 2 of the DEIS, a primary goal of the Yesler Terrace Redevelopment project is to create a new mixed income, mixed use neighborhood while "... fostering positive interactions throughout Yesler Terrace and the community at large, regardless of social, economic or cultural distinctions by employing creative urban design and architectural techniques, while avoiding segregation by income, race or other differences ...". Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative intended to achieve this goal.
4. Comment noted. Please refer to **FEIS Section 2.4.3** for a detailed description of the street grid assumed for the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 1:25 PM
To: Moore, Ryan A.; Fiske Zuniga, Anne; Van Dyke, Stephanie A.
Subject: FW: Yesler Terrace

From: Erin Harris [mailto:1erinharris@gmail.com]
Sent: Tuesday, December 07, 2010 12:09 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace

Hello,

I am writing in support of options two and three. I feel strongly that the number of low-income housing units should be preserved or increased, and made available to current residents. Current residents should also receive housing assistance until the new site is ready for use.

1

Thank you,

Erin Harris

Response to DEIS Letter 28

Erin Harris

1. Please see response to Letter 11, Comment 2 regarding the replacement of the existing extremely low income units and the additional very low income units assumed under the Preferred Alternative. Redevelopment of Yesler Terrace would occur in phases, so residents may be able to remain onsite until the particular sector in which they reside is redeveloped. During redevelopment, temporary relocation assistance would be available as described in DEIS Section 3.16.3 and **FEIS Section 3.16.3**. Please refer to **Chapter 5, Key Topics**, for additional discussion regarding the replacement of existing units, tenant relocation and tenant relocation assistance.

Moore, Ryan A.

From: Alex Hyde-Wright [alexhw88@gmail.com]
Sent: Saturday, December 11, 2010 5:04 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace Redevelopment

To whom it may concern-

I support the high density option. We need more housing in dense transit oriented neighborhoods. But I think it would also be better to get rid of about 5,000 parking spaces from this plan and replace them with 5,000 bike parking spaces. God knows Seattle doesn't need more cars. | 1

Thanks
Alex

Response to DEIS Letter 29
Alex Hyde-Wright

1. Comment noted. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding parking assumptions under the DEIS Alternatives and the Preferred Alternative.

Moore, Ryan A.

Subject: FW: Yesler Terrace Redesign

From: Kevin King [mailto:kingkm@uw.edu]
Sent: Monday, December 06, 2010 9:53 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace Redesign

Hello,

I'm writing to express my support for the medium density option, option #2, for the Yesler Terrace Redesign. It seems like the option that will be most attractive to the business and residential community alike, while avoiding the potential pitfalls of option #3, such as large vacancies in office space or dramatic increases in crime within a high-density, low income neighborhood.

1

Regards,
Kevin King

Response to DEIS Letter 30
Kevin King

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 11:10 AM
To: Moore, Ryan A.; Fiske Zuniga, Anne; Van Dyke, Stephanie A.
Subject: FW: Support for Yesler Terrace redevelopment (minus all the parking!)

From: Katie Kuciemba [mailto:katiekuciemba@hotmail.com]
Sent: Monday, December 13, 2010 10:42 AM
To: #Yesler EIS Comments
Subject: Support for Yesler Terrace redevelopment (minus all the parking!)

I'd like to write in support of the redevelopment plans for Yesler Terrace. As a resident on north Beacon Hill, I enjoy the proximity of downtown services, a variety of transit options, and a diverse community. Yesler Terrace, while groundbreaking at it's time when first developed, is prime for redevelopment that will guarentee residents the density and mobility that would be created. | 1

While I support option 3, I am concerned at the number of parking spaces that would be built to facilitate such development. I encourage you to work with the City and local transit agencies to bring additional services to Yesler Terrace without overloading the parking. | 2

Option Three (the highest density choice): 5,000 housing units built, with 1.2 million square feet of office/hotel space, 88,000 square feet of commercial space, 50,000 for neighborhood services, new street grids, fireworks, etc. It would also include 6.9 acres of open space and add 6,300 parking spaces to the area. | 3

Thank you for the opportunity to comment. I look forward to seeing the progress of the project.

Katie Kuciemba
2107a 15th Ave. S
Seattle, WA 98144

Response to DEIS Letter 31
Katie Kuciembe

1. Comment noted.
2. Comment noted. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding parking assumptions under the DEIS Alternatives and the Preferred Alternative.
3. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:51 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: alternative 3

-----Original Message-----

From: Bradley Meacham [mailto:brad@bradmeacham.com]
Sent: Sunday, December 12, 2010 9:12 PM
To: #Yesler EIS Comments
Subject: alternative 3

I'm writing to support Alternative 3 for the proposed redevelopment of Yesler Terrace. I support this plan for the following reasons:

-- More housing. More housing supply will ultimately lower the cost of housing for everyone. This neighborhood -- adjacent to downtown and new transit infrastructure -- is the ideal place to locate more units.

-- More mixed use. Our urban neighborhoods need the combination of commercial, office and residential space offered by this option.

-- Improved street grid. This option knits the neighborhood into the rest of the city for the first time. Restoring the grid it will help alleviate congestion throughout central Seattle.

However, I believe the plan includes too much parking. I'd like to see more efforts to encourage use of streetcar and buses along key corridors. In addition, I hope for the best possible design of individual buildings throughout the project area. I'd like to see Alternative 3 and a set of guidelines but the actual construction projects divvied up among many designers and firms so that the neighborhood develops as organically as possible.

Regards,

Brad Meacham
Columbia City

1
2
3

Response to DEIS Letter 32
Brad Meacham

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.
2. Comment noted. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding parking assumptions under the DEIS Alternatives and the Preferred Alternative.
3. Comment noted.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:50 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: Yesler Terrace Redevelopment

From: Scott Meyer [mailto:edgeplot@gmail.com]
Sent: Sunday, December 12, 2010 11:32 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace Redevelopment

Dear Yesler Terrace Citizen Review Committee and Seattle Housing Authority,

I live, work and attend school in Central Seattle. I am excited by the prospect that SHA may be able to redevelop Yesler Terrace into a modern, dense new neighborhood right in the middle of Seattle. It is very important for me that the redevelopment option chosen be the one with the highest density. Density will allow the redevelopment to host a mixture of businesses, residences and other activities to create a bright, vibrant and sustainable new community in Seattle's heart with the "critical mass" to succeed as a destination for work, fun and living. Because this neighborhood is downtown-adjacent, it is completely appropriate to fill it with high-rises and to reconnect it to the street grid. This is truly a once in a lifetime opportunity, and SHA should maximize the advantage of this opportunity by maximizing the density.

Sincerely,

Scott Meyer
206-355-1122

Response to DEIS Letter 33
Scott Meyer

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:50 AM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: Support for Yestler Terrace Option 3

-----Original Message-----

From: Bruce Nourish [mailto:bruce.nourish@gmail.com]
Sent: Sunday, December 12, 2010 11:01 PM
To: #Yesler EIS Comments
Subject: Support for Yestler Terrace Option 3

Hi,

I would like to express my support for Option 3 in the Yestler Terrace Redevelopment Plan. Higher urban density in all the close-in neighborhoods should be an explicit goal of the City. My only beef with Option 3 is the excess of parking spaces, given the proximity to bus lines and the new streetcar. | 1

Bruce J.A. Nourish
1920 1st Ave #208
Seattle WA 98101

Response to DEIS Letter 34
Bruce Nourish

1. Comment acknowledged. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding parking assumptions under the DEIS Alternatives and the Preferred Alternative.

Kristin O’Donnell –

Summary of Red-lined Comments in DEIS

Comments are in Red Type – and mostly at the section headings – this is as organized as it is going to get unless there is an extension on the comment period --- and with more time, I’d edit out some – but probably not all – of the bitchiness ---- Items that are core YTCC concerns are starred * and underlined.

Kristin O’Donnell

Page	Comment
1-6	<p>3.1 Earth</p> <p>a. Construction – as observed with Light Rail, Bus Tunnel and Harborview – is a significant negative impact on business and residential communities, and requires considerable on-going oversight to insure that mitigation practices are actually carried out. *That these impacts will be “temporary”needs to be balanced with the planned 20 year build-out. <u>Temporary for how long?</u></p> <p>b. Need more info on how grading – changing site contours will impact phasing.</p>
1-7, 1-8	<p>3.2 Air Quality</p> <p>a. See comment a under 3.1.</p> <p>b. Breathe shallowly? And although YT was here before the Freeway, there was probably more than a little toxic stuff from factory smokestacks then– the urban trade-off? <i>“wear a gas mask and a veil/and then you can breathe/ long as you don’t inhale” –Pollution, by Tom Leher</i></p>
1-9, 1-10	<p>3.3 Water Resources</p> <p>a. Need more on impact on water resources and drainage of increased impervious surfaces in 1, 1A, 2, 3 and 4.</p>
1-10, 1-11	<p>3.4 Plants and Animals</p> <p>a. See comment a under 3.1.</p> <p>b. See comment under 3.3</p> <p>c. What effect does “removal of vegetated area” have??? Air quality? Esthetics?</p> <p>d. Need more about how this interfaces with the City’s Urban Forest initiatives. Removing almost half of the “exceptional” trees – and possibly all of the ordinary trees -- can’t be described as “no significant impact”</p> <p>e. Inventory of birds and animals, especially the birds that come to the</p>

	neighborhood in Spring and Fall migration, needs to be done in much more depth, and over a longer time. – again, “no significant impact” may not apply.	11
1-12	3.5 Energy - Climate Change and Greenhouse Gas Emissions a. Since the thousands of new folks in the neighborhood would otherwise be living, breathing, consuming and excreting somewhere else in the world and maybe in Seattle, does it matter if it is here or elsewhere?	cont 12
1-12, 1-13	3.6 Environmental Health a. See comment a under 3.1.	13
1-13, 1-14	3.7 Noise a. See comment a under 3.1. b. Seattle’s noise enforcement ordinances – and the enforcement of same – need a LOT of work. c. Lid the freeway! – (As in Mercer Island—) d. Explore DOT’s use of less noisy surfaces— e. Move SeaTac flight path (over Mercer Island?) f. Close Harborview Heliport? (as in Laurelhurst) g. Limit siren usage. in residential areas h. Issue earplugs?	14 15
1-14 to 1-17	3.8 Land Use *a. See comment a under 3.1. <u>*b. Need MUCH more detail on “temporary displacement” both for residential and business use. “Right to return after redevelopment ” is much less useful if the time span between being moved out and having a place in the neighborhood to move back to is years- or as with the Model Cities’ “Urban Renewal to the east of Yesler Terrace, decades. There are still vacant lots on and near Yesler where homes, businesses and apartments were demolished more than 40 years ago. And Rainier Vista’s east side was torn down more than 4 years ago. This effectively changes land use to open space – and not useful open space.</u> c. Impact on business uses needs more attention and detail – probability that impact of YT development – especially if Goodwill project revives, will produce a business mix very different than the one currently in Little Saigon. If the businesses we get there are typical of other developing/gentrifying city neighborhoods, (Cascade, 12th Avenue, Pike Pine) we may have a whole lot of latte, some pet food boutiques and doggy day cares, spas, some fusion pizza with organic goat cheese and kimchee, two cupcake stores, a wine bar or so – and not a whole lot of produce stands, sandwich shops, dollar stores and other small, locally owned and affordable businesses. Low income residents may not be able to afford to shop at what they can walk to.	16 17 18

<p>1-17 to 1-19</p>	<p>3.10 Aesthetics/Light and Glare/Shadows</p> <p>a. “Consistent Design Standards” may produce a uniform community. Do they produce a community that is interesting? Part of what is good about Seattle’s near downtown neighborhoods is the variety in style – some buildings are lovely – some are pretty awful, yet because they are such egregious examples of the not-so-good clichés of their era, they provide interest to the block they are in, and give pedestrians more of a sense of where they are – and a landmark to find the way back. Consider standards that will allow variety and innovation. Current seattle multi-family and townhouse design rules are too inflexible. Required façade modulation and consistent setback requirements have given us a whole lot of ticky tacky – and striping a huge building in two or three different colors (the current decades “is this building ever going to look dated 10 years from now”?) looks like a huge striped building, not a smaller one.</p> <p>b. “positive impacts relative to the visual character of the site” seems to be a matter of taste. Depends on whether you’d rather see big buildings or small buildings and trees and gardens – or big buildings or Mount Rainier or Elliot bay over the top of the small buildings.</p> <p>c. Need more attention to shadow – canyon effect usefulness of “open spaces” if deeply shadowed for many hours of the day ---</p>	<p>19</p> <p>20</p> <p>21</p>
<p>1-20 to 1-22</p>	<p>3.13 Transportation</p> <p>a. See comment a under 3.1.</p> <p>b. Way more residents and workers and businesses are going to mean LOTS more traffic and a lot more demand for parking and/or seats on the bus and the streetcar.</p> <p>c. Biking and walking estimates are probably over-optimistic. Folks love their cars – original draft of First Hill plan reduced a lot of parking – which was restored after the validation event. More new residents will be able to afford private cars, and will be less likely to rent or buy a market rate unit with no parking -- Consider the hills, as well. Serious climb on foot or bike ---</p> <p>d. Possibility that 60 bus, which has multiple stops in YT and directly serves banks, full service groceries and pharmacies will be displaced by the streetcar, which serves fewer locations and will have many fewer stops. Transit dependent folks need short walk from home to transit-stop and grocery store to transit stop.</p> <p>e. More intersections with traffic lights would be excellent right now. With more density, they will be essential. Crossing not mentioned – Boren between Alder and Spruce.</p> <p>f. Street alignment – or misalignment – is in part due to original Seattle street layout which gets strange at Yesler and Denny. And the Freeway did not improve things, nor does the slide area to the south of YT. Will be hard to get logical and continuous street alignment.</p>	<p>22</p> <p>23</p> <p>24</p> <p>25</p> <p>26</p> <p>27</p>

	g. Freeway lidding might improve circulation.	28
	h. Paratransit should be addressed.	29
1-22 to 1-24	3.14 Public Utilities See 3.5 a	30
1-24, 1-25	<p>*3.15.1 Public Services - Parks and Recreation</p> <p>a. <u>Significant increase in # of people in community may stretch parks staffing resources. Demand for programs not now provided may conflict with recreation needs of Extremely low income families, elders and children. Parks is now under significant pressure to produce income from programs – we will have that pressure + a more affluent surrounding community –</u></p> <p>b. <u>P patches are far from the only gardening activity currently in the community. Are we exploring places to grow roses, too? (or ferns and hostas --) How will vegetable growing and significant shade increase interact?</u></p> <p>c. <u>Increased population will bring more demand for gardening opportunities. Currently the small Squire Park P Patch has a 3 year waiting list, is not a city park and is vulnerable to future development, which could happen sooner if YT development increases adjacent property values.</u></p> <p>d. Playfield. Leagues would like more use of the field. YT management is limiting use to preserve access to and use of the space for people who live in the community – and to reduce the considerable parking, noise and litter impacts which are commonly enjoyed by communities adjoining playfields -</p> <p>e. Freeway lid might provide replacement playfield space.</p> <p>f. <u>Neighborhood play areas/mini parks. Loss of private yard and balcony space isn't accounted for – yards and balconies are primary site of outdoor activity for most residents – and no increase of play area-mini-park area with large increase in # of neighborhood residents may cause unacceptable and conflict-producing overuse in public areas.</u></p> <p>g. Up on the roof – rooftop gardening is challenging. Drying winds, greater temperature extremes, need to water container plants more often,. Rooftop recreational open space is also made less attractive by temperature and wind. Additionally, rooftops are difficult to monitor. Capitol Hill Housing has a rooftop open space which is not accessible because of inappropriate youth uses. Someone from an SHA midrise building mentioned to me that “First time someone jumps, they’ll lock the door” – (SHA midrise roofs used to be accessible to residents, and a fine place to see fireworks from --- and SHA residents do jump ---)</p> <p>h. Balconies. Current SHA policy on decks and balconies allows VERY minimal gardening use, and limits other uses as well.</p>	31 32 33 34 35 36 37
1-25	3.15.2 Public Services – Schools a. Good a place as any here to comment that the projected increase in school-age	38 39

	<p>population is probably far too high. 80% of the kids in some of the HopeVI communities (which look and feel far more “family neighborhood” than Yesler Terrace and its surrounding area do or will) are children from extremely low income households. YT’s surrounding communities have a much smaller % of children than Seattle at large – which also has fewer children than in the past. What I’ve seen with many families with children in near-downtown neighborhoods is a tendency to move out when the children are school age – those who stay frequently don’t use public schools. Will redevelopment produce a better community for the kids who will live here? How is this supposed to happen?</p> <p>b. Garfield is indeed overenrolled now. SPS is going to change their enrollment system again – It happens often -- and it will most likely again have disproportionate impact on poor children and children of color and concurrently make Seattle a less attractive option for families with more choices.</p> <p>c. NO mention of early-childhood education – and we are possibly going to have more preschoolers than older children.</p>	39 cont
1-26, 1-27	<p>3.15.3 Public Services - Fire and Emergency Medical Services</p> <p>a. See 3.5 a</p> <p><u>*b. Want more information about fires in highrises. How long are those ladders?</u></p>	40 41 42
1-27	<p>3.15.4 Public Services – Police</p> <p><u>*a. See 3.5 a</u></p> <p><u>b. Significant class/resource differentials among residents may increase conflict.</u></p> <p><u>c. Some current residents are concerned</u></p>	43 44
1-28	<p>3.15.5 Public Services - Solid Waste</p> <p>a. See 3.5 a</p> <p>b. Assuming that recycling, composting and garbage containers will not be individual, the reality that extremely low income residents – and there will always be new ones – very often aren’t very good waste-sorters would be worsened.</p>	45 46
1-28 to 1-30	<p>3.15.6 Public Services – Community Services</p> <p>a. Community Services have always been provided first on a funding-available basis and then on a need-for service basis. Continuing and/or augmenting services depends very much on continuing or increasing funding.</p> <p><u>*b, Need more detailing on linkages to services. How will off -site services be accessed? Can service provision be assured offsite? Are on-site services adequate? Does it serve people better to be linked to a full-service off site provider, or to have an on-site mini-mart health clinic, school or library?</u></p> <p><u>c. Need to have more on access to mental health services, services for aging in place.</u></p> <p><u>d. Current funding in much Hope VI housing and in SHA rehabbed midrises</u></p>	47 48 49 50

	<p><u>precludes full-time college attendance. Midrises have set-asides for students, but not enough to meet demand. Will Yesler Terrace residents be able to attend college full time?</u></p>	50 cont
1-30 to 1-32	<p>3.16 Socioeconomics</p> <p><u>*a. What kind of construction jobs, duration? Career path? What has history with Hope VI been?</u></p> <p><u>b. SHA does well now in hiring/training and promoting SHA residents – all but one of current YT staff who have family-wage union jobs with excellent benefits -- is or has been a public housing resident. Will potential management changes in the redeveloped community eliminate this career path?</u></p> <p>c. Community cohesion: quote from a friend in High Point “I used to live in a neighborhood. Now I live in an apartment.”</p> <p><u>*d. Need more information about how “community” works in planned mixed income neighborhoods. Difference in class and resources may well lead to misunderstandings and conflicts. Studies -- and observation – are looking as if inter-class integration in planned mixed income communities is limited.. Current and former residents of Hope IV mixed income communities tell me that they are harassed and intimidated by homeowner neighbors and the Housing Authority. And homeowners complain about low income renters -- How will we do this better? Can we?</u></p> <p><u>e. Existing community bonds will be more likely to survive if interval outside the community is short or eliminated. Individual families will suffer less if disruptions of commuting/shopping patterns, school attendance and other neighborhood attachments are minimized. This needs much more work and detail on phasing before we can meaningfully assess the impact on the human environment.</u></p> <p><u>f. Home businesses will also benefit if interval outside community is short or eliminated. Family sizes of day-care providers vary – including at least 1 provider who is in a single bedroom unit. Need far more detail on what these live-work areas will be like? Who will be eligible? What happens if they change careers? Will there be a separate waiting list for these units?</u></p> <p><u>g. Much of this planning work does not seem to recognize that with or without redevelopment, people move on from public housing.</u></p> <p><u>h. Is greatly increased density going to increase social well being? How? Many people in the community think it will not.</u></p> <p><u>i. High-density environment may not increase people’s well-being. (not so good for rats – but hey, that’s in the lab --) How will this be mitigated?</u></p>	51 52 53 54 55 56 57 58 59
1-33 to 1-35	<p>3.17 Environmental Justice</p> <p>a. See comment a under 3.1.</p>	60

	<p>b. It is a great comfort to know that environmental justice is being addressed by providing an equal opportunity for the rich, or at least the middle class, to breathe toxic emissions and hear loud noises.</p> <p>c. Increased density just may not eliminate rodents.</p> <p>d. Mold elimination will need either non-human dependent ventilation or a lot of education of humans. Much of the mold in apartments is because of excellent weather-proofing/insulation and a lack of fan use and window-opening.</p> <p>e. It would NOT be a good idea to place more low income units in the noisier parts of the site— though the residents probably will complain less – see 3.7f.</p>	61
1-36	<p>1.5 Mitigation Measures and Significant Unavoidable Adverse Impacts</p> <p>* a. Construction related impacts – again, possible 20 years in a construction zone, which IS unavoidably disruptive. Construction projects must be continually monitored to .be sure guidelines are followed, and possible attenuation or disruption of citizen watchdog organizations –YT Community Council __ may lessen monitoring.</p> <p>b. More “could” and “might” in here than there should be. Need a lot more “shall” and “will”. Before this is final.</p>	62 63 64 65
1-41	<p>Plants and Animals</p> <p>a. As I said before, the loss of vegetation and trees is appalling, and the bird and animal inventory is most inadequate.</p> <p>b. A wetland on a roof??? Wow. Sounds high maintenance. Has anyone ever done that?</p> <p>c. How does native plant landscaping go together with making as much space as possible available for would-be gardeners? What, where and how much?</p> <p>d. Will non-food gardening – which can contribute to people’s well-being – daffodils are nice, even if not edible – be an option?</p>	66 67 68 69 70
1-43	<p>Waste Management and Deconstruction</p> <p>see 3.15.5 b.</p>	71
1-43	<p>Building Design</p> <p>Much emphasis on Green and LEED – not a bad thing. Do need additional work on incorporating Universal Design into community both for ADA access and to facilitate aging in place.</p>	72
1-44	<p>Environmental Health</p> <p>c. *Construction related impacts – again, possible 20 years in a construction zone, which IS unavoidably disruptive. Construction projects must be continually monitored to .be sure guidelines are followed, and possible attenuation or disruption of citizen watchdog organizations –YT Community Council __ may lessen monitoring.</p>	73
1-45	Noise	

	<p>Construction related impacts – again, possible 20 years in a construction zone, which IS unavoidably disruptive. Construction projects must be continually monitored to .be sure guidelines are followed, and possible attenuation or disruption of citizen watchdog organizations –YT Community Council __ may lessen monitoring.</p> <p>Minimize or eliminate exceptions to noise ordinances – large-scale construction projects often REALLY want to work nights – and too often get variances, especially in poor communities.</p> <p>High noise areas coincide with best views – trade-offs with public area and building locations need to be considered. And the perimeter may have the best light exposure –</p> <p>Air conditioning? Now there’s a concept – rather energy-consuming, though, again – trade-offs. Needs more work. Does HUD allow A/C?</p>	74
1-48	<p>Land Use</p> <p>Do we want a buffer or do we want to avoid the appearance of separation from across-the-street?</p>	75
1-49	<p>Aesthetics/Light and Glare/Shadows - Other Possible Mitigation Measures</p> <p><i>Need less “Might and “could” here as well. And there is not enough attention paid to the probability that much of the small area of open ground remaining is not going to have the sun shining on it a whole lot --</i></p>	76
1-50	<p>Aesthetics - Light and Glare</p> <p>Avoid upward lighting – design to avoid light trespass (currently a problem in neighborhood)</p>	77
1-51	<p>Historic Resources</p> <p>Heaps of YT History written already. If doing this helps folks consciences from twanging or provides contract jobs for writers/filmmakers/photographers/muralists/ interpretive dancers/kids -- well, whatever. Artists and kids need the money. But this is not saving a neighborhood which should have been preserved.</p>	78
1-53	<p>Transportation</p> <p>See Comments Above.</p>	79
1-56	<p>Freight – “most buildings could be designed to accommodate just small to medium-sized trucks since large trucks are not often used for deliveries near the downtown core area of Seattle. The exception would be for a potential grocery store.”</p> <p>Not that we are anywhere near likely to GET a grocery store – but how do Whole-Foods/SLU and urban Trader Joes handle this? Kress IGA downtown?</p>	80
1-59	<p>On-Street Parking Supply</p> <p>*Needs more detail –</p>	81
1-60	<p>Utilities - Water</p> <p>Graywater reuse???</p>	82
1-61	<p>Public Services - Parks and Recreation</p> <p>See comments above --- 3.15.1</p>	83
1-61	<p>“The City's CIP has identified a need for another new park in the First Hill Urban</p>	84

	Village, where Yesler Terrace is located, but a site has not yet been selected.” (Site was selected – on 8th Avenue, below St. James)	87
1-65	Tenant Relocation Plan – Temporary Relocation *Again – How temporary is temporary???? Will remaining in good standing acquire new standards/?	88
	And miscellany – need more indication on whether low income housing will be concentrated in some buildings? Site areas? – Floors of buildings? How integrated will we really be? How will voluntary community associations relate to each other, the Housing Authority and the City? * Need more clarity on on-site replacement. The nearness of the site to transportation, schools, healthcare and jobs is part of what makes YT a good place to live – we may have to share it, but we do not want to lose it. More information on surrounding area demographics is needed. If SHA gets the Choice Communities Grant, how will that be incorporated? Will EIS commitments and Core Values apply to the larger area? If existing housing with affordable rentals – for instance the Baldwin and the apartment buildings near SVI that were acquired to replace the YT units lost for the Community Center – are replacements for Yesler units, what replaces the existing repurposed units as low-income housing. Will there be less housing available for poor renters? EIS needs to address, and the City needs to do something about the negative impact of “temporary” loss of affordable housing. Years of vacant land where there was once affordable – maybe not new, but the plumbing worked and the roof didn’t leak (much) and the rent was affordable -- means more people without any roof to live under. * Unless units are deemed “beyond renovation” according to City Housing and Building codes, the City should defer demolition permits for affordable housing until plans and funding for near-term replacement are available.	89 90 91 92 93 94

Response to DEIS Letter 35
Kristin O'Donnell

1. Comment noted.
2. As discussed in DEIS Section 2.8.6, although a specific phasing development schedule has not been determined, construction activity would not occur throughout the entire site simultaneously during the 15-20 year buildout. Although the overall redevelopment plan is expected to occur over a period of up to 20 years, individual components of the redevelopment would be constructed in much shorter time frames. Also, redevelopment would likely occur incrementally, and therefore the extent of construction impacts (such as dust and noise) could be expected to be limited to immediately surrounding areas.
3. Except for redevelopment within or adjacent to the slide-prone area along the southern portion of the site, it is not anticipated that site grading would affect phasing of construction. Also see the response to Comment 163 in Letter 10.
4. As discussed in DEIS Section 2.8.6, although a specific phasing development schedule has not been determined, construction activity would not occur throughout the entire site simultaneously during the 15-20 year buildout. Although the overall redevelopment plan is expected to occur over a period of up to 20 years, individual components of the redevelopment would be constructed in much shorter time frames. Also, redevelopment would likely occur incrementally, and therefore the extent of construction impacts (such as air quality) could be expected to be limited to immediately surrounding areas. Project construction contractors would be required to comply with all relevant federal state and local air quality rules, which would serve to minimize the potential for air quality impacts during construction.
5. Comment noted.
6. A complete analysis of the water quality and stormwater system impacts of the Preferred Alternative is provided in **FEIS Section 3.3, Water Resources**.
7. See the response to Comment 2 of this letter.
8. See the response to Comment 6 of this letter.
9. A discussion of the impacts of the removal of vegetated area is provided in DEIS and **FEIS Section 3.4.2** in terms of the reduction in habitat area, tree removal and tree canopy reduction. The impacts of the removal of vegetated area in terms of the increase in impervious surfaces and changes in water quality are discussed in DEIS and **FEIS Section 3.3**.
10. Please see the response to Letter 2, Comment 2.
11. Comment noted. The significance of impacts to wildlife is determined in the context provided in the regulatory background, existing conditions, impacts of alternatives, and

mitigation discussions provided in the Plants and Animals Technical Report (DEIS Appendix G and **FEIS Appendix D**).

12. Comment acknowledged.
13. See the response to Comment 2 of this letter.
14. See the response to Comment 2 of this letter.

Project construction contractors would be required to comply with City of Seattle noise limits and timing restrictions pertaining to construction, which would serve to minimize the potential for construction noise impacts.

15. Comment noted. The condition and enforcement of Seattle's noise ordinance is beyond the scope of this EIS, as are suggestions for reducing noise from offsite sources such as the freeway, Harborview Heliport, SeaTac flight path and sirens from emergency/police vehicles. See Section **FEIS Section 3.7.3** for noise mitigation measures identified for the Preferred Alternative.
16. The Yesler Terrace Guiding Principles provide that SHA would minimize resident disruption. SHA would make every effort to minimize relocation disruption. Please see the response to Comments 2 and 9 in Letter 11, and **DEIS Chapter 5, Key Topics**, for a discussion of tenant relocation and replacement housing.
17. Comment acknowledged. The following sentence has been added as a bullet under SHA Rental Housing in Section 2.8.6 of the DEIS. "Maximize onsite relocations to minimize disruption to existing tenants." This is reflected in **FEIS Chapter 7, Errata**.
18. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion regarding indirect land use impacts on offsite uses.
19. Comment acknowledged. A discussion of the Urban Design Approach for the Yesler Terrace Redevelopment is provided in DEIS Appendix Q. As stated previously, specific design guidelines would be developed as part of the Development Plan and would be intended to "establish a vibrant, creative, urban neighborhood" as is stated in the DEIS Section 2.4, Objectives of the Proposal.
20. Your comment is noted. Impacts relative to the visual character of the site, compared to existing conditions, may be considered subjective.

As noted in the on page 2-42 of the DEIS, criteria were established for the location of residential high-rise buildings under Alternatives 1-3, and included minimum standards to reduce the impacts created by height, bulk and scale. These standards included protection of public views with minimum spacing between buildings, view protection from buildings, and establishment of a maximum number of high-rise building sites.

See **FEIS Section 2.6.2** for details about building heights and criteria for location of high-rise buildings under the Preferred Alternative. As well, please note that portions of the site would not contain any high-rise buildings, including the East of Boren and East of 12th Sectors, where redevelopment would occur according to the existing zoning.

21. Comment acknowledged. Shadow impacts were evaluated for the Yesler Community Center playground and the Commons Park; the largest open space areas assumed for the site under the DEIS redevelopment Alternatives 1-3 (see pages 3.10-107 to 3.10-108 of the DEIS). Also, as noted on page 2-40 in Chapter 2 of the DEIS, sector open space would be configured to allow maximum access to light and air. Refer to page 2-42 of the DEIS for criteria on the location of residential high-rise buildings in Alternatives 1-3, which included several minimum standards to reduce the impacts created by the height, bulk and scale of high-rise buildings. Siting and design criteria have been developed for the smaller open space areas to further address how shadow/shade impacts could be minimized under the Preferred Alternative. See **FEIS, Section 3.10** for the analysis of shadow impacts under the Preferred Alternative.
22. Comment acknowledged. Potential transportation impacts of project construction are evaluated in DEIS Section 3.13.2, and mitigation measures are identified in DEIS Section 3.13.3, to address those impacts.
23. The DEIS analysis includes a projection of the number of vehicle, transit, and non-motorized trips expected to result from the proposed project, analyzes the potential impacts of those increases, where needed, identifies mitigation measures to address those impacts.
24. Mode share assumptions were based on Puget Sound Regional Council forecasts, which take into account the projected characteristics of future land use, demographics, and mode options. The DEIS seeks to conservatively evaluate the potential trips that could be generated by the proposed development, based on established forecast methods.
25. Please see response to Letter 9, Comment 25.
26. Transportation mitigation measures are identified to address the specific transportation impacts that are expected to be triggered by the project. As shown in DEIS Table 3.13-14, new traffic signals have been identified as mitigation at two locations.
27. Comment noted.
28. Comment noted. Transportation mitigation measures that are identified in the DEIS and FEIS would address the specific transportation impacts that are expected to be triggered by the project.
29. Metro does provide paratransit service for disabled and senior citizens who are unable to use fixed-route service. Because it is an on-demand service that does not follow fixed routes, and site design would follow all standards established under Fair Housing Act and the Americans with Disabilities Act (ADA), paratransit service would not be adversely affected by the project.
30. Comment noted.
31. Please see the response to Letter 11, Comment 12. Under the Preferred Alternative, more public parks and open space areas would be available to onsite residents than

under existing conditions. The ownership and maintenance responsibility for the proposed onsite public open spaces has not been determined at this time. The Preferred Alternative assumes at least 10.8 acres of the total 17.2 acres of proposed parks and open space areas would be “semi-private” and would be accessible to only building residents. Semi-private open space would be provided in all sectors of the site. Additional private open space would also be provided in and around each building. These semi-private and private open space areas would not be owned or managed by the Seattle Parks Department and would not be subject to City funding issues or fee programs.

Please also see the response to Letter 5, Comment 5. The Preferred Alternative assumes the amount of Community/Neighborhood Services space would increase at the redeveloped Yesler Terrace site (to 65,000 SF as compared to 50,000 SF under existing conditions) and has developed a Social Infrastructure Plan to determine future needs for these services including services targeting extremely low income families, children and the elderly.

32. Please see the response to Letter 2, Comments 3 and 19.
33. Please see the response to Letter 2, Comment 3.
34. Please see the response to Letter 3, Comments 1 and 2.
35. Comment noted.
36. Please see the response to Letter 11, Comment 12.
37. Comment acknowledged. Rooftop gardens are one of an array of private open space opportunities such as balconies and upper level courtyards that would be evaluated as specific building designs are developed. The limitations of rooftop gardening opportunities and resident safety concerns would be considered when evaluating private open space options.
38. While there is no formal policy for gardening on decks specifically, SHA's requirements for the use of patios restricts planters and flower pots from being no larger than 14 inches in diameter.
39. Please see the response to Letter 6, Comment 1.
40. In DEIS and **FEIS Section 3.15.2.2**, the existing capacity issue at Garfield High School is described and the potential impacts of the Yesler Terrace redevelopment are analyzed. The overall enrollment issues of the Seattle School District and the potential associated social justice issues are outside the scope of this EIS.
41. Headstart is a current service provider with the existing community. As noted in **FEIS Section 3.15.6, Community Services** and the response to Comment 1 of Letter 9, community service providers currently providing services to residents onsite (including Headstart) would be offered the opportunity to relocate onsite or return to the redeveloped community, as space becomes available. The Preferred Alternative

includes a greater amount of neighborhood services space (65,000 SF) than the DEIS Alternatives (50,000 SF).

42. As noted in the DEIS, specific code requirements would be adhered to regarding emergency access to structures. All new buildings would be constructed in compliance with the 2009 Fire Code. Sprinkler systems would be provided for all buildings.
43. Increases in the onsite population and employment over the 20-year buildout of the Yesler Terrace mixed-use development under the Preferred Alternative would be incremental and could be accompanied by increases in demand for police service.
44. Your comment is acknowledged for the record. Class and/or resource differentials between residents would not be expected to increase conflict. As detailed in DEIS Section 2.4, objectives of the proposal include:
 - Create a vibrant, diverse and environmentally sustainable community that integrates uses, activities and incomes and enhances the livability of the Seattle community
 - Foster positive interactions throughout Yesler Terrace and the community at large, regardless of social, economic or cultural distinctions by employing creative urban design and architectural techniques, while avoiding segregation by income, race or other differences, and providing access to public amenities.

These objectives were informed by the Yesler Terrace planning process that has included extensive public input and participation and are applicable to the Preferred Alternative. As well, promoting mixed-income communities is a goal of the HUD Choice Neighborhoods and HOPE VI programs.

45. Comment noted.
46. Comment noted.
47. Comment noted.
48. Please see DEIS and **FEIS Section 3.15.6.2** for information regarding access to social services during construction and operation of the Yesler Terrace Redevelopment.
49. Comment noted. As described in Chapter 2 of the DEIS, neighborhood services uses could include (but are not limited to) police, education, library, social services, non-profit organizations, government funded health agencies and SHA offices open to the public. SHA could consider providing additional access to mental health services and services for the elderly as redevelopment progresses, within the framework of available funding and available space within the site.
50. This issue is beyond the scope of the EIS.
51. The types of construction jobs available under redevelopment of the site would be extensive and varied and related to all the primary aspects of redevelopment including building demolition and demolition of some existing utilities and paved areas;

construction of new site infrastructure including primary roadways, utilities and open/space parks; and, construction of new buildings and associated parking. Construction jobs would also be created with respect to renovation of several existing buildings including the Urban League building, the Baldwin Apartments and the Yesler Terrace Steam Plant.

52. Redevelopment of Yesler Terrace is not anticipated to affect SHA's existing hiring/training programs and practices.
53. Comment noted.
54. Comment noted. Please see the response to Letter 4, Comment 7 regarding SHA's commitment to community building.
55. Comment noted. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion of redevelopment impacts on tenants and tenant relocation.
56. Please refer to **FEIS Chapter 5, Key Topics**, for a discussion of redevelopment impacts on tenants and tenant relocation. As stated in DEIS Section 3.16.2, SHA has committed to configuring a portion of the ground level residential units to accommodate in-home day care businesses. Specific details about the location, eligibility, and assignment of these units would be determined at the time design and construction occur.
57. Comment noted.
58. Redevelopment of the Yesler Terrace site and the associated increases in density would be intended to improve social well being by providing a mixed use mixed income community with diverse social, economic and cultural characteristics and increased economic opportunities. The amount and quality of usable public open space would also increase relative to existing conditions. The number of families living in proximity to Downtown Seattle would increase, which would potentially reduce commuter trips from suburban areas and contribute to improving quality of life.
59. Please refer to the response to Comment 58 of this Letter.
60. Please refer to the response to Comment 2 of this Letter.
61. Comment noted. As discussed on page 3.17-1 in the DEIS, federal agencies, including the Department of Housing and Urban Development (HUD), are required to consider how federal projects, or federally-funded projects, may have disproportionately high and adverse human health or environmental effects on minority and/or low income populations. Refer to **FEIS Section 3.17** for the analysis of environmental justice for the Preferred Alternative.
62. In the DEIS, the elimination of rodents at Yesler Terrace was not linked to increased density resulting from site redevelopment. Rather, the existing rodent infestation is associated with old steam pipes that are no longer in use. These steam pipes would be removed during redevelopment, which would be expected to correct the rodent infestation. See page 1-34 in Chapter 1 and page 3.17-6 in Chapter 3, Section 3.17, Socioeconomics, of the DEIS for further information.

63. With redevelopment of the site, newly constructed residences would contain up-to-date ventilation systems, and mold issues would not be expected to occur.
64. Comment noted. It is anticipated that low income housing would be equitably distributed throughout the site.
65. As discussed in DEIS Section 2.8.6, construction activity would not occur throughout the entire site simultaneously during the 15-20 year buildout. Although the overall redevelopment plan is expected to occur over a period of up to 20 years, individual components of the redevelopment would be constructed in much shorter time frames. Also, redevelopment would likely occur sector by sector, and therefore the extent of construction impacts (such as dust and noise) could be expected to be limited to immediately surrounding areas.

SHA would continue to seek ways to ensure low income residents have a voice in shaping operations and redevelopment of Yesler Terrace. As long as HUD continues to provide funding, SHA would provide Resident Participation Funds to all duly elected public housing councils, including the Yesler Terrace Community Council. If the Yesler Terrace Community Council no longer existed in its current form, SHA would seek to support whatever new structure emerged.

66. Comment noted. As part of the City of Seattle's approval and decision-making process for this project, the mitigation measures identified in this Yesler Terrace EIS (including both required/proposed and other possible measures) would be considered and potentially incorporated into the Yesler Terrace Planned Action Ordinance adopted into law by the City and HUD's Record of Decision. When SHA submits proposals for specific development in the future, the City would review the specific proposal for consistency with the adopted mitigation measures. Implementation of mitigation per the Planned Action Ordinance would be enforced by the City as part of individual project approvals.
67. Please see the response to Letter 2, Comment 2, and Comment 11 of this letter.
68. The subject mitigation measure is identified in Seattle Municipal Code SMC 25.09.160B3 as an acceptable mitigation measure for wetland impacts to Category IV wetlands. The measure would not be intended to construct a wetland on the roof of a building but to provide hydrologic or water quality benefit of a wetland.
69. As stated in DEIS Chapter 2 and 3.5, Sustainable Design is a guiding principle for Yesler Terrace in the approach to design of the neighborhood as a whole, and potential sustainable features are identified, including urban agriculture. The DEIS states new P-patch Community Gardens could be provided onsite to offset the loss of the existing P-patches onsite. Specific locations and amounts of P-Patch area to be provided would be determined during future design and permitting.
- Native plant landscaping would, at a minimum, be provided in passive open space areas.
70. Please see the response to Letter 2, Comment 3.

71. Comment noted.
72. Universal Design, as it pertains to ADA access and aging in place, would be considered in the design phase of this project.
73. Please see the response to Comment 65 of this letter.
74. Please see the response to Comment 14 of this letter.
75. Construction activities would be required to comply with City of Seattle noise limits and timing restrictions pertaining to construction, which would serve to minimize the potential for construction noise impacts. As mentioned above in the response to Comment 74, many components of the overall project construction would be discrete, smaller projects. Regardless, if nighttime construction activities are required for some elements of the project, the City of Seattle has implemented a new construction noise variance process which is much more restrictive (i.e., protective) than the previous variance process.
76. Comment acknowledged.
77. Comment acknowledged.
78. Buffers are discussed in terms of providing a visual transition between the potential higher density onsite development from the existing lower offsite development, and are not intended to segregate the redeveloped site from the fabric of the existing neighborhood.
79. Comment acknowledged. Please see the response to Letter 2, Comment 19. As part of the City of Seattle's approval and decision-making process for this project, the mitigation measures identified in this Yesler Terrace EIS (including both required/proposed and other possible measures) would be considered and potentially incorporated into the Yesler Terrace Planned Action Ordinance adopted into law by the City. When SHA submits proposals for specific development in the future, the City would review the specific proposal for consistency with the adopted mitigation measures, including the array of aesthetics, light, glare and shadow measures identified as mitigation in DEIS and **FEIS Section 3.10**. Implementation of mitigation per the Planned Action Ordinance would be enforced by the City as part of individual project approvals.
80. As discussed in the DEIS and **FEIS Section 3.10**, light fixtures would be designed to avoid light trespass.
81. Comment noted.
82. See the responses to Comments 22 to 29 of this letter.
83. Truck access to the site would be determined for individual building applications.
84. Changes to the RPZ, or creation of a new subzone, would be determined as the site develops.

85. The report entitled, "Yesler Terrace Sustainable District Study," by CollinsWoerman and Gibson Economics was issued December 12, 2010, and provides a discussion by Alliance Environmental of the array of potential water reuse scenarios that could be incorporated into the final development and the relative reduction in water consumption that could be realized with each feature.
86. Open space amenities would be programmed to provide opportunities for all users.
87. Per the City of Seattle's website update March 2011, the City is currently in negotiations to purchase a property, but no site has been determined or publicly disclosed at this time.
88. One of the Guiding Principles of the Yesler Terrace redevelopment project includes minimizing the impacts of displacement for residents during the redevelopment process.³ To this end, an additional phasing priority has been added to the Development Phasing Criteria: "Maximize onsite relocations to minimize disruption to existing tenants." SHA would make every effort to minimize relocation disruption. Please see the response to Letter 11, Comments 2 and 9, and **FEIS Chapter 5, Key Topics**, for a discussion regarding the replacement of existing units and potential tenant relocation impacts.
89. Low income and market rate housing would be provided in all sectors of the site; see DEIS and **FEIS Section 3.16.2, Socioeconomics**, for additional detail. The amount of each type of housing provided within specific buildings would be determined as individual buildings are developed. Also, as a result of its commitment to community building, SHA would continue to seek ways to ensure low income residents have a voice in shaping operations and redevelopment of Yesler Terrace.
90. Please see the response to Letter 11, Comments 2 and 9 Please see the response to Comments 2 and 9 of Letter 11, and **FEIS Chapter 5, Key Topics**, for a discussion regarding the replacement of existing units and potential tenant relocation impacts.
91. The FEIS boundary was extended to 14th Avenue between E. Fir Street and Yesler Way (see **FEIS Chapter 5, Key Topics**). The FEIS mitigation measures would apply to the entire FEIS site, unless otherwise noted.
92. The Baldwin Apartments building was not acquired in order to fulfill replacement housing objectives for public housing units removed as a result of the Yesler Community Center development. The replacement units for the Yesler Community Center are identified at the following link to SHA's website:
<http://www.seattlehousing.org/redevelopment/replacement/community-center/>
93. Please see the response to Letter 11, Comment 9 and **FEIS Chapter 5, Key Topics**, for a discussion related to the replacement of existing units, as well as tenant relocation.
94. Please see the response to Letter 11, Comment 4.

³ See <http://www.seattlehousing.org/redevelopment/yesler-terrace/principles/> or DEIS Appendix A for the Yesler Terrace Guiding Principles.

Moore, Ryan A.

From: Blair Payson [Blair@olsonkundigarchitects.com]
Sent: Saturday, December 11, 2010 12:01 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace comment submission

Yesler Terrace design team,
 I would like to submit a comment in support of option 3 (the highest density option).

1

Yesler Terrace is among the most transit friendly neighborhoods in the city and also among the closest to downtown Seattle. Transit, the city of Seattle and Yesler Terrace will all benefit with increased density. The more people that live at Yesler Terrace, the more people that can enjoy the benefits of living in close to the city center without absolutely needing to own a car. The city benefits by having more people living close to the city center with more customers supporting downtown businesses.

I'd also like to comment on material selection. Since this is an urban location potentially with large buildings that will ideally last for a long time, I hope more durable building materials that age more gracefully can be used than the materials that were used on the existing Yesler Terrace buildings.

2

Thanks and good luck.

Blair Payson

Blair Payson, LEED AP
 Architect

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Response to DEIS Letter 36

Blaire Payson

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.
2. Comment noted. Building materials would be selected at later design phases of the project.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 8:27 AM
To: Moore, Ryan A.
Subject: FW: public comment on the new Yesler Terrace

From: j. petrait [mailto:jergins@gmail.com]
Sent: Monday, December 06, 2010 7:13 PM
To: #Yesler EIS Comments
Subject: public comment on the new Yesler Terrace

Build it up, the higher the better. We want mixed use, streetcar access, ground-floor retail, bike lanes. But most importantly, the higher the better. Thanks. | 1

Response to DEIS Letter 37

J. Petrait

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed building heights, mix of uses and other features assumed under the Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Monday, December 13, 2010 8:52 AM
To: Fiske Zuniga, Anne; Moore, Ryan A.; Van Dyke, Stephanie A.
Subject: FW: Yesler Terrace public feedback

-----Original Message-----

From: Brian Porter [mailto:bsporter99@gmail.com]
Sent: Sunday, December 12, 2010 11:39 AM
To: #Yesler EIS Comments
Subject: Yesler Terrace public feedback

I support Option Three, although I wish it did not have so much parking.

| 1

Thanks for considering my opinion.

Brian Porter
Seattle, WA

Response to DEIS Letter 38

Brian Porter

1. Comment noted. Please see **FEIS Chapter 5, Key Topics**, for a discussion regarding parking assumptions under the DEIS Alternatives and the Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 2:50 PM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: yesler terrace housing scheme option

From: Claire Schumacher [mailto:claire.e.schumacher@gmail.com]
Sent: Tuesday, December 07, 2010 2:19 PM
To: #Yesler EIS Comments
Subject: yesler terrace housing scheme option

Hello,

I would like to vote for Option Two (medium density) for Yesler Terrace. | 1

There should be adequate low-income housing units in this plan to help displaced current residents. Mixed-use buildings must be a priority to ensure a lively development. It can contain community services (daycare, library, grocery stores), while providing office space. And while the parking allotment is low for Seattle, it should be even lower. Yesler Terrace is within walking distance to downtown and First Hill, and is connected by many buses and soon the First Hill Streetcar. If the city wants this development to be successful, density, multi-use activities, and walkability are key ingredients. | 2

I am not voting for the highest density proposal, because the development could isolate itself from the surrounding neighborhoods to the east. The north end of the site allows for higher-rise development to connect with the fabric of Pill Hill. It may be possible to blend Option 2 and 3 together, with higher density towards the north and lower towards the east. | 3

This is a great opportunity that many cities do not have: building a new neighborhood within walking distance to the downtown business core. | 4

-Claire Schumacher
UW M.Arch student

Response to DEIS Letter 39
Claire Schumacher

1. Comment noted.
2. Please see **FEIS Chapter 5, Key Topics**, for further discussion regarding the replacement of existing extremely low income units, and parking assumptions under the DEIS Alternatives and the Preferred Alternative
3. Comment noted. As described in DEIS Chapter 2, Alternatives 1-3 assumed the highest density of development in the NW Sector, which is next to Harborview Medical Center. High-rise office buildings were assumed to be concentrated near Harborview Medical Center and other medical office uses to the north. Under the Preferred Alternative, it is assumed that two high-rise office buildings would be located adjacent to Alder Street to approximately match the adjacent height and density of the adjacent zoning at Harborview Medical Center. Ten residential high-rise buildings would be distributed in the remaining West of Boren Sectors. Refer to **FEIS Section 2.5.3** and **FEIS Figure 2-8** for further information about the assumed distribution of high-rise buildings throughout the site.
4. Comment noted.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 2:49 PM
To: Fiske Zuniga, Anne; Van Dyke, Stephanie A.; Moore, Ryan A.
Subject: FW: Yesler Terrace

From: Ted Schumacher [mailto:ted.schumacher@gmail.com]
Sent: Tuesday, December 07, 2010 2:33 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace

Hello,

I live in Eastlake and would like to add my input to the Yesler Terrace project. I believe the city needs to look to the future and we need a plan in place that can accomidate business and research growth through meeting future housing and commercial needs. By giving people the option to live in the city, near work, we will greatly reduce the number of cars that clog our highways, lower our carbon footprint and increase quality of life. I would jump at the opportunity to have a reasonable commute to work without a car. | 1

The best way to look to the future is to approve **option 3** which allows for the most business and housing growth and accomidates our growing tourism industry through the addition of more hotels which the city needs.

Thanks,

Ted Schumacher
1926 Fairview Ave. E. apt. 105
98102

Response to DEIS Letter 40
Ted Schumacher

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.

Moore, Ryan A.

From: Frazier, Collette
Sent: Tuesday, December 07, 2010 8:27 AM
To: Moore, Ryan A.
Subject: FW: Yesler Terrace

From: Andrew Smith (REDMOND) [mailto:ansmith@microsoft.com]
Sent: Monday, December 06, 2010 6:46 PM
To: #Yesler EIS Comments
Subject: Yesler Terrace

Hello,

I'm a long-time First Hill resident – I first moved to First Hill in 1999 – and I want have a few comments on the Yesler Terrace replacement plan:

- The highest-density option will be best for the neighbourhood. Bringing more residents to the area will increase demand for businesses after office hours, which means businesses will stay open later, Also, bringing more offices to the area will increase the demand for housing as well as shops in the area which will likely create a virtuous cycle of re-urbanisation. None of the massing simulations seem particularly large from anywhere but the freeway where they will seem visually quite impressive. | 1
- I wish there was a larger over-all increase in low-income housing, though if money can be raised to build more public housing elsewhere that is also reasonable. | 2

More minor points:

- I see no reason to make the building heights dependent on land-use purpose. Why not let developers build large office towers? | 3
- Please include more commercial space. Millions of square feet of housing and office means thousands of new people in the area. 40,000~90,000 square feet of commercial isn't enough new space for thousands of people. I'd be worried the new people would chase existing owners out of their locations in Little Saigon, etc. | 4

Cheers,
 Andrew Smith

Response to DEIS Letter 41

Andrew Smith

1. Comment noted. Please refer to **FEIS Chapter 2** for a detailed description of the proposed Preferred Alternative.
2. Please refer to **FEIS Chapter 5, Key Topics**, for information regarding the replacement of the existing extremely low income housing units.
3. As described in **FEIS Chapter 2**, the Preferred Alternative assumes office uses would occur in high-rise buildings adjacent to Harborview Hospital and that residential uses would occur in mid-rise and high-rise buildings in the West of Boren Sectors and primarily in mid-rise buildings in the East of Boren and East of 12th Sectors. .
4. Comment noted. As discussed in **FEIS Chapter 2**, the Preferred Alternative assumes approximately 88,000 SF of neighborhood commercial uses would be developed throughout the Yesler Terrace site, similar to DEIS Alternative 3.

Please also refer to **FEIS Chapter 5, Key Topics**, regarding potential indirect offsite land use impacts.

Moore, Ryan A.

Subject: FW: Yesler Terrace Draft EIS = Comments

From: David Sucher [mailto:dsucher@citycomforts.com]

Sent: Monday, November 29, 2010 4:25 PM

To: Fiske Zuniga, Anne

Cc: Sullivan, Brian D.; John Fox

Subject: Yesler Terrace Draft EIS = Comments

To the Seattle Housing Authority:

My perspective

When reading an Environmental Impact Statement as a non-decision maker, much of it boils down to whether you like the project or not. So let me state my bias openly: by and large I do like the redevelopment of Yesler Terrace. As a general proposition, redevelopment of existing urban land seems to me to be a "good thing." And since Yesler Terrace is a magnificent site in the heart of a major city, more should be done with it so as to create, either on site or in the form of a financial endowment, more low-income housing.

I focused briefly, in no particular order, on three things in the DEIS:

- Urban Quality
- Environmental Impacts (per se)
- Displacement
- Urban Quality — the DEIS is inadequate to explain the density Alternatives

I can't understand from the DEIS which of your alternative plans — Low, Medium and High Density — offer the best one from an urbanistic perspective. I think that part of the reason is that the DEIS does not offer sufficient information offer a sense of of what each Alternative density will look and feel like by the residents and users,

I suggest that SHA issue an addendum to better explain the alternatives.

The site, as I mentioned, is magnificent; I had never before really pondered its scale: thirty-four acres of prime view property within easy walking distance of the CBD. My immediate reaction would be, *"Build as much as you can in order to maximize value to support low-icome housing, whether in the form of direct fee simple sales or as long-term ground leases to provide an on-going endowment."*

That's my immediate reaction but my reaction is bounded by also asking *What's the best urban form? Which alternative creates the "best" citiness?*

I can't get a handle on that question from the DEIS. I wonder which alternative will make the most interesting neighborhood -- not just a project or a campus but real urban fabric, basically an extension of Capitol and First Hills.

I appreciate the work done by the Portico Group on massing but frankly, if I were to judge just by the foreboding drawings, I'd suggest "Don't build anything at all!" Of course I am NOT saying that. But from what I

see in the DEIS, I get no sense of which alternative will produce the most likely good walkable urbanism. (And personally that is my measure: "walkable urbanism.") | 2
cont

What I'd like to see are photos of real places with density similar in each Alternative. Local is best but if you have to use other cities to offer neighborhoods which can show examples of the kind of neighborhoods are planner for each Alternative, then that's OK too. But make the Alternatives more vivid so we can get a sense of what the densities mean. | 3

• Environmental Impacts in general

The site is urbanized and I am sanguine that the environmental impacts are minor and/or can be mitigated through design. Until SHA and its development partners gets into detailed planning of such things as water and air quality, solid waste etc it seems to me that it's hard to say much except that everyone should follow legal requirements, which I am sure will be done. Whether existing legal requirements are sufficient I have no idea and venture no opinion. | 4

The only proviso is that environmental laws change over time and so I assume that then future standards will meet future buildings, in what is likely to be a slow build-out.

• Displacement of Existing Residents

This issue is obviously a serious one and must be addressed. SHA commits to provide alternative housing in some location if there is unavoidable displacement due to construction phasing. That's good. | 5

But the site might be large enough to allow phased construction: *build new housing before demolition of the old.* I think I read that SHA is committed to do so. If not then that SHA should make that commitment. | 6

•••

Btw, I'd like to thank John Fox for bringing the DEIS to wider attention. I probably would not have noticed it had he not written about it on the web and this project is of real significance in many regards. | 7

Sincerely,
David Sucher

Response to DEIS Letter 42
David Sucher

1. Comment noted.
2. Three dimensional drawings are provided in this FEIS for DEIS Alternatives 1-4 and the Preferred Alternative in order to further illustrate the bulk, scale and density of the proposed redevelopment alternatives. Please see **FEIS Section 3.10**, for the three dimensional drawing of the Preferred Alternative and **FEIS Chapter 4, Updates to the DEIS Analysis**, for illustrations of DEIS Alternatives 1-4.

Refer to DEIS Section 2.8.2 for details on pedestrian circulation under the DEIS Alternatives. As noted, pedestrian circulation throughout the site would be accommodated along all streets and private access roads and would include a system of trails to connect public open spaces and streets (see DEIS Figures 2-11 to 2-14). All improved rights-of-way and private access roads would be developed as complete streets providing sidewalks for pedestrians, and woonerf-type streets would be developed to allow pedestrian activation along the entire street and to enhance walkability and connectivity of the site sectors.

Redevelopment under the Preferred Alternative would involve a similar pedestrian circulation concept, as related to walkability, complete streets and woonerf-type streets. Refer to **FEIS Figure 2-9** for the proposed circulation system under the Preferred Alternative. As noted in **FEIS Section 2.5.3**, the onsite circulation concept under the Preferred Alternative would be similar to under DEIS Alternatives 2 and 3, and is based on a comprehensive reconfiguration of the circulation infrastructure across the site. This new configuration would enhance connections to surrounding neighborhoods and provide an internal circulation loop of secondary rights-of-way which would connect the West of Boren Sectors without the need to travel on primary rights-of-way.

3. Please see the response to Comment 2 of this letter.
4. Comment acknowledged.
5. Comment acknowledged. Please see the response to Comments 2 and 9 of Letter 11, and please refer to **FEIS Chapter 5, Key Topics**, for further discussion related to replacement of the existing units and potential tenant relocation and tenant relocation impacts.
6. Comment acknowledged. Please refer to **FEIS Chapter 5, Key Topics**, for further discussion related to tenant relocation.
7. Comment noted.

Mike Wold
 4232 34th Avenue South
 Seattle, WA 98118
 November 29, 2010

Stephanie Van Dyke
 Seattle Housing Authority
 PO Box 19028
 Seattle, WA 98109-1028

RE: Yesler Terrace Redevelopment Draft Environmental Impact Statement

Dear Ms. Van Dyke:

The analysis in the DEIS is insufficient on at least two grounds:

First, the “project area,” which is limited to the existing Yesler Terrace footprint plus a small area to its east, is not correctly delineated, given that SHA is already applying for funds to expand its redevelopment efforts farther into the Squire Park neighborhood. SHA needs to consider the impact of the totality of its redevelopment plans in its alternatives.

Second, the section on socio-economic impacts has very little information in it on the actual impacts of the alternatives. Wordings that indicate that certain impacts "could" happen beg the question of whether and how what "could" happen "would" happen.

This second issue is not simply a semantic distinction - SHA and the City of Seattle have the power to condition development to result in positive outcomes for the low-income and immigrant population in the study area or they can leave development up to the market, with the likely result that this population will be marginalized and underserved within an otherwise upper middle class neighborhood.

The analysis needs to start by being more candid about the likely mix of economic classes and family types due to the alternatives. The table showing housing mix is closest to this; what it does not acknowledge, however, is that "market rate" housing this close to downtown will be bought and lived in by people who earn well above the median King County income - in other words, there will likely be a gulf in economic and social power between the people who occupy low- and moderate-income units and those who occupy market-rate housing. If the market is left to determine the kinds of neighborhood grocery stores, drug stores, and the like that are established in the area, neighborhood services will undoubtedly be aimed at this wealthier, more lucrative market.

Given this likelihood, the assertion that there may be more services for low-income residents is disingenuous - without a conscious effort to serve these residents, the likelihood is that stores will sell goods that are not affordable for or aimed at this population and that this will not be a positive impact for this group.

The gulf in class power that SHA is facilitating here is likely to be exacerbated if, as is likely in this area, the wealthier residents are childless adults, as this will reduce any possibility that cross-class social cohesion will be developed in the new neighborhood. In fact, surrounding low-income families who have children with high-income singles and childless couples is a set up for conflict - a conflict that the low-income families will likely lose; this will likely result in an adverse impact on low-income Yesler Terrace families.

1
2
3
4

On the other hand, if development is aimed at creating higher-income units that are suitable for families and if programs are established to encourage families, there would at least be more chances for low-income families to actually benefit from the additional resources and political power higher-income families have.

4 cont

This possibility would be increased if SHA provides resources that help low- and moderate-income residents organize – particularly resources that facilitate development of leadership and representation of low-income people in the neighborhood, as well as resources for bridging linguistic and cultural gaps between low-income residents, so that these residents will be able to advocate for their own interests within the neighborhood.

5

As far as employment opportunities, it is also disingenuous for the analysis to suggest that meaningful employment opportunities for low-income residents will increase with the development of offices and hotels in the neighborhood, absent explicit programs to make that happen. Given that Yesler Terrace is already within a mile or so of downtown office buildings, hotels, and retail stores, simply increasing this type of land use in the area will have a marginal impact on residents' employment opportunities, particularly given that the redevelopment will also increase the neighborhood's moderate-income population, which presumably will have more education and skills than the low-income residents and will be more likely to be hired for any higher paid jobs offered by the new offices and hotels. Unless there is a conscious program to train and hire low-income Yesler Terrace residents for skilled jobs in these offices, hotels, or other businesses, they will end up, as they often do now, in the lowest-paid and most unskilled jobs, with little or no hope for advancement.

6

Any business that locates in the project area and thus benefits from the redevelopment of Yesler Terrace should be required, as a pass-through condition of development, to provide training and job advancement opportunities for low-income residents in the neighborhood, at wages that are sufficient to support families.

At this point, the DEIS treats measures such as these as "possible mitigation measures" - however, if one of the goals of the project is to benefit the low-income population by diluting it in a mixed-income neighborhood, measures to make this experiment work need to be explicitly committed to by SHA and included in the description of each alternative. A commitment should include explicitly identifying whether any needed funding is likely available for any proposed mitigation measures and explain what SHA will do to secure that funding; in the absence of such a concrete commitment, the EIS analysis should assume that such mitigation measures are unlikely and should analyze concretely what the likely impacts of redevelopment are on the low-income residents, absent these mitigation measures.

7

Sincerely



Mike Wold

Response to DEIS Letter 43

Mike Wold

1. Please refer to **FEIS Chapter 5, Key Topics**, for further discussion related to the expanded FEIS Site boundary.
2. Comment acknowledged. Predicting the socioeconomic consequences of redevelopment is speculative, and is dependent on many related as well as independent factors, some of which cannot be known or predicted. It is for this reason that potential impacts are identified with the 'could' qualifier, rather than the more certain 'would'. Never-the-less, the Yesler Terrace redevelopment proposal has been subject to an extensive planning process that is intended to guide the redevelopment towards achieving certain objectives and goals. Refer to DEIS Sections 2.2 and 2.4 for additional information on the history of the redevelopment planning and the objectives of the proposal.
3. Comment acknowledged. As shown in **FEIS Table 2-5**, under the Preferred Alternative approximately 1,801 housing units, or 36 percent of the total 5,000 housing units, would be low income housing. The remaining 3,199 units (64 percent) would be market rate housing. The projected population for the low income housing is estimated at roughly 3,500, as compared to an estimated population of 4,880 for the market rate units (see **FEIS Appendix L** for details). While a greater ratio of the total population on the redeveloped site would be attributed to the market rate units, there would still be a large segment of the population that could be categorized as low income. Due to this large low income population, retail uses that would be useful to low income residents could still be expected to emerge on the site. However, implementing requirements as related to the affordability of certain categories of commercial businesses is beyond the scope of this EIS.

Please also see the response to Letter 4, Comment 6 for information on neighborhood services space to be provided onsite under the Preferred Alternative.

4. Comment acknowledged. SHA is committed to continuing to ensure that resources are available for residents to organize and for bridging linguistic and cultural gaps. Currently this is done through SHA Community Building staff and partner agencies; this is a model that SHA wants to continue.

Please refer to Letter 22, Comment 4 for further information about the characteristics of the redeveloped community which would be beneficial to and could serve to attract families with children.

5. See the response to Comment 4 of this letter.
6. Comment acknowledged.
7. Please see the response to Letter 35, Comment 79.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

December 15, 2010

Stephanie Van Dyke
Development Director
Seattle Housing Authority
120 Sixth Avenue North
P.O. Box 19028
Seattle, Washington 98109-1028

Dannette R. Smith
Acting Director
City of Seattle Human Services Department
700 Fifth Avenue, Suite 5800
P.O. Box 34215
Seattle, Washington 98124-4215

Re: U.S. Environmental Protection Agency (EPA) Comments on the Yesler Terrace
Redevelopment Project (Project) Draft Environmental Impact Statement (DEIS).
(EPA Project Number: 10-029-HUD)

Dear Ms. Van Dyke and Ms. Smith:

The EPA has reviewed the Yesler Terrace Redevelopment Project DEIS and we are submitting comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Under our policies and procedures, we evaluate the environmental impact of the proposed action and the adequacy of the impact statement. We have assigned an Environmental Concerns – Adequate (EC-1) rating to the DEIS. A copy of the EPA rating system is enclosed.

1

We commend the lead agencies' efforts to lay the foundation for the redevelopment of Yesler Terrace into a healthy, livable, affordable, viable and green community. Your interest in following through on the Project's core values - social equity, economic opportunity, environmental stewardship, one-for-one replacement housing – is apparent in the consistent links between those values; the Guiding Principles and Planning Concepts; Objectives of the Proposal and the purpose and need statement. Indeed, the objective/purpose, "Create a vibrant, diverse and environmentally sustainable community that integrates uses, activities and incomes and enhances the livability of the Seattle community" (DEIS, p.2-7) is one among many which are consistent with the HUD-DOT-EPA Interagency Partnership for Sustainable Communities' (Partnership) six livability principles.¹

2

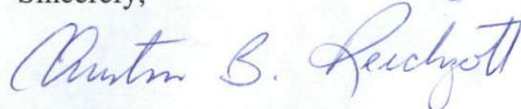
¹ <http://epa.gov/dced/partnership/index.html>

Our Environmental Concerns rating is based on our concern that mitigation measures are not linked to a monitoring plan or program. We believe the targets and decision thresholds of a monitoring plan or program is a key part of ensuring that the predicted environmental impacts are achieved and the objectives of the proposal are met. This is especially true for a Project involving such a complex array of stakeholders and real estate and other transactions over a long period of time.

Our enclosed detailed comments also describe a series of recommendations for additional clarifying language regarding impacts and possible operational mitigation measures for toxic air pollutants (both for sensitive receptors and for low income and minority populations). We also recommend additional clarifying language regarding the DEIS alternatives' relative consistency with the City of Seattle's stormwater Peak Control Standards.

We would like to thank you for this opportunity to comment and also for the time your Agencies' staff has spent communicating with us and the public on the Project. We would like to note especially, the efforts of the Seattle Housing Authority's Ryan Moore and the City of Seattle Department of Human Service's Kristen Larson. If you have any questions or concerns please contact Erik Peterson of my staff at (206) 553-6382 or by electronic mail at peterston.erik@epa.gov. You may contact me at (206) 553-1601.

Sincerely,



Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosures:

EPA Detailed Comments on the Yesler Terrace Redevelopment Project Draft Environmental Impact Statement
EPA Rating System for Draft Environmental Impact Statements

EPA DETAILED COMMENTS ON THE YESLER TERRACE REDEVELOPMENT PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT

Mitigation and Monitoring

We believe many of the Project's objectives are well served by the DEIS's suite of Required/ Proposed Mitigation Measures. To fully achieve the Project's objectives and fully protect the environment, other possible mitigation measures, such as those identified for: Air Quality; Water Resources; Plants and Animals; Climate Change, Greenhouse Gas Emissions and Energy; Noise; Land Use; Historic Resources; and Solid Waste, should be given full consideration and – to the maximum extent feasible – be incorporated into the FEIS as Required/ Proposed Mitigation Measures.

We are confident that the lead agencies are working diligently to include as many sustainability features/ mitigation measures as is possible and appropriate given the circumstances of the Project. With this in mind, we are less concerned with the final combination of mitigation measures, than we are with the likelihood of full implementation. We are primarily focused on the DEIS's lack of linkages between mitigation measures and monitoring. Without clear links from mitigation to monitoring we are concerned that predicted environmental benefits may be more difficult to achieve.

We note that, for agency decisions based on an EIS, the Council on Environmental Quality (CEQ) regulations require that, "a monitoring and enforcement program shall be adopted...where applicable for mitigation." 40 C.F.R. §1505.2(c). In addition, the regulations state that agencies may "provide for monitoring to assure that their decisions are carried out and should do so in important cases." 40 C.F.R. §1505.3. Monitoring plans and programs should be described or incorporated by reference in the agency decision documents.

Furthermore, we continue to believe – as stated in our May 19, 2010 scoping letter - that your efforts to benchmark existing conditions develop tools to measure progress towards achieving community visions, and increase the accountability of engaging in sustainable redevelopment may help to (i) move the national dialogue on livability measures forward, and, (ii) effectively measure the performance of your efforts.

Recommendation:

- We recommend that the FEIS describe or incorporate by reference a monitoring plan or program to ensure that mitigation measures are implemented and effective. We are especially interested in monitoring requirements associated with sustainability features (also listed as possible mitigation measures for Climate Change, Greenhouse Gas Emissions and Energy). Consider also, establishing specific implementation targets for mitigation measures which depend on phrases such as, "To the extent feasible,...". For additional general information consider the Council on Environmental Quality's "Draft Guidance for NEPA Mitigation and Monitoring".²

² http://ceq.hss.doe.gov/nepa/regs/Mitigation_and_Monitoring_Draft_NEPA_Guidance_FINAL_02182010.pdf

Air Quality

We agree with the DEIS's conclusion that, "...With implementation of the controls required for the various aspects of construction activities and consistent use of best management practices to minimize on-site emissions, construction of the proposed project would not be expected to significantly affect air quality." (p. 3.2-10).

Recommendation:

- To assist in your decision process regarding which construction "Other Possible Mitigation Measures" for air impacts should be included in the FEIS and Record of Decision as "Required/Proposed Mitigation Measures" we recommend you consider the potential environmental benefits of the measures proposed in the Northeast Diesel Collaborative April 2008 Model Contract Specification.³ We recommend this resource, as well as other examples of construction air quality mitigation measures contract language,⁴ as a supplement to the resources already listed in the DEIS.

With regard to operational air quality impacts, we commend the Seattle Housing Authority and City of Seattle Human Services Department for the DEIS's disclosure and discussion of potential human health impacts from Toxic Air Pollutants (TAPs). By comparing TAPs to Acceptable Source Impact Levels (ASILs) you have been generally responsive to our May 19, 2010 scoping letter's recommendation that the DEIS disclose potential human health impacts from Mobile Source Air Toxics (MSATs).

Our May 19 letter also included recommendations to assist in the development of mitigation for potential human health impacts from MSATs. To develop mitigation for MSATs/TAPs, we believe you would have to link TAPs to sensitive receptor locations as well as human health impact levels (e.g., ASILs). This overall concept is captured in our May 19 letter as,

"Assess or account for (qualitative or modeled depending on the severity of existing and projected conditions) factors that could influence the degree of adverse impact to human health. These factors include, for example, distances to human activity centers and sensitive receptor locations and the amount, duration, location and dispersion of emissions." (p. 4).

The DEIS concludes, essentially, that the degree of potential adverse impacts to human health from TAPs is not different: (a) within the Yesler Terrace Site, or, (b) between the Yesler Terrace Site and other areas of Seattle or other similar urban areas in the United States. Yet DEIS findings also indicate that long-term residency near busy roads carries with it a potentially elevated health risk. Therefore we believe that this project should explore feasible operational mitigation measures that fully protect human health and the environment.

Recommendations:

- We recommend that the FEIS discuss the feasibility of operational air toxic mitigation measures based on dispersion modeled TAPs concentrations and ASILs. Discuss, for

³ <http://www.epa.gov/otaq/diesel/construction/documents/cl-nedc-model.pdf>

⁴ <http://www.epa.gov/otaq/diesel/construction/contract-lang.htm>

example, the potential benefits – if any - of including air toxics operational mitigation measure for the siting or design of healthcare centers, nursing homes, and/or day care centers. Consider, as appropriate, how ASILs are used as screening guidelines or, if relevant, to develop mitigation measures for proposed stationary sources.

Water Resources

We strongly support proposed stormwater flow control facilities that would, "...reduce the peak stormwater discharge from the site relative to existing conditions and could help reduce CSOs, which can occur during heavy rainfall events." (DEIS, 3.3-15). We expect your goal of meeting the City of Seattle's flow control requirements (SMC Chapter 22.805.060, 22.805.070 and 22.805.080) would help reduce CSOs.

We are concerned that whereas the DEIS clearly states that the Project's flow control facilities will reduce peak stormwater discharge from the site relative to existing conditions, the DEIS does not clearly state that the Project's flow control facilities will meet all of Seattle's flow control requirements for all alternatives.

Recommendations:

- We recommend that the FEIS include additional clarifying language regarding the relative consistency among the alternatives (including existing conditions) with City of Seattle flow control requirements – especially the Peak Control Standards. Clarifying language should interpret the relevance of modeled results in Tables 3.3-1 through 3.3-5 to Peak Control Standards.
- We recommend that the FEIS discuss how the City of Seattle's Peak Control Standard ("...limits 2-year storm discharge rates to 0.15 cubic feet per second/acre (cfs/ac) and 25-year storm discharge rates to 0.4 cfs/ac...") would relate to the predevelopment hydrology⁵ of the Project site.
- We recommend that the FEIS include information on the permeability of on-site soils. Address how the DEIS estimates for GSI Required Release Rates (DEIS Tables 3.3-2 – 3.3-5) factored in the DEIS's conservative 0% infiltration rate for on-site soils.

Environmental Justice

We commend the Seattle Housing Authority and City of Seattle's Department of Human Services for the meaningful involvement efforts which have been an integral part of your project planning. Hand delivery of meeting notices (e.g., for the April 29, 2010 DEIS scoping meeting) and translation services at the meeting itself are two of many examples of how the lead agencies have made substantial efforts to ensure meaningful involvement.

We agree that the Project has the potential to result in disproportionate impacts from noise and TAPs to low income and minority populations. We also note that all of the action alternatives are likely better than no-action in this regard. We remain concerned, however, that the apparent mitigation for disproportionate impacts from noise and TAPs is limited to the Project's likely equitable distribution of housing types.

⁵ www.epa.gov/owow/nps/lid/section438

Recommendation:

- We recommend that the potential for disproportionate impacts from noise and TAPs to low income and minority populations be addressed through an operational mitigation measure. For more information on potential operational mitigation measures for TAPs see our Air Quality recommendation above.

9 cont

**U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987

Response to DEIS Letter 44
EPA

This letter was received on December 15, 2011, after the closure of the Yesler Terrace DEIS public comment period.

1. Comment acknowledged.
2. Comment acknowledged.
3. Comment acknowledged. As part of the City of Seattle's approval and decision-making process for this project, the mitigation measures identified in this Yesler Terrace EIS (including both required/proposed and other possible measures) would be considered and potentially incorporated into the Yesler Terrace Planned Action Ordinance adopted into law by the City. Such measures could include mitigation targets and thresholds under certain environmental elements. When SHA submits proposals for specific development in the future, the City would review the specific proposal for consistency with the adopted mitigation measures, including the potential array of sustainable features identified as mitigation in DEIS and **FEIS Section 3.5**. Implementation of mitigation per the Planned Action Ordinance would be enforced by the City as part of individual project approvals.

Likewise, the mitigation measures identified in this Yesler Terrace EIS (including both required/proposed and other possible measures) would be considered and potentially incorporated into the NEPA Record of Decision by HUD. Such measures could include mitigation targets and thresholds under certain environmental elements.

As new individual projects are submitted for review and approval over time, the City and SHA would have additional opportunities to review the effectiveness of mitigation implemented for completed projects and to select mitigation from the array of identified potential mitigation based on the unique requirements of each building/project, as well as experience from redevelopment that has already been completed on the site.

4. Comment acknowledged.
5. As stated in the DEIS Section 2.8.2, SHA is committed to sustainable design as a guiding principle for the Yesler Terrace Redevelopment. Specific sustainable features to be implemented would be determined at the time individual projects are designed and submitted for approval. When SHA submits projects for design review and building permits to the City of Seattle, the City would ensure that sustainable features are incorporated to the extent physically and financially feasible. As noted in the response to Comment 3 of this letter above, implementation of mitigation per the Planned Action Ordinance and the Record of Decisions would be enforced by the City (as the reviewing jurisdiction and as the NEPA Representative) as part of individual project approvals.
6. Comment acknowledged. Please see **FEIS Section 3.2.3** for new or modified mitigation measures under the Preferred Alternative.

7. Comment acknowledged. Based on the projected future concentrations of TAPs across the project site identified in Section 3.2.2 of the DEIS, SHA would evaluate the feasibility of applying operational mitigation measures in the form of building air intake filtration systems. SHA has previously developed and applied "Breathe Easy homes" for asthmatic residences as part of their High Point development. The strategies for reducing in-home toxins and particulate matter included use of HEPA filter vacuums and active HVAC systems to limit the need for intake of unfiltered outdoor air in selected units. SHA is now exploring the options for using whole-building filtration systems as part of the Yesler Terrace redevelopment as a means to reduce concentrations of air pollutant levels inside of all the buildings on the site. An additional possible mitigation measure is added to **FEIS Section 3.2.3, Air Quality**, to incorporate the use of additional filters on building air intake units.
8. DEIS Tables 3.3-2 through 3.3-5 shown in DEIS Section 3.3 and Tables 4.2-7 through 4.2-10 shown in Water Resource Technical report (Appendix F of the DEIS) provide a comparison among the alternatives and existing conditions. See below for individual responses to the bulleted recommendations:
- The "Code Required Release Rate" column provides the allowable release rate from each sector, in accordance with City requirements.
 - Comment noted, but predevelopment hydrology does not need to be analyzed in a combined sewer basin, per the City's stormwater regulations.
 - Onsite soils are identified in the geotechnical report in Section 3.1.1 of the DEIS and Section 2.2.2 of Appendix D of the DEIS, indicating that Lawton Clay, which underlies the entire site, has low permeability and inhibits downward migration of groundwater. To be conservative in the sizing of the facilities, the use of infiltration was not assumed.
9. The DEIS does not identify disproportionate impacts from noise and TAPs to low income and minority populations, as the income types would be distributed across the project site. To the degree practical within the requirements of the project, site design features would be used to take advantage of the barrier effects of buildings and the distance from major roadways to control transmission of traffic noise levels to some exterior areas. This would reduce noise to levels suitable for outdoor residential uses.

The final project development plan would also incorporate noise control measures into residential buildings located in the noisiest portions of the site using certain construction materials and techniques to ensure that interior sound levels from outside noise sources in all residential units comply with the HUD noise standards for interior uses. Examples of potential noise control mitigation measures for the Preferred Alternative are described in **FEIS Section 3.7, Noise**.

See the response to Comment 7 of this letter regarding TAPs.

From: Ted Klainer [<mailto:tklainer@u.washington.edu>]
 Sent: Tuesday, December 14, 2010 3:54 PM
 To: Moore, Ryan A.
 Subject: Harborview Medical Center's response to the Yessler Terrace EIS

Ryan,

Harborview Medical Center has two comments on the SHA's Yessler Terrace EIS:

1. Harborview Medical Center and Airlift Northwest has significant concerns about the planned height of buildings along Alder St. As you know Airlift Northwest transports patients via helicopter to Harborview. Their helicopters land at the helipads on the corner of Alder and 8th Ave (the drive way in front of the main entrance to the Hospital). Airlift Northwest's main flight path to the helipad is along I5 coming either north or south. During inclement weather the helicopters use and alternate path that generally follows Alder St heading west and then landing on the helipad. Airlift Northwest and their consultants, Air Methods have stated that the Yessler Terrace development should leave room for a flight path along Alder that has been defined in the FAA guidelines. Per our previous meetings on the subject SHA has those guidelines. We also understand that your consultants have done preliminary calculations that show the future buildings planned along Alder St would impede the flight path along Alder. We understand this is a complicated issue and we will need to continue to work together to come up with a solution to this problem. So in general please note that Harborview and Airlift Northwest have significant concerns about the flight paths for helicopters being blocked by buildings along Alder St.

1

1. Harborview is also concerned about the expected increase in volume of automobile traffic along 9th Ave at the intersections of Alder, Jefferson and James St. Harborview is the only Level 1 Trauma Center in the WWAMI region. A very large number of emergency response vehicles bring critically injured patients to Harborview arriving at the Emergency Department located at the SW corner of 9th Ave and Jefferson. A significant increase in traffic congestion could seriously impact our ability to care for patients. This congestion could also delay the ability of visitors and staff from getting to and from the campus. We request a more in depth look at the traffic congestion along 9th Ave.

2

Thanks

Ted Klainer
 Harborview Medical Center
 Capital Projects Manager
 P: 206-744-2421
 C: 206-419-7187

Response to DEIS Letter 45
Harborview Hospital

This letter was received on December 14, 2011, after the closure of the Yesler Terrace DEIS public comment period.

1. Thank you for your comments. SHA is committed to working with Harborview in order to ensure that both access to the heliport and SHA's goals and objectives for redevelopment of the site can be accommodated.

2. Your comment is noted. Please note the EIS has analyzed potential impacts of the project at all three intersections that are of concern to Harborview, and mitigation has been recommended at 9th Avenue/Jefferson Street and 9th Avenue/Alder Street.



Chapter 7 - ERRATA

CHAPTER 7 ERRATA

This chapter of the Final EIS (FEIS) identifies corrections to the October 2010 Draft EIS (DEIS), including text changes and clarifications, based on comments received and other updated information.

1.0 Summary

On DEIS page 1-16, on the row the text under Displacement of Existing Uses – Residential, 3.8, Land Use, the No Action language is updated to include the following phrase:

“Residents living at Yesler Terrace at the time of relocation would be offered the opportunity to return to the redeveloped community.”

On page 1.27 to 1-28, the text under the Operational Impacts, 3.15.4 Public Services – Police is hereby modified to read as follows:

“Increases in the on-site population and employment would be accompanied by increases in demand for police service; however, the exact number of incremental new calls cannot be quantified. Likely impact to police workload can be mitigated by SHA’s continued funding for dedicated police staff and full implementation of the Neighborhood Policing Plan, which will add officers to the force. As well, the design and layout of the site, increased residential density, increased activity levels, and improved site lighting should contribute to safety improvements.

On page 1-43, the 1st sentence of the 4th paragraph is hereby modified to read as follows:

“Due to the presence of asbestos and lead-based paint in the majority of the existing onsite buildings, it is unlikely that construction and demolition debris would be recyclable.”

2.8.2 EIS Alternatives Summary

On page 2-34, the last sentence of the 1st paragraph and 1st sentence of the 2nd paragraph are hereby modified to read as follows:

“Some of the options under consideration that could mitigate waste generated by the Yesler Terrace project include on-site source separated recycling, potential reuse of demolition materials on-site, deconstruction of existing buildings, salvage and reuse of building components, and subscription to the City of Seattle contracted haulers.

Due to the presence of asbestos and lead-based paint in the majority of the existing onsite buildings, it is unlikely that construction and demolition debris would be recyclable.”

2.8.6 Development Phasing/Assumed Buildout Date

The following text is hereby added to page 2-51 under Development Phasing/Assumed Buildout Date as bulleted items under the SHA Rental Housing subsection:

- “Maximize onsite relocations to minimize disruption to existing tenants.”
- “Minimize extended delays between demolition of public housing units and commencement of redevelopment.”

3.1 Earth

On page 3.1-15, the 3rd bullet is modified to read as follows:

- “Site-specific investigations and analyses would be conducted during the design and permitting process in order to identify appropriate measures to address the potential need for and impacts of excavation dewatering. These measures could include site-specific design and control of dewatering systems, minimizing the extent and duration of dewatering, and monitoring for settlement. Based on the capacity of the combined sewer, additional storage of construction de-watering with flow control could be required.”

3.3 Water Resources

On page 1-40, the 2nd sentence of the 1st paragraph is hereby modified to read as follows:

"Zinc and copper source controls would extend to rooftops, which would be constructed of inert materials so that water quality treatment facilities for metals removal would not be required.

On page 3.3-2, the following sentence is hereby added after the 1st sentence in the 3rd paragraph:

“This analysis utilized a simple flow routing model that does not account for backwater effects or the possibility of additional capacity due to surcharging.”

On page 3.3-2, the reference to “Appendix O” in the third paragraph is hereby modified to read:

“Appendix L”

On page 3.3-3, the following sentence is hereby added after the 2nd sentence of the 1st paragraph:

“The non-current standard structures are adequate for collection and conveyance of existing flows.”

On page 3.3-5, the following is hereby added into the list of GSI options in the 1st sentence of the 3rd paragraph:

“Green roofs,”

On page 3.3-6, the following sentence is hereby added after the 2nd paragraph:

“See Section 3.3.2 of Appendix L - Public Utilities Technical Report for a discussion of combined sewer improvements required for each alternative.”

On page 3.3-6, the following sentence is hereby added after the 5th paragraph:

“The only available discharge location available for temporary dewatering is the combined sewer system. Additional construction storage with flow control may be required to mitigate against increased flow to the combined sewer system.”

On Page 3.3-6, the 1st sentence of the 9th paragraph is hereby modified to read:

“Under Alternative 1, the permanent stormwater control system for the privately-owned portions of the site would include catch basins, inlets, green roofs (20 percent of the roofs are assumed to be “green” vegetated roofs), GSI flow control facilities, downspouts, footing drains and private stormwater conveyance pipes that would collect and convey stormwater runoff to the existing combined sewer system.”

On Page 3.3-7, the 1st sentence of the 1st paragraph is hereby modified to read:

“The permanent stormwater control system for public rights-of-way improvements under Alternative 1 would include catch basins, inlets and GSI flow control facilities that would collect and convey stormwater runoff to the existing combined sewer system.”

On Page 3.3-7, the reference to “Appendix O” in the first paragraph is hereby modified to read:

“Appendix L”

On Page 3.3-14, the following sentence is hereby added after the 2nd paragraph:

“Coordination with SDOT’s Streetcar work will be provided to locate utility stubs or sleeves to minimize rework required after streetcar construction is complete.”

On page 3.3-14, the 2nd sentence of the 8th paragraph is hereby modified to read as follows:

“Zinc and copper source controls would extend to rooftops, which would be constructed of inert materials so that water quality treatment facilities for metals removal would not be required.”

On page 3.3-14, the 8th paragraph is hereby moved to after the 4th paragraph on page 3.3-15.

On page 3.3-15, the sixth paragraph including the heading, “Other possible Mitigation Methods,” is hereby moved to after the first paragraph.

On page 3.9-45, the 2nd sentence of the 4th paragraph is hereby modified to read:

“Detailed hydraulic modeling, using EPA’s SWMM5.21, of drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment to the capacity of the existing system and potential impacts of proposed redevelopment on the City’s drainage and wastewater infrastructure. The modeling results will be used to identify needed improvements to the combined sewer system to support the proposed plan.”

3.4 Plants and Animals

On page 3.4-9, the 2nd sentence of the 3rd paragraph is hereby modified to read:

"The addition of new trees would mitigate for exceptional trees and/or tree canopy lost and support Seattle's 30-year goal of 20 percent coverage for all multi-family residential sites, 15 percent coverage for all commercial/mixed use sites, or 25 percent for newly developed parks."

3.5 Climate Change, Greenhouse Gas Emissions and Energy

On page 3.5-2 the 1st sentence of the 5th paragraph is hereby amended to read as follows:

“Other strategies that can further reduce greenhouse gas from energy use are: employing design features that naturally reduce energy use such as daylighting and green roofs; retaining mature trees to provide carbon sequestration, air purification and cooling; providing onsite power generation such as solar panels or wind turbines; designing and installing energy efficient lighting, building systems and controls.”

On page 3.5-10, the last sentence of the 1st paragraph and 1st sentence of the 2nd paragraph are hereby modified to read as follows:

“Some of the options under consideration that could mitigate waste generated by the Yesler Terrace project include on-site source separated recycling, potential reuse of demolition materials on-site, deconstruction of existing buildings, salvage and reuse of building components, and subscription to the City of Seattle contracted haulers.

Due to the presence of asbestos and lead-based paint in the majority of the existing onsite buildings, it is unlikely that construction and demolition debris would be recyclable.”

3.9 Relationship to Plans, Policies and Regulations

On page 3.9-50, the second and third bullets at the top of the page are hereby modified to replace the word ‘guidance’ with the word ‘requirements’ as follows:

- SMC 25.11.070 provides requirements for tree protection on sites in areas zoned Low-rise 3 (such as the West of Boren Sectors). See Section 3.4, **Plants and Animals** for details.
- SMC 25.11.080 provides requirements for tree protection on sites in mid-rise and commercial zones (such as the East of Boren Sector). See Section 3.4 **Plants and Animals**, for details.

On page 3.9-51, the top paragraph is modified to include the underlined text as follows:

“These new and retained trees would contribute to the City’s overall 30-year canopy coverage goals.”

3.10 Aesthetics

On page 3.10-13, the last sentence of the 1st paragraph is hereby modified to read as follows:

“Views of the Cascade Mountains are available on clear days.”

On page 3.10-13, the 2nd sentence of the 2nd paragraph is hereby modified to read as follows:

“The existing views of the southeast skyline and the Cascade Mountains would be largely obscured and views of the Steam Plant smokestack would be eliminated; view of the Pacific Medical Center would not be affected.”

On page 3.10-13, the 2nd sentence of the 3rd paragraph is hereby modified to read as follows:

“These new buildings would largely obscure the southeast skyline and the view of the Cascade Mountains.”

On page 3.10-22 of the DEIS, the last sentence in the 1st paragraph under the existing conditions discussion is hereby modified to read as follows:

“The skyline and part of the south Downtown neighborhood are visible in the distant Alder Street corridor.”

On page 3.10-22 of the DEIS, the 2nd sentence of the first complete paragraph (Alternative 1 discussion) is hereby modified to read as follows:

“The South Downtown neighborhood and skyline would continue to be visible in the distance down the Alder Street corridor.”

On page 3.10-37, the 3rd sentence in the 2nd paragraph under the 9th Avenue and Jefferson Street, Looking Southeast discussion is hereby modified to read as follows:

“Views of the southeast skyline and Mount Rainier within the 9th Avenue corridor would be largely eliminated.”

On page 3.10-37, the 2nd sentence in the 3rd paragraph under the 9th Avenue and Jefferson Street, Looking Southeast discussion is hereby modified to read as follows:

“These new buildings would also largely eliminate views of the skyline and Mount Rainier.”

3.13 Transportation

On page 3.13-9 and 3.13-10, Table 3.13.1, footnote 6 is added for two intersections:

Int #	Intersection Name
16	14 th Ave S/Rainier Ave S/S Jackson St ⁶
35	4 th Ave S/S Jackson St ⁶

Notes:

6. 2030 condition includes street modification that would be completed as part of the First Hill Streetcar project. At 14th Avenue S/Rainier Avenue S/S Jackson Street this includes elimination of all southbound movements on 14th Avenue S; at 4th Avenue S/S Jackson Street, this includes elimination of the eastbound left-turn movement.

On page 3.13-10, 1st paragraph, and Appendix N, Section 2,3,2, p. 20, 1st paragraph, the text is hereby modified to read as follows:

4th Avenue S / S Jackson Street – This intersection currently operates at LOS F during the PM peak hour, and operations are influenced by the close spacing to the adjacent intersection at the 2nd Avenue Extension. However, the Streetcar project would prohibit ~~westbound~~ eastbound left turn movements from S Jackson Street, which would improve operations to LOS C.

On page 3.13-13, 2nd paragraph, and Appendix N, Section 3.8, p. 28, 3rd paragraph, the text is hereby modified to read as follows:

There are many bicycle facilities in the site vicinity, including separate trails, bicycle lanes, and lanes that are marked with shared lane pavement markings (or “sharrows”) indicating that motorists should share the lane with bicyclists. A “sharrow” is a bicycle symbol carefully placed to guide bicyclists to the best place to ride on the road, avoid car doors and remind drivers to share the road with cyclists. Unlike bicycle lanes, sharrows do not designate a particular part of the street for the exclusive use of bicyclists. They are simply a marking to guide bicyclists to the best place to ride and help motorists expect to see and share the lane with bicyclists. ~~shared lane pavement marking that is placed in the roadway lane to highlight the shared space; however, unlike a bicycle lane it does not delineate a particular part of the roadway that a bicyclist should use.~~

On page 3.13-13, 3rd paragraph, and Appendix N, Section 3.8, p. 28, 4th paragraph, the text is hereby modified to read as follows:

The project site is entirely within the Tier 1 High Priority Area for pedestrian improvements as identified in the Seattle Pedestrian Master Plan. Two roadways are identified as high priority for pedestrian improvements within the project site area; 9th Avenue ~~south~~ north of Alder Street, and S Main Street west of 12th Avenue S. Priority locations for spot improvements are also identified along Broadway, Boren Avenue, and S Jackson Street in the vicinity of the project site. Although these locations are among the citywide locations that the Plan designates as high priority, no sidewalk improvement projects are currently programmed in the site vicinity. The First Hill Neighborhood Plan recommended improving the pedestrian crossing at Boren Avenue and Yesler Way. This crossing is located on the school walk route between Yesler Terrace and Bailey Gatzert Elementary School.

On page 3.13-13, 4th paragraph, and Appendix N, Section 3.8, p. 28, 5th paragraph, the text is hereby modified to read as follows:

Already Completed:

- Yesler Way, I-5 to west of Broadway – Bicycle Climbing Lane. A bicycle lane was added to the eastbound (uphill) direction, and pavement markings for a shared roadway (sharrows) were added in the westbound (downhill) direction.
- Yesler Way, west of Broadway to 12th-14th Avenue – ~~Bicycle Lane~~ Sharrows provided in both directions
- Yesler Way, 14th Avenue to 18th Avenue. A bicycle lane provided in the eastbound (uphill) direction, and sharrows provided in the westbound (downhill) direction.

On page 3.13-31, 2nd paragraph, and Appendix N, Section 3.8, p. 54, 1st paragraph, the text is hereby modified to read as follows:

Although the analysis of street vacation policies is an independent process from this EIS analysis, ~~S~~-sub-elements of this policy are noted below with a discussion of how the proposed street vacation would meet the policy's intent.

On page 3.13-31, 3rd paragraph, and Appendix N, Section 3.8, p. 54, 2nd paragraph, the text is hereby modified to read as follows

Alternatives 2 and 3 propose to vacate ~~9th-8th~~ Avenue between Yesler Way and 9th Avenue/Fir Street.

On page 3.13-34, 3rd paragraph, and Appendix N, Section 3.8, p. 60, 1st paragraph, the text is hereby modified to read as follows:

~~Based on statistical trends, h~~-Higher traffic volumes tend to relate to a higher number of collisions.

On page 3.13-34, 4th paragraph, and Appendix N, Section 3.8, p. 60, 2nd paragraph, the text is hereby modified to read as follows:

There are a number of measures that can be implemented to reduce the potential for collisions including:

- Where traffic volumes warrant and adequate right-of-way is present~~practical~~, providing left-turn lanes where local roadways meet the arterial streets so that the left-turn vehicle traffic can operate on a separate signal phase than pedestrian crossings.
- Calming traffic on internal roadways using measures such as traffic circles, speed humps or cushions, chicanes, and curb-bulbs, which help reduce traffic speeds.
- Locating internal driveway access points where they minimize conflicts with pedestrians.
- ~~Where conflicts cannot be avoided, p~~ Providing adequate sight lines between motorists and pedestrians.

On page 3.13-35, 3rd paragraph, and Appendix N, Section 3.10, p. 61, 1st paragraph, the text is hereby modified to read as follows:

Therefore, many riders who are physically able to walk may instead opt to walk to a bus that will provide direct service to their destination rather than wait for a bus and then transfer to another bus.

On page 3.13-35, 3rd paragraph, and Appendix N, Section 3.10, p. 61, 1st paragraph, the text is hereby modified to read as follows:

Other routes can be accessed from S Jackson Street, and there would be an improved pedestrian connection to this street included as part of the Yesler Terrace Redevelopment project (note, the proposed pedestrian connection is described in “Non-Motorized Facilities” later in this section).

On page 3.13-37, 6th paragraph, and Appendix N, Section 3.10, p. 64, 7th paragraph, the text is hereby modified to read as follows:

This would include ~~amenities~~ features such as wider sidewalks, bike lanes, bike parking areas, streetscape improvements, curb bulbs, covered sidewalks, and pocket parks.

On page 3.13-38, 5th paragraph, and Appendix N, Section 3.10, p. 64, 7th paragraph, the text is hereby modified to read as follows:

The ~~majority~~ highest proportion of these (about 1,000) would be generated by the Northwest Sector of the project, which would be served by several streets and off-street pedestrian paths.

On page 3.13-41, Table 3.13-12, note 3, and Appendix N, Section 3.12.2, p. 67, Table 24, note c, the text is hereby modified to read as follows:

- c. Derived by applying varying rates for size and type of unit. The ~~0.60–0.85~~ vehicles per unit reflects the demand for Yesler Terrace Redevelopment Alternative 2 with 4,000 units, of which 896 would be owned by SHA.

On page 3.13-45, 1st paragraph, and Appendix N, Section 5.1, p. 72, 2nd paragraph, the text is hereby modified to read as follows:

- Off-street ~~C~~-construction employee parking areas.

On page 3.13-47, 8th paragraph, and Appendix N, Section 5.2, p. 75, 2nd paragraph, the text is hereby modified to read as follows:

Seattle's Comprehensive Plan for the First Hill/Capitol Hill Urban Center established a trip goal that all ~~peak-period~~ trips using non-SOV modes reach 75% by the year 2010 and 80% by 2020. This means that trips by single-occupant vehicle (SOV) should be no more than 25% of the ~~peak-period~~ trips in 2010, or 20% in 2020.

On page 3.13-49, Table 3.13-15, and Appendix N, Section 5.2, p. 76, Table 26, the text is hereby modified to read as follows:

Heading:

TMP Elements from Seattle Director's Rule 19-~~2008-2009~~

Table Note:

Source: DPD Director's Rule 19-2008, December 31, 2008. The numbers in the ~~right~~ left-hand column match the element numbers from the Director's Rule

On page Appendix N, Section 2.2.2, p. 14, 1st paragraph, the text is hereby modified to read as follows:

These volumes were forecast using SDOT's enhanced version of the Puget Sound Regional Council's (PSRC) regional planning model, which operates on the EMME/2-3 software platform.

On page Appendix N, pp. 19-20, Table 4, footnote f is hereby added for two intersections:

<i>Int #</i>	<i>Intersection Name</i>
16	14 th Ave S/Rainier Ave S/S Jackson St ^f
35	4 th Ave S/S Jackson St ^f

Notes:

f. 2030 condition includes street modification that would be completed as part of the First Hill Streetcar project. At 14th Avenue S/Rainier Avenue S/S Jackson Street this includes elimination of all southbound movements on 14th Avenue S; at 4th Avenue S/S Jackson Street, this includes elimination of the eastbound left-turn movement.

On page Appendix N, Section 2.5, pp. 23-24, Table 6, is hereby amended:

Table Heading: # Buses/Weekday⁴⁵

Route 99 (row 9) under # Buses/Weekday: n/a⁵⁶

Table notes:

1. Peak period headways calculated from 7:00 to 9:00 A.M.
2. Mid-day headways calculated ~~from~~ ~~from~~ 12:00 P.M to 1:00 P.M.
3. Afternoon peak headways calculated from 4:00 P.M to 6:00 P.M.
- ~~3-4.~~ Evening headways calculated from 8:00 P.M to 10:00 P.M.
- ~~4-5.~~ Number of buses in both directions.
- ~~5-6.~~ Bus stop is farther than ¼ mile form Yesler Terrace.

On page Appendix N, Section 2.6 p. 28, 4th paragraph, is hereby amended:

This crossing is located on the school walk route between Yesler Terrace and Bailey ~~Gatzert~~ Gazert Elementary School.

On page Appendix N, Section 3.8, p. 29, Figure 13 is hereby revised:

Figure 13 – Legend definitions corrected – the dotted lines represent sharrows and the solid lines represent bike lanes – as shown in the included figure.

On page Appendix N, Section 3.2.5, p. 38, 1st paragraph, is hereby amended:

Detailed trip generation tables for all alternatives are provided in Appendix AC.

On page Appendix N, Section 3.2.5, p. 41, 2nd paragraph, is hereby amended:

The input assumptions used in the Urbemis model are summarized in Appendix GD.

On page Appendix N, Section 3.2.5, p. 51, 2nd paragraph, is hereby amended:

Many of the intersections to which the Yesler Terrace project would add project trips would already operate at LOS F in the year 2030 without the project.

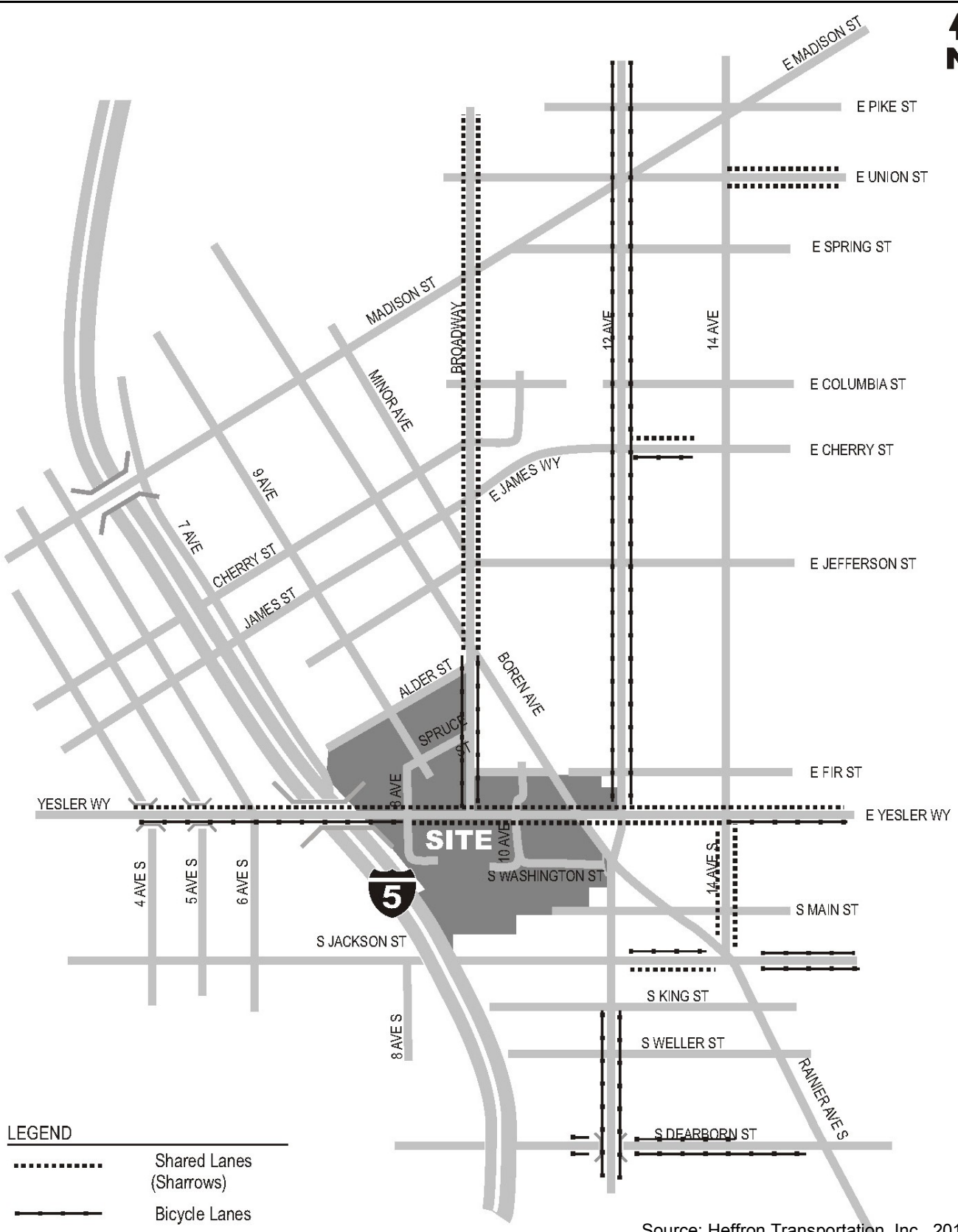
On page Appendix N, Section 3.7, p. 55, 2nd paragraph, is hereby amended:

Most of the work on the Streetcar is planned to occur between the existing curbs with sidewalk improvement at stations.

On page Appendix N, Section 3.7, p. 57, 2nd paragraph, footnote 19 is hereby added:

For those segments, a desirable volume of less than 3 vehicles per minute (180 vehicles per hour) is the target for a two-lane residential street; 1 vehicle per minute (60 vehicles per hour) for a woonerf.¹⁹

¹⁹ Desirable volumes for woonerfs is based upon information provided in a research paper entitled, *How Much is Too Much Traffic* (ITE Journal, May 1982). That paper presented relationship between traffic flow and the environmental quality on a residential street. It rated the quality based on the exposure to traffic in terms of vehicles per minute, and suggested that exposures of 1.0 vehicle per minute or less would represent a “good” environment. This level of traffic (60 vehicles per hour) was presented as the desirable volume for the lowest class of street. A rate of three times this rate was selected for the next highest class, since it could be used to collect traffic from several woonerfs.



Source: Heffron Transportation, Inc., 2011



Figure 13 - Revised
Bicycle Facilities
In the Vicinity of Yesler Terrace

Yesler Terrace
Redevelopment EIS

On page Appendix N, Section 5.2, p. 76, Table 28, the source for the table is hereby amended:

Source: DPD Director's Rule 19-20098, December 31, 2008. The numbers in the left right hand column match the element numbers from the Director's Rule.

3.14 Utilities

On page 3.14-2, the following sentence is hereby added after the 1st sentence in the 5th paragraph:

"This analysis utilized a simple flow routing model that does not account for backwater effects or the possibility of additional capacity due to surcharging. "

On page 3.14-2, the 3rd sentence of the 5th paragraph is hereby modified to read:

"Detailed hydraulic modeling, using EPA's SWMM5.21, of drainage and wastewater systems would be completed during the design phase of the Yesler Terrace Redevelopment to the capacity of the existing system and potential impacts of proposed redevelopment on the City's drainage and wastewater infrastructure. The modeling results will be used to identify needed improvements to the combined sewer system to support the proposed plan. "

On page 3.14-4, the reference to "Appendix O" in the 4th paragraph is hereby modified to read:

"Appendix L"

On page 3.14-5, Table 3.14-1 SUMARRY OF WATER DEMAND, the 4th row of Existing condition / No action Alternative, in columns of MDD and PHD are hereby modified to read as follows:

"167,000 gpd for MDD and 561 gpm for PHD. "

On page 3.14-6, the reference to "Appendix O" in the 4th paragraph is hereby modified to read:

"Appendix L"

On page 3.14-7, the reference to "Appendix O" in the 4th paragraph is hereby modified to read:

"Appendix L"

On page 3.14-8, the reference to "Appendix O" in the 5th paragraph is hereby modified to read:

"Appendix L"

On page 3.14-9, the 1st sentence under the NW Sector discussion is hereby modified to read as follows:

"The existing 8-inch and 12-inch combined main located between 9th Avenue and Yesler Way does not have capacity for the estimated flows"

On page 3.14-10, the 1st sentence under the NW Sector discussion is hereby modified to read as follows:

“The existing 8-inch and 12-inch combined sewer main located between 9th Avenue and Yesler Way does not have capacity for the estimated flows.”

On page 3.14-10, the reference to “Appendix O” in the fourth paragraph is hereby modified to read:

“Appendix L“

On page 3.14-11, the reference to “Appendix O” in the fifth paragraph is hereby modified to read:

“Appendix L“

3.15 Public Services

3.15.2 Parks and Open Space

On page 3.15.1-2, DEIS Table 3.15.1-2 incorrectly identifies the amount of existing Yesler Terrace P-Patch area provided on the DEIS Site as 0.3 acres and is hereby modified as follows:

“0.6 acres.”

3.15.2 Schools

On page 3.15-37, Table 3.15.2-10 the increase in the number of students under Alternative 3 was incorrectly stated and is hereby modified to read as follows:

**Table 3.15.2-10
PROJECTED K-12 SCHOOL ENROLLMENT
AND EXISTING CAPACITY, ALTERNATIVE 3**

School Level	Increase in Students at Yesler Terrace Under Alternative 3	Available Functional Capacity in SPS District (2015)	Functional Capacity in District After Redevelopment of Alternative 3	Available Functional Capacity in Central District Area (2015)	Functional Capacity in Central District After Redevelopment of Alternative 3	Available Functional Capacity in Attendance Area Schools (2015)	Functional Capacity in Attendance Area Schools after Redevelopment of Alternative 3
Elementary	507	835	328	330	-177	47	-460
Middle School	213	725	512	75	-138	75	-138
High School	294	1,507	1213	-26	-320	-26	-320
TOTAL	1,014	3,067	2,053	379	-635	96	-918

Source: EA/Blumen, 2011.

3.15.4 Police Services

On page 3.15-46, the 4th sentence of the 1st paragraph under the Affected Environment discussion is hereby modified to read as follows:

“Staffing at the East Precinct currently includes: 112 patrol officer, 15 patrol sergeants, four police lieutenants, eight detectives, one detective sergeant, and one police captain.”

On page 3.15-46, the last sentence of the 1st paragraph under the Affected Environment discussion is hereby amended to include the following information:

“SHA also provides funding for a Community Police Team officer to work with Yesler Terrace management and residents on crime and crime-related concerns: this officer is included in the staff count of 112 patrol officers identified above.”

On page 3.15-46, the 1st sentence of the last paragraph under the Affected Environment discussion is hereby modified to read as follows:

“**Table 3.15-4-1** shows total dispatched calls for police service and on-view police incidents for the City as a whole, and for the East Precinct, between 2005 and 2009.”

On page 3.15-47, the 1st sentence of the 2nd paragraph under the Affected Environment discussion is hereby modified to read as follows:

“**Table 3.15.4-2** shows total calls for police service and on-view police incidents at the Yesler Terrace site from 2005 to 2009.”

On page 3.15-48, the 1st sentence of the last paragraph under the Operation discussion is hereby modified to read as follows:

“The Police Department believes that there are several factors that could mitigate the impact to police workload likely to result from the redevelopment alternatives.”

On page 3.15-49, the last sentence of the 3rd paragraph under the Cumulative Impacts discussion is hereby modified to read as follows:

“These demand increase impacts could be mitigated by adjustments in service provision.”

3.15.5 Solid Waste

On page 3.15-51, the last sentence of the 3rd paragraph is hereby modified to read as follows:

“Some garbage and recycling materials are delivered to the South Recycling and Disposal Station (SRDS) at 8100 2nd Avenue S in Seattle, which is managed and operated by Seattle Public Utilities (SPU) and some recyclables are hauled by a City contractor to the City’s contracted recycling processor.”

On page 3.15-51, the 2nd and 3rd sentences are revised as follows:

“Garbage, organics (yard and food waste) and non-traditional recyclables (clean wood waste, appliances and other scrap metal, plastics, paper and other recyclables) are collected at the SRDS. The SRDS has limited traditional recyclables drop-off capacity. Garbage is compacted, and the waste materials are trucked to: an intermodal yard for transfer to trains (solid waste), the Cedar Groves Composting Facility in King County (organics) and other various recycling facilities (recyclables).”

On page 3.15-52, the 1st sentence of the 2nd paragraph is hereby modified to read as follows:

“During redevelopment of Yesler Terrace, construction and demolition waste would be generated by both demolition and construction activities.”

On page 3.15-52, the 2nd sentence of the 3rd paragraph is hereby modified to read as follows:

“Other means of reducing the solid waste generated by redevelopment of Yesler Terrace include: on-site source separated recycling (on-site sorting); potential reuse of demolition materials on-site, and, salvage and reuse of building components.”

On page 3.15-60, the following additional ‘Possible Mitigation Measures’ are hereby incorporated into Section 3.15.5.3:

“Potential demolition and construction mitigation measures could include:

- Salvage reusable components when full deconstruction is not possible.
- Recycle asphalt paving, bricks, recyclable concrete and other masonry.
- Source-separated or comingled recycling of the recoverable clean wood, clean gypsum, metal, tear-off asphalt shingles carpet and other materials with delivery to processing facilities approved by the city.
- Segregate all land clearing debris for composting, wood mulch or topsoil end markets.
- Submit a Waste Diversion Plan and Summary.
- Deliver recyclable materials to processing facilities approved by the City.
- Use compost-amended soils for landscaping needs.”

3.17 Environmental Justice

The Affected Environment Section on page 3.17-2 of the DEIS is modified after this sentence, “The site is situated immediately east of Interstate 5 (I-5)” to include the following:

“Existing sound levels on Yesler Terrace near the southwestern and western edges of the site are exposed to traffic noise from I-5 at levels exceeding HUD noise standards for residential uses. Sound levels at locations in the interior portions of the site are more typical of an urban residential environment, although traffic noise is audible throughout. See Section 3.7, **Noise**, for additional information. The project area is considered an attainment area for all monitored air pollutants except Carbon Monoxide and ozone,

which suggests that air quality is generally good in the vicinity of the site, although challenges exist with recent and more stringent air quality standards, such as for nitrogen dioxide (NO₂) and a pending future short-term ozone standard.”

3.18 Wind

The Impacts Section on page 3.18-1 of the DEIS, the 3rd sentence of the 2nd paragraph is hereby modified to read as follows to change the 681 to 691, the correct number:

“The wind analysis evaluates wind flow impacts from both the building configurations in a 500-foot wide flight path (Option 2), and the building configurations in a wider (691-foot wide) flight path recommended by AirMethods (Option 1)

APPENDIX F – WATER RESOURCES TECHNICAL REPORT

On page 7, the following sentence is hereby added after the 2nd sentence in the 2nd paragraph:

“Stormwater runoff from the entire site is conveyed using man-made systems including GSI to the public combined sewer system.”

On page 10, the following sentence is hereby added after the 1st sentence in the 6th paragraph:

“This analysis utilized a simple flow routing model that does not account for backwater effects or the possibility of additional capacity due to surcharging. “

On page 12, the following sentence is hereby added after the 2nd sentence in the 2nd paragraph:

“The existing non-current standard structures are adequate for collection and conveyance of existing flows. “

On page 15, the following sentence is hereby added after the 3rd sentence in the 4th paragraph:

“Areas of the proposed site that may be classified as "High-Use" based on increased traffic loading or where flow from PGIS is concentrated, will likely require pretreatment before discharging to GSI facilities. “

On page 20, the following sentence is hereby added after the 6th sentence in the 3rd paragraph:

“The construction operator would need to apply for coverage under the NPDES Construction General Permit for Alternative 1-4 and the No Action Alternative. “

On page 22, the following sentence is hereby added after the 1st paragraph:

“BMPs recommended to reduce construction sediment transport from the site include:

- Drip Pans,
- Spill Kits,
- Proper Equipment/Vehicle Fueling and Maintenance Practices. “

On page 22, the following sentence is hereby added after the 2nd paragraph:

“See Section 3.3.2 of Appendix L - Public Utilities Technical Report for a discussion of combined sewer improvements required for each alternative. “

On page 30, the reference to “Appendix F” in the 1st paragraph is hereby modified to read:

“Appendix L“

On page 39, the following sentence is hereby added after the 2nd paragraph:

“Coordination with SDOT’s Streetcar work will be provided to locate utility stubs or sleeves to minimize rework required after streetcar construction is complete. “

On page 39, the following sentence is hereby added after the 4th paragraph:

“The construction operator would apply for coverage under the NPDES Construction General Permit. “

On page 39, the 2nd sentence of the 8th paragraph is hereby modified to read as follows:

“Zinc and copper source controls would extend to rooftops, which would be constructed of inert materials so that water quality treatment facilities for metals removal would not be required. “

On page 39, the eighth paragraph is hereby moved to after the 5th paragraph on Page 40.

On page 40, the 7th paragraph including the heading, “Other possible Mitigation Methods,” is hereby moved to after the 2nd paragraph.

APPENDIX L – UTILITIES TECHNICAL REPORT

On page 20, the second sentence of the 3rd paragraph is hereby modified to read as follows:

“To simulate peak hourly demand (PHD) and maximum day demand (MDD) conditions, Water System Design Manual, WA DOH (the manual) was referenced.”

On page 22, the following sentence is hereby added after the 1st paragraph:

“Water reuse was not considered as a mitigation strategy for this EIS but was explored as option in another report titled, “Yesler Terrace Sustainable District Study,” by CollinsWoerman and Gibson Economics, dated December 12, 2010. This report discusses the environmental and regulatory impacts of using a district approach to water reuse. The Sustainable District Study states that reclaimed water will be most effective if used replace potable water demand for irrigation water, flushwater and laundry water. If a district approach to water reuse is selected as a mitigation strategy during the design phase the demand on the City owned water supply system will be decreased.”

On page 26, Figure 3.1-1, the proposed water main called out 12-inch connecting to 12th Ave in North of EOB is hereby modified to read as follows:

“8” W (8-inch watermain).”

On page 27, Figure 3.1-2, the proposed water main called out 12-inch connecting to 12th Ave in North of EOB is hereby modified to read as follows:

“8” W (8-inch watermain).”

On page 30, the following is hereby added after the 1st paragraph:

“Water reuse was not considered as a mitigation strategy for this EIS but was explored as option in another report titled, “Yesler Terrace Sustainable District Study,” by CollinsWoerman and Gibson Economics, dated December 12, 2010. This report discusses the environmental and regulatory impacts of using a district approach to water reuse. The Sustainable District Study states that the most effective source of reclaimed water would be total black wastewater. If a district approach to water reuse is selected as a mitigation strategy during the design phase the loading on the City owned combined sewer system will be decreased.”

On page 32, 3.2.3 a. ii, the 1st sentence under the NW Sector is hereby modified to read:

“The existing 8-inch and 12-inch combined.”

On page 33, 3.2.3 b. ii, the 1st sentence under the NW Sector is hereby modified to read:

“The existing 8-inch and 12-inch combined.”

APPENDIX N – TRANSPORTATION TECHNICAL REPORT

See Section 3.13, Transportation, above for errata changes to Appendix N.



Chapter 8 - DISTRIBUTION LIST

CHAPTER 8 DISTRIBUTION LIST

Federal Agencies

U.S. Department of Housing and Urban Development, Environmental/Community Planning
Advisory Council on Historic Preservation
U.S. Army Corps of Engineers, Seattle District
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
Federal Emergency Management Agency
U.S. Department of the Interior, Bureau of Indian Affairs
U.S. Environmental Protection Agency, Region 10
U.S. Fish and Wildlife Service

State Agencies

Office of the Governor
Department of Archaeology and Historic Preservation
Department of Commerce
Department of Ecology, Environmental Review Section
Department of Ecology, Shorelands & Environmental Assistance
Department of Natural Resources, SEPA Center
Department of Fish and Wildlife, Region 4
Department of Fish and Wildlife, Habitat Management Division
Department of Social and Health Services (DSHS)
Department of Transportation (WSDOT), Environmental Affairs Office
Department of Health, Environmental Health
State Habitat Office

Regional Agencies

Puget Sound Clean Air Agency
Puget Sound Partnership
Puget Sound Regional Council
Sound Transit

Local Agencies

King County

King County Metro Transit, Environmental Planning
Seattle – King County Department of Health
King County Youth Correctional Facility

City of Seattle

Mayor's Office
City Council
Human Services Department, Community Development Block Grant Program
Department of Planning and Development
Department of Planning and Development, SEPA Register
Department of Neighborhoods

Department of Parks and Recreation
Office of Economic Development
Office of Intergovernmental Relations
Office of Housing
Fire Department
Police Department
Seattle City Light
Seattle Public Utilities, Environmental Review Section
Seattle Department of Transportation

Schools

Seattle Public Schools – Enrollment Planning*
Bailey-Gatzert Elementary School*
Seattle University*

Libraries

Seattle Public Library – Government Publications
Seattle Public Library
Seattle Public Library – International District/Chinatown Branch
Seattle Public Library – Douglass-Truth Branch
UW Built Environments Library*
UW Allen Library*
UW Suzallo Library*

Tribes

United Indians of All Tribes Foundation
Muckleshoot Indian Tribe
Duwamish Tribe
Snoqualmie Tribe

Newspapers

Daily Journal of Commerce*
Seattle Times*
Capitol Hill Times*
Northwest Asian Weekly*
The Seattle Medium Newspaper Group*
ColorsNW Magazine*
Seattle Chinese Post*
South Seattle Beacon*

Other Organizations

Harborview Medical Center*
Swedish Medical Center – First Hill*
Swedish Medical Center –Cherry Hill*
Yesler Terrace Community Council*
Capitol Hill Community Council*
First Hill Improvement Association*
Pike-Pine Neighborhood Council*
Squire Park Community Council*

International District Housing Alliance*
Youth Tutoring Program*
Historic Seattle*
Yesler Community Center*
El Centro de la Raza*
Seattle Displacement Coalition*
SHA Resident Action Council
Community Coalition for Environmental Justice*
Real Change*
Nature Consortium*
Neighborhood House*
Tenants Union*

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Scott Meyer
Bruce Nourish
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Blair Payson
J. Petrait
Brian Porter
Claire Schumacher
Ted Schumacher

Andrew Smith
David Sucher

* Denotes entities that were not sent a hard copy of the FEIS. These entities were provided a copy of the Notice of Availability either electronically or via mail.

**This category includes individuals or organizations that submitted a scoping comment, are not included in the previous categories, and provided contact information.

***This category includes individuals or organizations that submitted a comment on the Draft EIS, are not included in the previous categories, and provided contact information.



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CHAPTER 9 LIST OF PREPARERS

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