April 2015

Federal Way Link Extension

Draft Environmental Impact Statement

VISUAL TECHNICAL REPORT

Appendix G5

SoundTransit
Central Puget Sound
Regional Transit Authority

U.S. Department of Transportation
Federal Transit Administration

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SOUNDTRANSIT

Federal Way Link Extension

Visual and Aesthetic Resources Technical Report

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April 2015

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Acronyms and Abbreviations

EIS	environmental impact statement
FHWA	Federal Highway Administration
FWLE	Federal Way Link Extension
HC	Highline College
I-5	Interstate 5
KOP	key observation point
OCS	overhead catenary system
PR-C	Pacific Ridge Commercial
SR	State Route
TPSS	traction power substation
WSDOT	Washington State Department of Transportation

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Summary

This section provides a summary of potential impacts on visual and aesthetic resources that would result from the Federal Way Link Extension (FWLE) alternatives. Table S-1 lists the number of residences where visual quality would be affected, by alternative. Potential impacts include:

- The elevated guideway of the State Route (SR) 99 Alternative would impact the greatest number of sensitive viewers (residents) of the four alternatives, primarily in residential areas along the SR 99 corridor.
- The I-5 to SR 99 Alternative would impact the second largest number of sensitive viewers because of tree removal near residences located west of, and adjacent to, I-5 north of Kent/Des Moines Road. Sensitive viewers would also be affected by the presence of the elevated guideway in the median of SR 99 adjacent to residences south of S 240th Street.
- The SR 99 to I-5 Alternative would impact the third greatest number of sensitive viewers from residences along the SR 99 corridor north of Kent-Des Moines Road as well as from residences west of, and adjacent, to I-5 south of S 240th Street.
- The I-5 Alternative would impact the fewest sensitive viewers, all of whom would be located in residences west of, and adjacent, to I-5. The I-5 Alternative would require the removal of mature vegetation, primarily large conifers, that screens views of the freeway from adjacent residences on the west side of I-5. This vegetation removal, along with the presence of project features such as elevated guideways (in some areas) and trains, would lower the visual quality of some adjacent areas.

TABLE S-1
Number of Residences Where the Visual Quality of the Viewed Landscape Would be Reduced (Range with Options)

Alternative	Residences
SR 99	**215** (160-230)
I-5	**115** (115-115)
SR 99 to I-5	**130** (85-130)
I-5 to SR 99	**200** (190-200)

As evaluated, none of the station or alignment options would greatly reduce the number of impacted residences for that alternative. The Kent/Des Moines Highline College (HC) Campus Station Option would impact sensitive viewers in residences along the west side of 28th Avenue S south of Kent-Des Moines Road, whereas the segment of the SR 99 Alternative it would replace has no impacts. The S 272nd Redondo Trench Station Option would impact residents between S 279th Street and S 302nd Street in similar numbers to the corresponding portion of the SR 99 Alternative. The remaining station and alignment options would not have additional impacts on residents.

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1.0 Introduction

Visual and aesthetic environments are the landscape's natural and cultural features that can be seen and that contribute to the public's appreciation and enjoyment of their surroundings The visual environment encompasses elements from both the built and natural environments. They can include solitary built and natural landmarks (such as buildings, trees, and bodies of water) or entire landscapes. Impacts on the visual and aesthetic environment are defined in terms of the extent to which the project's presence would change the visual character and quality of the environment.

The description of existing visual and aesthetic conditions in the corridor and the assessment of changes that would be associated with the FWLE are based upon, but do not strictly follow, the visual assessment methodology developed by the Federal Highway Administration (FHWA) for assessing impacts related to transportation projects (FHWA, 1988). The FHWA system is described in Appendix A of this report. Each of the following three factors were used to determine if the alternatives being evaluated would result in impacts on visual and aesthetic resources:

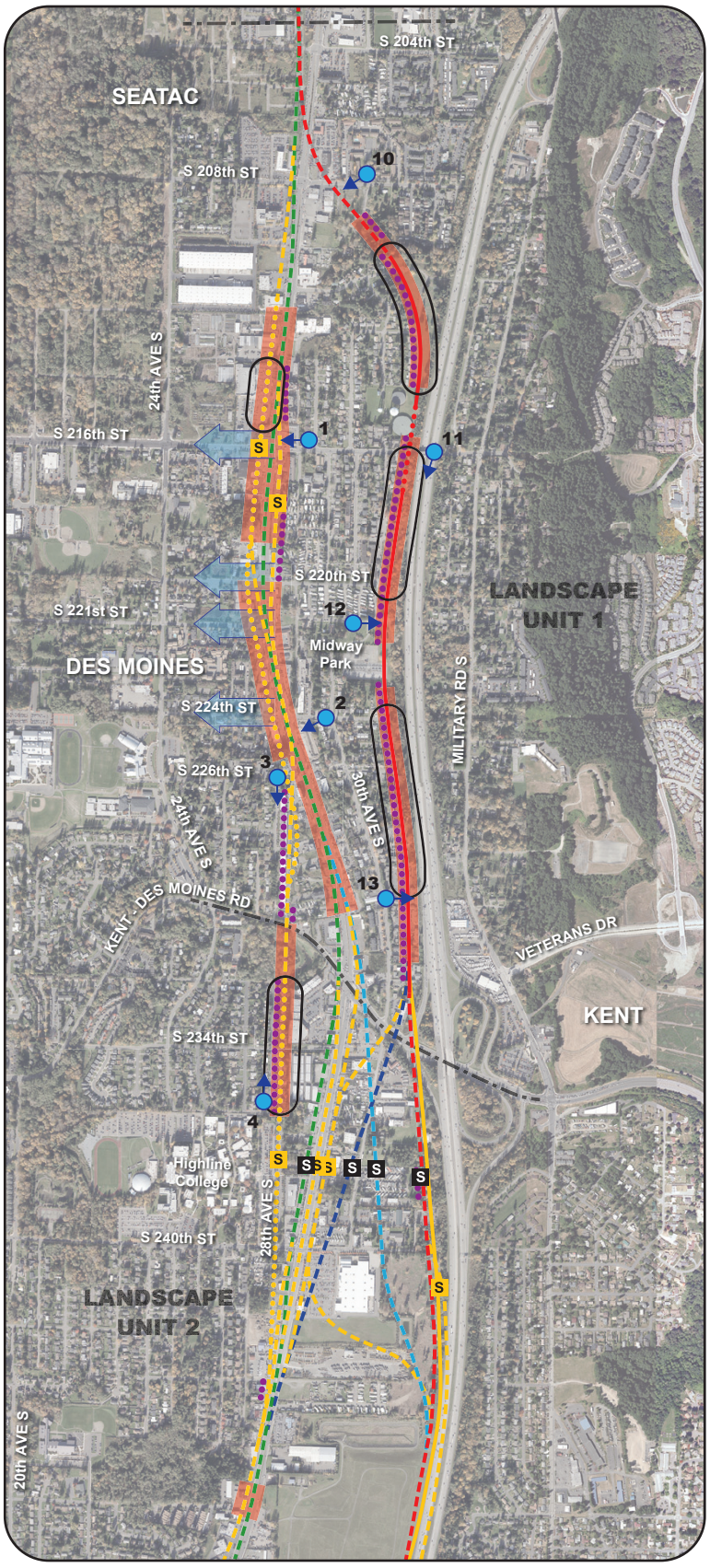
- Change to visual quality near areas with concentrations of sensitive viewers (such as residents and park users who are very familiar with a viewed landscape and would notice changes to it)
- Potential blockage of or intrusion on existing views of Puget Sound, the Olympic Mountains, and Mt. Rainier
- Impacts associated with light and glare related to light rail stations, parking areas, and trains

Of these three, the primary factor for this assessment was determining locations along the corridors of the alternatives and options where the existing visual quality category would be lowered near residences or for sensitive viewers. Residential areas scattered along the corridors contain multi-story residential buildings (apartments and condominiums), mobile homes (usually in mobile home parks), and single-family residences, which are collectively referred to as residences in this technical report. Estimating the approximate number of residences near the alternatives and options where visual quality would be lowered allowed comparisons to be made between the alternatives and options. The other factors—view blockage of Puget Sound, the Olympic Mountains, and Mt. Rainier and impacts associated with light and glare—are discussed in qualitative terms in the assessment of the various alternatives.

In accordance with the FHWA methodology, the FWLE corridor was divided into three landscape units to organize the description of the affected environment and impact assessment. Landscape units are identifiable and distinct geographic areas within a linear project corridor from which there are views (the viewshed) of a proposed action (see Exhibits 1-1, 1-2, and 1-3).

Consistency of the FWLE alternatives with the plans, policies, and ordinances of the cities of SeaTac, Des Moines, Kent, and Federal Way regarding visual or aesthetic resources and/or scenic views was evaluated. None of the documents reviewed from these four cities identified protected views from

specific locations, linear features (such as highways), or view corridors that were applicable to the alternatives being evaluated. Although no protected views were identified in policies, plans and ordinances, views of Puget Sound and the Olympic Mountains were mentioned in several plans as positive elements within the respective jurisdictions. Therefore, areas containing general views to the west of the Olympics and Puget Sound are depicted in Exhibits 1-1 to 1-3. The potential loss of views from the alternatives and/or from future building projects was one of the three factors used to determine if the alternatives being evaluated would result in impacts on visual and aesthetic resources. To determine if any state scenic highways are present in the vicinity of the FWLE project, the Washington Department of Transportation (WSDOT) website that identifies highways designated as scenic or recreational highways was consulted. Neither SR 99 nor I-5 have been designated by the state as scenic or recreational highways in or near the vicinity of the FWLE project (WSDOT, 2014a).



Legend

SR 99 Alternative
- Elevated

I-5 Alternative
- Elevated
- At-Grade
- Trench

SR 99 to I-5 Alternative
- Elevated

I-5 to SR 99 Alternative
- Elevated

Options
- Elevated
- At-Grade
- Trench

Stations
- S — Station for Alternatives
- S — Station for Options
- Landscape Unit Boundary
- Area with Views of Puget Sound, the Olympic Mountains, or Mt. Rainier
- Area with Concentration of Sensitive Viewers
- 5 — Key Observation Point and View Direction
- Average Visual Quality

Note: Portions of Alternative Corridors Not Categorized as Average Visual Quality Are Categorized as Low Visual Quality

- Location Where Visual Quality Would Be Lowered Adjacent to Areas with Concentration of Sensitive Viewers

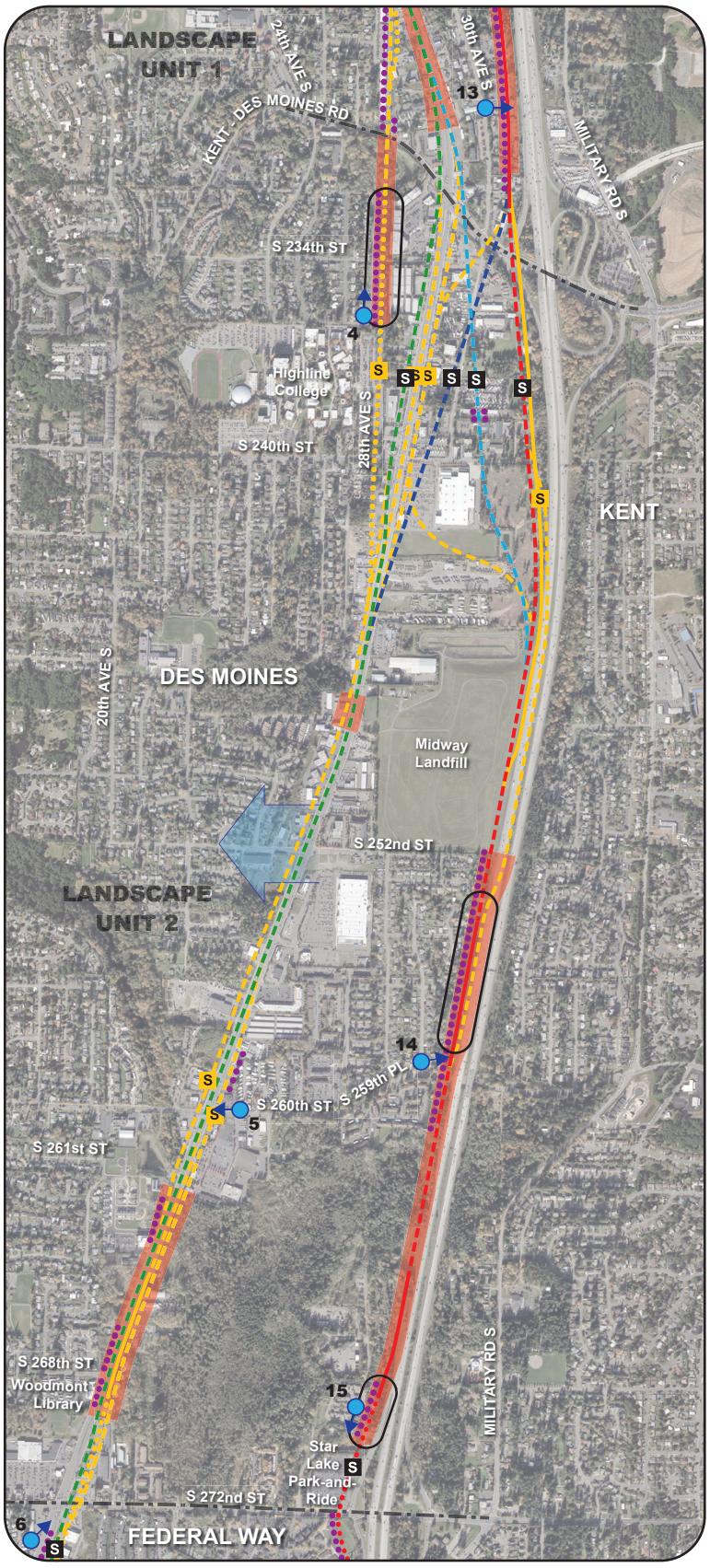
Data Sources: King County, Cities of Des Moines, Federal Way, Kent, SeaTac, AeroMetric (2013).

N

0 0.25 0.5 Mile

Exhibit 1-1
Visual Conditions in Landscape Unit 1

Federal Way Link Extension



Legend

SR 99 Alternative
- Elevated

I-5 Alternative
- Elevated
- At-Grade
- Trench

SR 99 to I-5 Alternative
- Elevated

I-5 to SR 99 Alternative
- Elevated

Options
- Elevated
- At-Grade
- Trench

Stations
- S — Station for Alternatives
- S — Station for Options
- Landscape Unit Boundary
- Area with Views of Puget Sound, the Olympic Mountains, or Mt. Rainier
- Area with Concentration of Sensitive Viewers
- 5 — Key Observation Point and View Direction
- Average Visual Quality

Note: Portions of Alternative Corridors Not Categorized as Average Visual Quality Are Categorized as Low Visual Quality

- Location Where Visual Quality Would Be Lowered Adjacent to Areas with Concentration of Sensitive Viewers

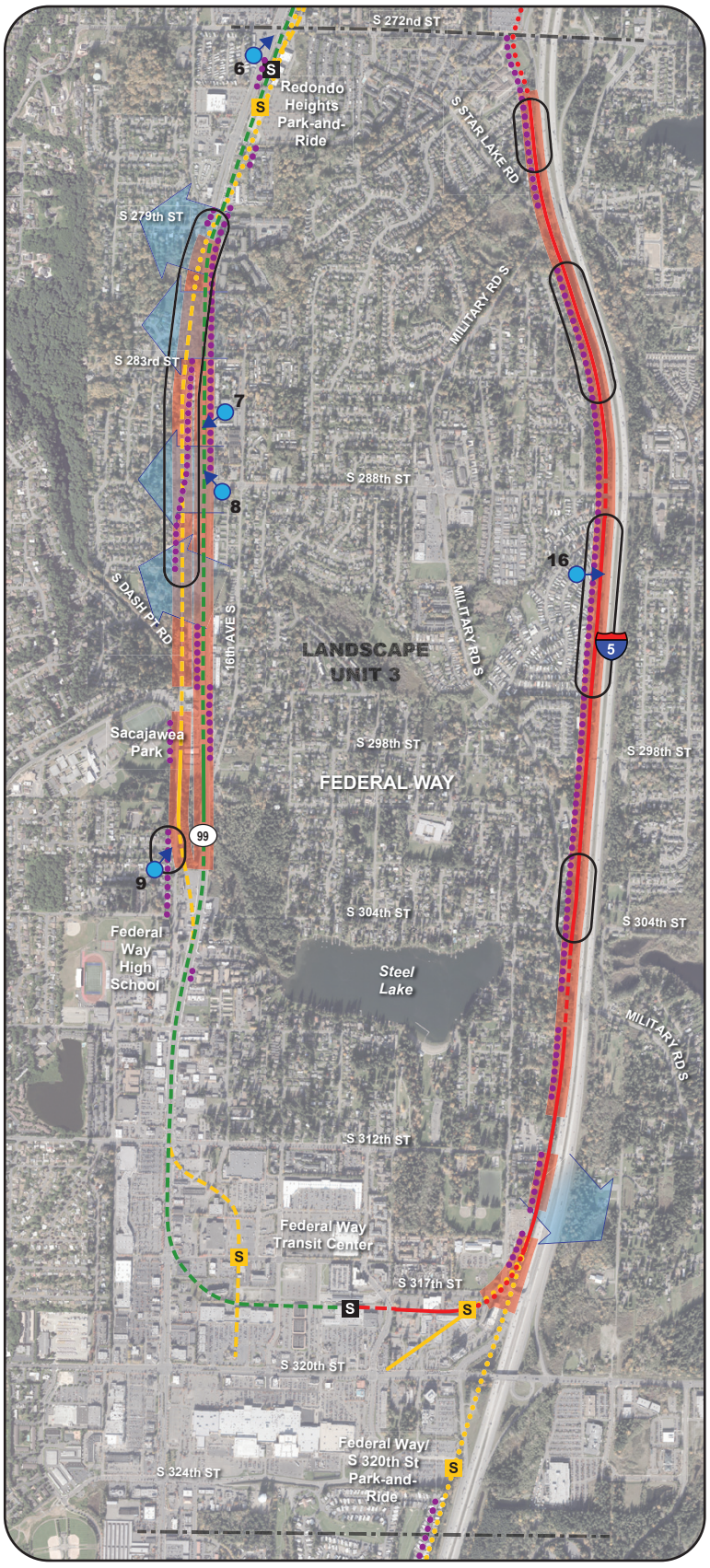
Data Sources: King County, Cities of Des Moines, Federal Way, Kent, SeaTac, AeroMetric (2013).

N

0 0.25 0.5 Mile

Exhibit 1-2
Visual Conditions in Landscape Unit 2

Federal Way Link Extension



Legend

SR 99 Alternative
- Elevated

I-5 Alternative
- Elevated
- At-Grade
- Trench

SR 99 to I-5 Alternative
- Elevated

I-5 to SR 99 Alternative
- Elevated

Options
- Elevated
- At-Grade
- Trench

Stations
- Station for Alternatives
- Station for Options
- Landscape Unit Boundary
- Area with Views of Puget Sound, the Olympic Mountains, or Mt. Rainier
- Area with Concentration of Sensitive Viewers
- Key Observation Point and View Direction
- Average Visual Quality

Note: Portions of Alternative Corridors Not Categorized as Average Visual Quality Are Categorized as Low Visual Quality

- Location Where Visual Quality Would Be Lowered Adjacent to Areas with Concentration of Sensitive Viewers

Data Sources: King County, Cities of Des Moines, Federal Way, Kent, SeaTac, AeroMetric (2013).

N

0 0.25 0.5 Mile

Exhibit 1-3
Visual Conditions in Landscape Unit 3

Federal Way Link Extension

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2.0 Affected Environment

The study area for visual and aesthetic resources is the viewshed of the alternatives being evaluated (generally between approximately 200 to 500 feet from the alternatives alignments). In many locations along the alternatives, views of the elements associated with the alternatives (such as guideways, stations, and trains) would be interrupted by vegetation, terrain, and buildings. The description of the affected environment focuses on landscape character, visual quality, viewer sensitivity, and views of Puget Sound, the Olympic Mountains, and Mt. Rainier.

FWLE Terms

Alternative: A combination of guideway and station locations

Alignment: The horizontal location of the guideway (e.g., in the median, on the west side, or on the east side of a roadway)

Profile: The vertical location of the guideway (e.g., elevated, at-grade, or in a trench)

Landscape character is an objective description of a viewed landscape that considers and describes the various natural and human-built elements that can be seen. Visual quality is an assessment of the composition of character-defining features of selected views. Under the FHWA visual quality analysis methodology, the visual quality of viewed landscapes is determined and evaluated in terms of vividness, intactness, and unity, which are defined as follows:

- **Vividness** is the degree of drama, memorability, or distinctiveness of the landscape components. Vividness is composed of four elements—*landform, vegetation, water features, and human-made elements*—that usually influence the degree of vividness.
- **Intactness** is a measure of the visual integrity of the natural and human-built landscape and its freedom from encroaching elements. This factor can be present in well-kept urban and rural landscapes, as well as in natural settings. High intactness means that the landscape is free of visual intrusions and is not broken up by features that appear to be out of place. Intactness is composed of two primary elements—*development and encroachment*—that influence the degree of intactness.

  Unity is the degree of visual coherence and compositional harmony of the landscape when it is considered as a whole. High unity frequently attests to the careful design of individual components and their relationship in the landscape.

Establishing visual quality categories assists in assessing changes in the visual environment that would occur from the various alternatives and options. The following three visual quality categories are used to describe existing visual quality and to assist in evaluating potential changes to visual quality associated with the alternatives; Appendix A, FHWA Visual Impact Methodology Used for FWLE, Existing Visual Quality, and Impacts of Alternatives on Visual Quality, describes how these three categories were determined:

- **Low Visual Quality:** These areas have low visual quality with some combination of features that seem visually out of place, lack drama or memorability, do not have visual coherence, do not have compositional harmony, and/or might contain encroaching elements.

- **Average Visual Quality:** These areas are commonly occurring or average-appearing landscapes that have a generally pleasant appearance but might lack enough distinctiveness, memorability, drama, and compositional harmony to place them in the high visual quality category. This is generally the most frequent category.
- **High Visual Quality:** These areas must be outstanding in terms of being very memorable, distinctive, unique (in a positive way), and/or intact. The areas can be natural, park-like, or urban (with urban areas displaying distinctive and consistent architectural and urban design features).

Exhibits 1-1, 1-2, and 1-3 depict (in orange) the visual quality areas along the FWLE alternatives and options that have been categorized as average visual quality. Areas adjacent to the corridors that do not have average visual quality have been categorized as having low visual quality. No areas along the portions of the SR 99 or I-5 corridors in the project area were categorized as having high visual quality.

Sound Transit, in consultation with local jurisdictions, selected 16 site-specific locations from which to take photographs showing existing visual conditions. Those photographs were used to develop photographic simulations to (1) illustrate how existing visual characteristics of areas where the proposed project would be located would change with FWLE alternatives and options, (2) assist in evaluating changes to visual quality, and (3) depict areas where project components could potentially intrude upon, or block, views of Puget Sound, the Olympic Mountains, and Mt. Rainier. The locations, or key observation points (KOPs), are shown in Exhibits 1-1, 1-2, and 1-3, as are areas along the FWLE corridor that have views of Puget Sound and the Olympic Mountains. Appendix B, Key Observation Point Analysis, provides a description of the existing conditions of each KOP (including visual quality), as well as descriptions of how the alternatives would affect existing conditions and information on the types of viewers from each KOP who would see potential changes associated with the alternatives. Existing condition photographs from each KOP as well as simulations of the alternatives are included in Appendix C, Simulations.

People who view and experience a landscape (viewers) have low, medium, or high sensitivity to changes in the viewed environment. Viewer sensitivity is strongly influenced by a viewer's awareness of his or her surroundings, the activities they are engaged in, and the amount of time spent looking at a view (viewer duration). People such as residents and park users who see a landscape multiple times for long periods of time and are familiar with it would be aware of changes in the landscape and have high viewer sensitivity. Viewers with medium viewer sensitivity include workers and customers who might expect a somewhat pleasant visual setting for the establishments they work in or visit, but are in the locations for purposes other than enjoying its scenery or visual quality. Students, faculty, and members of religious congregations would also be expected to have medium viewer sensitivity. People who view a landscape infrequently, view it for short periods of time, or are not attentive to it because they are focusing on other activities (such as working) are often less sensitive to changes and are assumed to have low viewer sensitivity. People sightseeing on highways or driving through their neighborhood are considered to have high to medium viewer sensitivity. Commuters and other drivers primarily passing through an area are considered to have low viewer sensitivity because they often become accustomed

(and indifferent) to the views along their travel routes because of repetition and short viewing duration.

Areas adjacent to the alignments of the FWLE alternatives that contain residences, parks, or community centers (such as the Woodmont Library) where people with high viewer sensitivity are located were identified and labeled as "areas with concentrations of visually sensitive viewers" (see Exhibits 1-1 to 1-3). These areas are the focal point for identifying locations where the FWLE alternatives could potentially impact visual and aesthetic resources.

2.1 SR 99 Corridor

The character of the six-lane SR 99 corridor is typical of major arterial transportation corridors where automobile-oriented commercial development has evolved over the last several decades (see Section 4.2, Land Use, of the Draft Environmental Impact Statement [EIS] for a more detailed description of land uses along SR 99). The wide variety of land uses along the SR 99 corridor include many large-scale, low-rise commercial, manufacturing, and storage buildings with extensive paved areas for parking or storage that do not support visual order, intactness, or unity. As a result, large parts of the SR 99 corridor have a utilitarian appearance and a visual quality category of low. As areas along the SR 99 corridor develop, redevelop, or receive additional streetscape improvements, the character of the corridor has evolved and will continue to evolve from large-scale commercial, "strip mall" commercial, and undeveloped, to residential and/or office and smaller commercial. Visual quality in these areas is expected to improve. Areas that in past years would have been considered to have low visual quality have improved in recent years, and large swaths of the SR 99 corridor have been categorized as having average visual quality (see Exhibits 1-1 to 1-3).

No specific protected views along the SR 99 corridor were identified in plans or policies developed by cities within the FWLE corridor. However, during site visits and conversations with staff from these cities, westward views of Puget Sound and the Olympic Mountains from parts of SR 99 and adjacent areas (and Mt. Rainier from the I-5 corridor) were identified as important features to these communities.

The following subsections provide a brief description of the affected environment of Landscape Units 1 through 3. For more information on how the existing visual quality was determined, see Table A-1 in Appendix A.

Landscape Unit 1: Landscape Unit 1 begins at the northern end of the FWLE corridor and continues south through SeaTac and Des Moines to Kent-Des Moines Road. The cities of SeaTac and Des Moines have made efforts to improve the appearance of the SR 99 corridor by establishing landscaped medians, planting street trees near sidewalks, and encouraging or requiring landscaping on adjacent properties. The northern

Future Development along SR 99

As properties along the west side of SR 99 redevelop over time, views of Puget Sound and the Olympic Mountains from SR 99 and areas east of SR 99 could be impacted. For example, areas on the west side of SR 99 in the vicinity of S 216th Street have been zoned Pacific Ridge Commercial 2 (PR-C2). This zone allows a maximum height of 75 feet, except for 1-acre parcels where buildings as tall as 200 feet can be built if a floor area ratio height bonus is approved. As these properties redevelop over time, there is a good chance that views of Puget Sound and the Olympic Mountains from SR 99 and areas east of it could be restricted to road corridors like those near S 216th Street and S 224th Street.

part of this landscape unit contains a number of large-scale, commercial developments surrounded by extensive areas of parking, and smaller developments that are sometimes termed strip developments. Although areas along this section of SR 99 are generally neat and well maintained, the presence of large-scale parking areas and strip developments creates a lack of intactness and unity and, as a result, the visual quality is low along parts of the northern section of the SR 99 corridor in Landscape Unit 1. Newer developments, such as the multi-family residential development north of S 216th Street, streetscape improvements, and landscaped medians, have begun to change the character of parts of this landscape unit and its visual quality. As seen in Exhibit 1-1, the visual quality of much of the SR 99 corridor in Landscape Unit 1 is average. Areas with concentrations of sensitive viewers in Landscape Unit 1 include an area with multi-story residential buildings east of SR 99 and north of S 216th Street and a mobile home park east of SR 99 between S 216th Street and S 220th Street. Views from SR 99 toward Puget Sound and the Olympic Mountains are generally restricted by topography, buildings, and/or vegetation, but are possible from areas along the east side of the SR 99 corridor such as the multi-family building described above. Views from SR 99 and roadways east of SR 99 such as S 216th, 220th, 221st, and 224th streets are limited, but possible (see KOP 1, Exhibit 1a, and KOP 2, Exhibit 2a, in Appendix C). Light and glare from vehicles travelling on SR 99 can be observed from within the corridor and on adjacent properties.

Landscape Unit 2: Landscape Unit 2 travels through Kent and Des Moines. The SR 99 corridor in Landscape Unit 2 is similar in character to Landscape Unit 1, with fewer landscaping features along the street and median. The portion of SR 99 in Landscape Unit 2 has less visual unity than in most of Landscape Unit 1 and has more areas of low visual quality (see Exhibit 1-2). Areas along SR 99 with concentrations of visually sensitive viewers include a mobile home park north of S 260th Street and east of SR 99, and two small subdivisions north of S 268th Street and west of SR 99. In the vicinity of the SR 99 and S 252nd Street intersection, there are limited views of Puget Sound and the Olympic Mountains. SR 99 Alternative options would pass near neighborhoods west of, but not adjacent to, SR 99 that have concentrations of sensitive viewers. As is the case in Landscape Unit 1, light and glare from vehicles travelling on SR 99 can be observed from within the corridor and on adjacent properties.

Landscape Unit 3: Landscape Unit 3 is located within Federal Way where SR 99 contains a number of raised landscaped medians, landscaped parking strips, and street trees. Newer developments on adjacent lands, particularly residential developments, tend to have landscaping, which helps to unify the character of this part of SR 99. The visual quality of most of Landscape Unit 3 is average, except for commercial areas with parking lots that are categorized as low visual quality. As indicated in Exhibit 1-3, there are a number of areas with concentrations of visually sensitive viewers along this part of the SR 99 corridor with a mix of single-family residential neighborhoods and multi-story residential buildings immediately adjacent to SR 99. A number of the multi-story residential complexes on the east side of the corridor are elevated above SR 99 and have views to the west of Puget Sound and the Olympic Mountains. Street level views of Puget Sound and beyond are possible from some parts of SR 99 in Landscape Unit 3.

2.2 I-5 Corridor

The following description of I-5 is not differentiated by landscape units as is the SR 99 Alternative in the preceding subsection because I-5 is fairly consistent in terms of character and visual quality. There is a distinctive visual connection along the freeway because of its generally north-south orientation and fairly straight alignment.

I-5's eight travel lanes, center divider, shoulder, cleared area adjacent to the shoulder, and vegetated areas beyond are typical of major interstate highways. Many motorists drive through the FWLE corridor on I-5 each day. The western view from I-5 in the FWLE corridor contains mature vegetation beyond the cleared right-of-way and is typical of the highway. Vegetation is predominantly mature conifer trees, which provide a visual barrier between the freeway and adjacent land uses. These types of vegetated areas are not uncommon in the greater Seattle metropolitan area, but do offer a visual contrast to areas adjacent to I-5 that do not have such vegetation and allow views of adjacent urban land uses. One noticeable exception is the Midway Landfill, where vegetation is limited to maintained grass and no trees are present.

Most of the neighborhoods adjacent to I-5 are visually screened from the freeway by this vegetation and/or sound walls. Most of the residences adjacent to and west of I-5 are oriented away from the freeway. Where I-5 can be seen from adjacent areas, its presence influences the character of adjacent land uses and the visual quality of the surrounding area. Several units in multi-story buildings near the south end of Landscape Unit 3 have balconies that face east toward I-5, with views of Mt. Rainier beyond I-5. Vegetation along the edge of I-5 serves as a distinctive backdrop for many adjacent neighborhoods, as well as a pleasant backdrop for people driving on I-5. Exhibits 1-1 through 1-3 show that the visual quality of much of the I-5 corridor is average.

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3.0 Environmental Impacts

The following three factors were used to determine whether the alternatives being evaluated would result in impacts on visual and aesthetic resources:

- Change to the visual quality of the corridors near areas with concentrations of visually sensitive viewers (mostly residents)
- Potential blockage or intrusion on existing views of Puget Sound, the Olympic Mountains, or Mt. Rainier
- Impacts associated with light and glare related to light rail stations, parking areas, and trains

This section discusses the relationships between these three factors and the FWLE alternatives, and also discusses the No Build Alternative.

3.1 No Build Alternative

With the No Build Alternative, there would be no construction of new transit facilities and no acquisition of properties that would result in existing buildings being removed. As individual properties redevelop over time, changes to the visual environment would occur incrementally. Westward views of Puget Sound and the Olympic Mountains, which are currently possible from locations along SR 99 and properties on the east side of SR 99, might change over time if properties adjacent to SR 99 are redeveloped to their allowed zoning heights (see Section 3.4.1, SR 99 Alternative). Views of Mt. Rainier from multi-story residential buildings near the south portion of the I-5 Alternative adjacent to I-5 would be less likely to change over time because there is no developable land between the existing buildings and I-5.

3.2 Build Alternatives

The FWLE alternatives were developed with consideration given to minimizing potential visual impacts. The following minimization measures were included during conceptual design to avoid and minimize impacts:

- Selecting and/or modifying alignments to avoid or reduce the need to acquire and clear new right-of-way. This measure has already been incorporated to a great degree in identifying alignment and station alternatives and includes using existing transportation corridors (arterial streets and highways, limited-access highways) and a utility corridor.
- Minimizing the height of elevated structures and stations to the extent allowed by required vertical clearances.
- Incorporating trenched and at-grade alignments where possible to eliminate the need for elevated structures, resulting in reduced visual and aesthetic impacts.
- Minimizing total area disturbed for construction and operation.

- Maintaining surplus property for redevelopment by other parties.

The simulations in Appendix C that were developed for KOPs to depict FWLE alternatives show the conceptual design of these alternatives. The simulations provide an idea of the expected scale and general appearance of elements associated with the alternatives when seen from adjacent areas. The simulations that were developed do not include many of the potential mitigation measures described in Chapter 4.0, Potential Mitigation Measures, such as revegetation with native vegetated areas, landscape screening, station design, and art. Conceptual noise barriers on elevated guideways and sound walls are depicted in some simulations for the KOP assessment in Appendix B, as are conceptual areas where landscaping would be appropriate, to provide a general indication of the scale of these features. Mitigation commitments would be developed once a Preferred Alternative is identified and would include input from the community and cities in the project corridor.

Light rail passengers in this area would have views of the corridor except where the guideway would be in a trench or adjacent to sound walls., Motorists would have views of the FWLE trains and facilities as they drive past them. Simulations depicting views from the trains were not developed because it would not be possible to compare “before” project photographs with simulations of the project from the trains. Simulations depicting street-level views of the FWLE alternatives were developed to depict views of the corridor that would be seen by pedestrians, motorists, and people on adjacent properties.

3.3 Direct Impacts

3.3.1 Impacts Common to All Build Alternatives

All of the FWLE alternatives and options would change the visual environments in which they would be constructed. Exhibits 1-1 to 1-3 depict the routes of the FWLE alternative and option alignments and proposed profile (at-grade, elevated, or trench). The construction and operation of the alternatives and options would require the removal of a variety of existing visual features such as buildings, street trees, landscaped areas, slopes, and parking lots. Some streets would require minor widening and others would require bridging structures where the alternative would pass beneath them in a trench. Table 3-1 identifies the main components of the FWLE and describes their visual characteristics.

The evaluation of impacts associated with the build alternatives focuses on how they would change the visual conditions of the corridors they would be located in. Most sensitive viewers (residents) who would see impacts would do so from adjacent properties. The FHWA methodology refers to this as “views of the road” from nearby areas. The FHWA methodology also refers to “views from the road” that would be seen by people travelling on the road. Both types of views are depicted in the simulations in Appendix C that were developed to depict views of alternatives and options that would be seen by pedestrians, motorists, and people from adjacent properties.

TABLE 3-1
Visual Characteristics of FWLE Components

Project Component	Visual Characteristics and Notes
Elevated Guideways or Structures (piers, straddlebents)[a]	These are often the most visible project elements. The bottom parts of elevated guideways would range between approximately 18 feet and 80 feet above grade. In some locations, elevated guideways (and their associated overhead catenary system [OCS]) could intrude on views of the Puget Sound and/or Olympic Mountains, although they might not block them altogether. Elevated stations (and guideways to a lesser extent) could create shadows that could have negative impacts. However, stations and associated structures such as elevators, escalators, and walkways would be designed to be attractive architectural elements or features in the areas where they would be built and would add visual interest to the nearby area.
Overhead Catenary System	The OCS is a highly visible element from close viewing distances. OCS elements (wires and poles) become less visible as viewing distances increase. The structures may intrude on views of the Puget Sound and/or Olympic Mountains but would not block views of the Puget Sound and/or Olympic Mountains because of their thin, cable-like profile and appearance.
Stations	The boarding platforms would be approximately 380 feet long. Depending on size, bulk, and whether they would be elevated, trenched, or at-grade, stations could block views of the Puget Sound and/or Olympic Mountains, intrude on views, cast shadows, or add built elements to the landscape. Elevated stations would generally be more visible than at-grade stations and would contain features such as escalators, elevators, and stairs.
Parking Structures	Depending on size and bulk, parking structures could block existing views of the Puget Sound and/or Olympic Mountains. Parking structures can be designed or assigned criteria to match surrounding architecture types to help them aesthetically fit with their surroundings. Local landscape regulations would be followed to help parking structures visually and aesthetically better blend into the areas where they would be located.
Parking Lots	Parking lots result in additional hard surface, which is low in visual interest. Some jurisdictions require landscaping that can reduce the visual impact. Local parking lot and relevant landscape regulations would be followed to help parking lots visually and aesthetically better blend into the areas where they would be located.
Lighting and Glare Associated with Structures and Parking Lots	Project-related lighting could create light impacts, potentially create glare impacts, increase the level of ambient light in nearby areas, and increase skyglow, which can adversely affect nighttime views of the stars. This is true of both operation and construction. Design-related measures such as shielding and altering light direction in stations, parking structures, and parking lots would be used where appropriate to reduce potential impacts. Glare impacts from the FWLE alternatives would be unlikely. “Glare” is defined by the online Merriam-Webster Dictionary is “a harsh uncomfortably bright light” (Merriam-Webster, 2013); given this definition, potential reflection from stations might be seen under certain conditions and at certain times of the day, but would not produce harsh, uncomfortable bright light.
Lighting Associated With Trains	Lights from the interior of FWLE light-rail trains and train headlights would be seen at night in some locations as the light rail passes viewers. Briefly seeing light associated with light-rail trains passing would not be expected to create visual disturbances, given the existing level of traffic found along the SR 99 and I-5 corridors at night. Some sensitive viewers living in units that would be adjacent to elevated structures might find passing night-time light-rail visually disturbing.
Building Removal	Removal of existing buildings can improve or detract from visual settings, depending on building condition, style, scale and color. Areas where buildings would be removed would contain project elements and/or be revegetated to better blend in with nearby areas.
Vegetation Removal	Removal of vegetation can open up views that are nonexistent or, conversely, expose other unsightly views, such as parking areas or other generally unattractive elements. When possible, Sound Transit would preserve existing vegetation, replant vegetation, replace trees, and screen to minimize effects of vegetation removal.
Retaining Walls	Retaining walls often replace vegetated hillsides with hard materials such as concrete that might require surface design treatments to reduce impacts. Where appropriate, retaining walls would be treated with surface design enhancements.
Sound Walls	Sound walls or noise barriers are built of solid materials and placed adjacent to or attached to the light rail guideway. When these measures are not effective, sound walls might be constructed along property lines, sometime replacing existing fences. The height and location of sound walls are not final in this EIS, and when depicted in visual simulations, are not intended to depict final height and location.
Trenches	Trenches would only be visible from nearby areas. Design guidelines and coordination with local jurisdictional design review would be applied to the fencing and/or walls located at the top of a trench; this fencing or walls would be the most visible elements of this feature.
Traction Power Substations	The traction power substation (TPSS) would be in enclosed buildings, about 20 feet by 60 feet in size, with an additional 10 to 20 feet required around each unit. Where appropriate, they would be screened from public view with a wall or fence. The exterior walls or fences would be landscaped in accordance with the landscape regulations of the jurisdictions where the facilities would be located.

[a] Piers are columns holding up the elevated guideway. Straddlebents are supports made of two columns that support a beam on which the guideway sits.

Given the developed nature of areas in the vicinities of the potential stations and the mitigation measures described in Section 4, Potential Mitigation Measures, the presence of the lights at the stations and parking areas would not be expected to be disturbing to sensitive viewers (primarily residents). Lights from passing trains (some of which may be elevated) could be seen by some nearby residents, although sound walls (which would often be located on alignments adjacent to residential areas) would tend to block views of train headlights and interior lights depending upon the height and placement of the sound wall. The presence of passing trains at night would be brief, but might disturb some sensitive viewers, although similar lights from vehicles passing by along SR 99, I-5, or other arterials are currently seen along many of the alternative corridors.

3.4 Impacts by Alternative

The following subsections describe the visual impacts from the FWLE alternatives in terms of the three factors evaluated for this EIS: reductions in visual quality along the corridors of the alternatives in locations adjacent to areas with concentrations of residents; potential blockage or intrusion on existing views of Puget Sound, the Olympic Mountains, or Mt. Rainier; and potential impacts associated with light and glare from components associated with the alternatives. Table 3-2 provides a summary of the estimated number of residences near FWLE alternative corridors where visual quality would be lowered. Table 3-3 identifies the number of residents near FWLE alternative option corridors where visual quality would be lowered and compares those numbers to the corresponding section of the SR 99 Alternative that the option would replace.

TABLE 3-2
Reduction in Visual Quality Category by Alternative Near Areas along SR 99 with Concentrations of Sensitive Viewers (by Approximate Number of Residences)

Analysis Area[a]	Number of Residences Near Areas with Reduction in Visual Quality		
	SR 99 Alternative	SR 99 to I-5 Alternative	I-5 to SR 99 Alternative
Landscape Unit 1			
North of S 216th Street	45	45	Not applicable
Landscape Unit 2			
North of S 260th Street	None	None	None
Landscape Unit 3			
S 279th St. to S 283rd St.	40	Not applicable	40
S 283rd St. to S 288th St.	70		70
S 288th St. to Dash Point Rd.	40		40
Dash Point Rd. to S 303rd St.	20		20
Total Residences	**215**	**130**	**200**

[a] Segments of the landscape units with average visual quality categories near areas with concentrations of sensitive viewers.

TABLE 3-3
Reduction in Visual Quality Category by Alternative Near Areas along I-5 with Concentrations of Sensitive Viewers (by Approximate Number of Residences)

Analysis Area[a]	Number of Residences with Reduction in Visual Quality		
	I-5 Alternative	SR 99 to I-5 Alternative	I-5 to SR 99 Alternative
Landscape Unit 1			
S 211th St. to S 216th St.	15	Not Applicable	15
S 216th St. to Kent-Des Moines Rd.	15		15
Landscape Unit 2			
S 252nd to S 259th St.	10	10	Not applicable
S 259th St. to Star Lake Park-and-Ride	5	5	
Landscape Unit 3			
S 272nd St. to Military Rd.	5	5	Not applicable
Military Rd. S to S 288th St.	10	10	
S 288th St. to S 298th St.	30	30	
S 298th St. to S Military Rd.	10	10	
S Military Rd. to S 312th St.	10	10	
S 312th St. to 28th Avenue S	5	5	
Total Residences	**115**	**130**	**200**

[a] Segments of the landscape units with average visual quality categories near areas with concentrations of sensitive viewers.

3.4.1 SR 99 Alternative

The SR 99 Alternative elevated guideway would be taller than most adjacent structures. It would not, however, be inconsistent with the utilitarian character of portions of the corridor that are adjacent to large-scale, low-rise commercial and industrial buildings that are surrounded by expansive paved areas for vehicle parking or storage. Many of these areas have low visual quality and do not contain sensitive viewers; the SR 99 Alternative would not reduce visual quality in these areas. In residential areas (primarily containing multi-story residential buildings) of the SR 99 corridor that have average visual quality, the SR 99 Alternative elevated guideway would be generally out of scale and would reduce the visual quality of the SR 99 corridor to low. Areas where the visual quality of the corridor would be lowered near areas with concentrations of sensitive viewers are indicated in Exhibits 1-1 to 1-3. Table A-1 in Appendix A provides a detailed description of how the SR 99 Alternative would, or would not, change visual quality along segments of corridor.

Many areas along the SR 99 corridor that have been categorized as having average visual quality contain landscaped medians, street trees, and sidewalk/adjacent property planting areas. The SR 99 Alternative would require the removal of portions of landscaped medians in SR 99 for guideway support columns and/or turn lanes. Where medians that currently contain landscaping would be affected, existing vegetation would be maintained to the extent possible, although existing trees that might grow too tall to fit under the elevated guideways would likely be replaced with smaller trees or

shrubs. Landscaped medians would be replanted in consultation with local jurisdictions and would be expected to obtain the current degree of attractiveness within approximately 5 to 8 years.

The following subsections describe where the SR 99 Alternative would have impacts on visual quality near areas with concentrations of sensitive viewers and describes potential impacts related to view blockage of Puget Sound and the Olympic Mountains, and impacts due to and light and glare. Although the elevated guideways could intrude upon or block views of Puget Sound and the Olympic Mountains from SR 99 and adjacent areas, the elevated guideways and stations would offer passengers expansive elevated views in some locations that would include views of Puget Sound and the Olympic Mountains.

3.4.1.1 Visual Quality

Landscape Unit 1

In Landscape Unit 1, the presence of the elevated structure along the median of SR 99 would not be consistent with the residential character of the area east of SR 99 and north of S 216th Street. The scale of the elevated structure adjacent to the multi-story residential buildings would encroach on views up and down the SR 99 corridor from west-facing units in the buildings. The elevated structure and replacement of the existing median would lower the existing average intactness and unity of the corridor. Visual quality would be reduced from average to low in this area.

The SR 99 Alternative would pass west of a mobile home park located south of S 216th Street on the east side of SR 99. Part of the park is adjacent to a segment of SR 99 that has average visual quality. Views to the west from the residences within the park are currently restricted by the presence of trees throughout the park, other residences, and a perimeter wall and fence next to SR 99 that block views of it from within the park. The presence of the elevated guideway would add a large-scale element to the corridor and would somewhat encroach on views between trees and structures and over the wall and fence of the SR 99 corridor. The presence of the elevated structure would lower visual quality along the corridor, but not enough to reduce it from average to low.

Landscape Unit 2

The southern end of Landscape Unit 2 contains sensitive viewing areas (a small subdivision and the Woodmont Library) that are adjacent to a part of the corridor with average visual quality. The elevated guideway of the SR 99 Alternative would pass this area in the SR 99 median and would be clearly seen in front of the forested area on the east side of SR 99 from the library and partially seen through trees from the subdivision. The presence of the elevated guideway along the median would reduce the vividness and intactness of the SR 99 corridor, but it would not lower the visually quality enough to reduce it from average to low in this section.

Landscape Unit 3

In Landscape Unit 3, the elevated guideway would pass a series of residential areas adjacent to parts of the SR 99 corridor that have average visual quality. Most of the residential areas are found along the east side of SR 99 and consist of multi-story buildings that have been constructed on terrain higher than SR 99 and have views down to it. Some isolated areas in Landscape Unit 3 contain single-family residences and mobile homes that are generally at the same elevation as SR 99. The scale and presence of the elevated guideway above the median in these residential areas would not be consistent with the

residential character of these areas and would reduce the average visual quality of these parts of the SR 99 corridor to low in a number of areas. The elevated guideway would also intrude on, or block, views of Puget Sound and the Olympic Mountains from some areas along this section of the SR 99 corridor (see KOPs 7 and 8, Exhibits 7b and 8b, in Appendix C of this report).

3.4.1.2 Views

A number of the west-facing residences in Landscape Unit 1 north of S 216th Street and east of SR 99 have elevated views that include Puget Sound and the Olympic Mountains. The SR 99 elevated guideway could intrude upon, or block, residents' views of Puget Sound and the Olympic Mountains. In Landscape Unit 3, the SR 99 Alternative elevated guideway would also intrude upon or block views of Puget Sound and the Olympic Mountains from residences located along the east side of SR 99, as well as from parts of SR 99.

3.4.1.3 Light and Glare

Interior lights from trains passing on elevated guideways would be visible from some nearby residences and could disturb residents to varying degrees. Headlights from trains could also be visible from some (but not most) residences near the elevated guideways, although sound walls would limit the visibility of the headlights. Although lights from vehicles traveling on SR 99 are currently visible from some residences, interior lights from trains passing on elevated guideways at night may be more visible from residences located on upper floors of buildings than are lights from the vehicles currently travelling on SR 99. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

Building Heights

Current zoning would allow buildings to be built along much of the SR 99 corridor in Landscape Unit 1 that would be taller than current buildings and would potentially intrude upon or block views of Puget Sound and the Olympic Mountains. Exhibit 1a in Appendix C depicts what the SR 99 corridor would look like when viewed from S 216th Street under the current conditions, without considering what current zoning would allow to be built. If buildings on these properties were built to the heights allowed in current zoning, views of Puget Sound and the Olympic Mountains could be blocked regardless of FWLE construction. Properties along the west side of SR 99 south of S 216th have been zoned as Pacific Ridge Commercial 1 (PR-C1) and could be developed to as high as 55 feet; areas on the west side of SR 99 that are north of S 216th Street have been zoned as Pacific Ridge Commercial 2 (PR-C2) and could be developed even higher. The maximum height of areas zoned PR-C2 is 75 feet; however, for 1-acre parcels where a floor area ratio height bonus is granted, buildings can be built as tall as 200 feet.

3.4.2 SR 99 Alternative Station Options

The following subsections discuss the station options associated with the SR 99 Alternative. Options that would lower the visual quality of areas next to concentrations of sensitive viewers are identified as are options that would have impacts from view interruption or blockage and/or impacts from light and glare.

3.4.2.1 S 216th West Station Option

Visual Quality

The guideway for the S 216th West Station Option would be elevated from its starting point to approximately S 211th Street, where it would travel in a trench west of SR 99 from near S 211th Street to south of S 220th Street. From just south of S 220th Street, it would transition to elevated on its way back to the median of SR 99. The S 216th West Station Option would require the removal of

commercial buildings and parking areas along the west side of SR 99 in a portion of the corridor with average visual quality. The station associated with this option would be in a trench and have a low profile (see KOP 1, Exhibit 1c, in Appendix C). Trains and OCS in the trench would not be noticeable (or be seen at all) from most units in the residential buildings on the east side of SR 99 north of S 216th Street or from the mobile home park south of S 216th Street. The S 216th West Station Option would not lower the visual quality of the portion of the SR 99 corridor near the station that has average visual quality. It would avoid the SR 99 Alternative impacts to the sensitive viewers on the east side of SR 99 that are north of S 216th Street.

Views

Because portions of the alignment and the station would be located in a trench, these parts of the station option would not intrude on views of Puget Sound and the Olympic Mountains from areas east of SR 99 (see KOP 1, Exhibit 1c, and KOP 2, Exhibit 2d, in Appendix C).

Light and Glare

Because the trench portion of the alignment would be directly west of the residences on the east side of SR 99 that are north of S 216th Street, residents would only see the lights from trains if they could look down into the trench. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

3.4.2.2 S 216th East Station Option

Visual Quality

The elevated guideway leading into the S 216th East Station Option would pass within approximately 40 feet of the southern-most of the multi-story residential buildings north of S 216th Street and east of SR 99. The elevated structure would introduce a large-scale element that would be out of character with a residential area and would reduce the average visual quality of this part of the SR 99 corridor to low. These impacts would also occur with the SR 99 Alternative and this option would not increase impacts. The location of the light rail would be closer to these residences with this option, however, and would intensify impacts.

The elevated station would require a number of the residences in a mobile home park south of S 216th Street to be removed. The elevated station would be immediately west of the residences that would remain in the mobile home park and would be highly visible from it. The elevated station would change the character of western views from the mobile home park from residential to transportation. For the remaining residences, the elevated station would be much larger in scale than nearby objects, but would slightly improve the visual quality of areas near the station and mobile home park. The average visual quality of this part of the SR 99 corridor would be maintained. Although this option would not lower visual quality, the presence of the elevated station would be much more noticeable to residents in the mobile home park than the SR 99 Alternative elevated guideway would be.

Views

The elevated guideway leading to the station would intrude upon, or block, views of Puget Sound and the Olympic Mountains from the residences east of SR 99 and north of S 216th Street, as well as from streets such as S 216th Street (see KOP 1, Exhibit 1d, in Appendix C). Because the guideway would be

closer to the residences east of SR 99 and north of S 216th Street than the SR 99 Alternative, more of the views of Puget Sound and the Olympic Mountains from these residences would potentially be intruded upon or blocked by this option.

Light and Glare

Lights from trains would be seen at eye level from some residences north of S 216th Street and from below (but less visibly) from residences such as those in the mobile home park that would remain east of the elevated station. The light could disturb residents to varying degrees. Because the guideway would be closer to the residences east of SR 99 and north of S 216th Street than the SR 99 Alternative guideway would be, lights from trains could disturb residents to a greater degree than the SR 99 Alternative would. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the station.

3.4.2.3 Kent/Des Moines HC Campus Station Option

Visual Quality

The Kent/Des Moines HC Campus Station Option alignment would begin in the southern part of Landscape Unit 1 between S 216th Street and S 220th Street and pass over the SR 99 median as the SR 99 Alternative would to approximately S 224th. Like the SR 99 Alternative, it would reduce the visual quality of the SR 99 corridor adjacent to residences north of S 216th Street on the east side of SR 99 from average to low. After departing the median, the elevated alignment would be sited immediately east of a series of parking areas and travel next to parking areas that are behind five multi-story residential buildings on the east side of 28th Avenue S that are situated between S 226th Street to the north and Kent-Des Moines Road to the south (see KOP 3, Exhibit 3b, in Appendix C). The elevated guideway would be constructed on what are currently back areas and storage yards of businesses that front SR 99 or are accessed from SR 99 via driveways and an electrical transmission line corridor. Constructing the guideway would require the removal of several large trees that provide some visual relief for residents in this utilitarian area. The presence of the elevated guideway would not be inconsistent with the character of the area the alignment would pass through. The large-scale elevated guideway, trains, other features, and removal of trees would be very noticeable from the backs of the multi-story buildings (including walkways), but not from the west sides of the buildings, where large windows and decks from these units face west. The presence of the elevated guideway would somewhat further reduce the existing low visual quality of the area it would pass through.

If the S 216th Street West Station to HC Campus Option was selected, it would depart the west side of SR 99 and pass in a trench behind the parking areas of five multi-story residential buildings that face 28th Avenue S. This part of the alignment would require a wall next to the parking areas associated with the five residential buildings (see KOP 3, Exhibit 3c, in Appendix C), but would not be inconsistent with the character of the area it would pass through. Although the removal of trees and the presence of the wall would be noticed by residents, the option would not further reduce the low visual quality of areas near it. Compared to the elevated guideway associated with the Kent/Des Moines HC Campus Station Option, the S 216th Street West Station to HC Campus Option trench would create less visual change.

South of the five multi-family residential buildings, the guideway would pass over Kent-Des Moines Road and the wetland to the south before transitioning into a trench north of S 234th Street with both of the options described in the previous paragraph. This part of the alignment would pass along the edge of a residential neighborhood and would require the removal of all residences on the east side of 28th Avenue S (see KOP 4, Exhibit 4b, in Appendix C). The removal of the residences and their associated vegetation, along with the presence of the sound wall, OCS, and tops of trains, would not be consistent with the residential character of this area. These features would decrease the intactness and unity of 28th Avenue S and would decrease the visual quality of this part of the station option corridor to low. If the potential mitigation measures discussed in Section 4.5.5 related to landscaping and sound walls were implemented next to the trench, visual quality could be restored to average after approximately 5 to 8 years as plants matured.

From 28th Avenue S, the station option alignment would continue south in a trench to the HC Campus Station and transition to an elevated structure along the median of SR 99. It would not pass sensitive viewers along these portions of the station option corridor.

Views

The Kent/Des Moines HC Campus Station Option would intrude upon the same views of Puget Sound and the Olympic Mountains seen from residences north of S 216th Street on the east side of SR 99 as the SR 99 Alternative would. Along the section of 28th Avenue S south of Kent-Des Moines Road and north of the Highline College campus where the station option would pass east of residences, the Kent/Des Moines HC Campus Station Option would not intrude on existing eastern views from the residences because they are blocked by vegetation and residences. Removing the vegetation on the east side of 28th Avenue S could open up distant views to the northeast (see KOP 4, Exhibit 4b, in Appendix C).

Light and Glare

As with the SR 99 Alternative, lights from trains associated with the Kent/Des Moines HC Campus Station Option would be seen at eye level from some residences north of S 216th Street and from below (but less visibly) from residences such as those in the mobile home park that would remain east of the elevated station. The light could disturb residents to varying degrees. Most light associated with the S 216th Street West Station to HC Campus Option would not disturb residents due to the trenching used for much of the alignment. Where the station option's elevated guideway would pass above the parking area of the five multi-story residential buildings on the east side of 28th Avenue S, headlights from trains would likely be blocked from view by sound walls. Interior lights from passing trains would likely be seen over the sound walls from the backs of some of the residences and some residents could find lights in passing trains disturbing to varying degrees. Residents' views of the headlights and interior lights of trains from along 28th Avenue S would likely be blocked by sound walls and, eventually, landscaping planted as mitigation. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

3.4.2.4 Kent/Des Moines SR 99 Median Station Option

Visual Quality

The Kent/Des Moines SR 99 Median Station Option would start in Landscape Unit 1 and end in Landscape Unit 2. The elevated guideway would transition from the median to the west side of SR 99 as it would pass over Kent-Des Moines Road and then back to the median as it approached the elevated station. The elevated station would be located approximately 400 feet west of an area containing sensitive viewers (a mobile home park). The presence of the elevated guideway, station, and associated parking area would be consistent with the arterial and utilitarian character of this part of the SR 99 corridor. The elevated station could add an interesting architectural element to this part of the corridor, but would not improve the low visual quality of the area enough to reclassify it as average.

Views

The Kent/Des Moines SR 99 Median Station Option would not intrude on views of Puget Sound or the Olympic Mountains.

Light and Glare

Light from passing trains would likely be seen from some residences and might disturb some residents to varying degrees. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

3.4.2.5 Kent/Des Moines SR 99 East Station Option

Visual Quality

The elevated Kent/Des Moines SR 99 East Station Option would begin in Landscape Unit 1 and would transition from the median to the east side of SR 99 as it passes over Kent-Des Moines Road into Landscape Unit 2. It would remain on the east side of SR 99 until transitioning back to the median to approach the elevated station. The closest sensitive viewers would be residents in a mobile home park on 30th Avenue S, approximately 300 feet east of the station. The addition of the elevated guideway, station, and adjacent parking area would be consistent with the arterial and utilitarian character of the nearby areas. The elevated station would add a large-scale architectural element to the SR 99 corridor that would be seen by residents to the east, but would not improve the low visual quality of the area enough to reclassify it as average.

Views

The Kent/Des Moines SR 99 East Station Option would not intrude on views of Puget Sound or the Olympic Mountains.

Light and Glare

Light associated with passing trains would likely be seen by some residents and could disturb some of them to varying degrees. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

3.4.2.6 S 260th West Station Option

Visual Quality

The elevated S 260th West Station Option would be located in Landscape Unit 2. After travelling along the west side of SR 99 through areas of the corridor that have low visual quality, it would reach the

potential additional station (which would be north of S 260th Street) in an area of low visual quality. The station option would be consistent with the arterial corridor character of this section of SR 99 (see KOP 5, Exhibit 5c, in Appendix C).

There is a mobile home park across SR 99 east of the station location. Views of the elevated guideway and station for residents in the mobile home park would be largely screened by trees and vegetation, but it could be seen by some residents. The presence of the elevated guideway would not reduce the visual quality of this part of the SR 99 corridor and the presence of the elevated station would slightly improve visual quality, but not enough to improve the low visual quality near the station to average.

From the station, the elevated guideway would head south along the west side of SR 99 though an area with average visual quality. The elevated guideway would require the removal of trees along the west side of SR 99, some of which would be near a stormwater detention pond. South of the stormwater detention pond, the elevated alignment would transition back to the SR 99 median. After converging with the median, the elevated guideway would be seen by residents in small subdivisions west of SR 99 and from the Woodmont Library. The presence of the elevated guideway along the median would reduce the vividness and intactness of the forested portion of the SR 99 corridor east of SR 99, but not of the portions of SR 99 where small businesses have been built no forest remains. The presence of the elevated guideway in the vicinity of the small residential subdivisions and library would lower visual quality, but not enough to reduce the average visual quality of this portion of the SR 99 corridor to low.

Views

The S 260th West Station Option would not intrude on views of Puget Sound or the Olympic Mountains.

Light and Glare

Lights associated with passing trains would be seen by some residents and may disturb them some to varying degrees. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

3.4.2.7 S 260th East Station Option

Visual Quality

The elevated guideway of this station option would travel along the east side of SR 99 near two areas with concentrations of sensitive viewers, the mobile home park on the east side of SR 99 that is north of S 260th Street and a subdivision on the west side of SR 99 and the Woodmont Library. Both areas are south of S 260th Street. The mobile home park would be adjacent to the elevated guideway and station, and is located in a portion of the SR 99 corridor that has low visual quality. The elevated guideway and station would be clearly visible from adjacent residences, areas along SR 99, and S 260th Street (see KOP 5, Exhibit 5d, in Appendix C). This station with this option would be closer to these residences than the station on the west side of SR 99 associated with the S 260th West Station Option would be. The scale of the guideway and S 260th East Station Option would be larger than structures near it but would not be inconsistent with the utilitarian and arterial character of this section of SR 99. The presence of the guideway would further reduce the low visual quality of areas near it. The elevated station crossing over S 260th Street would improve visual quality, but not enough to increase

the current low visual quality to average. South of S 260th Street, the elevated guideway would continue on the east side of SR 99 and pass across SR 99 from the residential subdivision and the Woodmont Library described in the S 260th West Station Option (which would cross on the west side of SR 99 closer to the residences and library). The elevated guideway would require the removal of a strip of trees from a heavily forested area along the east side of SR 99 opposite the subdivision and library, as well as several businesses. Although the elevated guideway would be clearly seen in front of the forested area on the east side of SR 99 from the library and partially seen through trees from the subdivision, it would not lower visually quality enough to reduce the average visual quality of this section of the SR 99 corridor to low.

Views

The S 260th East Station Option would not intrude on views of Puget Sound or the Olympic Mountains.

Light and Glare

Lights from the elevated passing trains would be seen by nearby residents in the mobile home park and from the residential subdivision at the south end of Landscape Unit 2 and the Woodmont Library. Interior lights from moving trains could disturb some viewers. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

3.4.2.8 S 272nd Redondo Trench Station Option

Visual Quality

The S 272nd Redondo Trench Station Option would be located in Landscape Units 2 and 3 and would pass next to several residential areas (see Exhibits 1-1 to 1-3). South of S 260th Street (see KOP 6, Exhibit 6c, in Appendix C), the elevated guideway would pass from the SR 99 median to the east side of SR 99 and then transition to an at-grade profile across SR 99 from the residential subdivision and the Woodmont Library described under the S 260th Street option evaluations. As with the S 260th Street East Option, the presence of the alignment on the east side of SR 99 would not change visual quality enough to reduce the average visual quality of this part of the SR 99 corridor near sensitive viewers to low.

South of the Woodmont Library, the station option would enter a trench, crossing under S 272nd Street to the trench station. It would continue under SR 99 and past S 279th Street near a multi-story building east of SR 99 and single-family residences further south on the west side. The alignment would then follow an existing utility corridor via an elevated guideway to a location west of S 288th Street. From north of S 284th to S 288th Street, the elevated guideway would pass west of (and downhill from) a series of multi-story residential buildings on the west side of SR 99. It would also pass east of (and uphill from) a group of single-family residences. The presence of the cleared right-of-way and elevated guideway would be inconsistent with the residential character of this portion of the S 272nd Redondo Trench Station Option corridor. The elevated guideway would also be seen west of SR 99 from multi-story residential buildings east of SR 99 and would not be consistent with the residential character of this portion of the corridor. The existing average visual quality of this part of the corridor would be reduced to low.

South of S 288th Street, the alignment would remain elevated and crossover Dash Point Road. The alignment would travel below and in front of another series of multi-story residential buildings adjacent to the west side of SR 99 and east of and uphill from additional single-family residences. The vegetation cleared for the alignment would be noticeable from these residences, as would the guideway and passing trains, which would not be consistent with the residential character of this area and would reduce the average visual quality of the corridor to low.

After passing over Dash Point Road, the elevated guideway would continue south as it parallels SR 99. The elevated guideway would pass east of the Sacajawea Middle School athletic field and the Sacajawea Park softball and baseball fields (behind trees planted to screen views of SR 99) and would transition to an at-grade profile east of 16th Avenue S. The presence of the alignment from Dash Point Road as it passes the middle school and ball fields would be consistent with the character of the adjacent SR 99 corridor and would not lower the visual quality of the corridor.

The station option would continue south at-grade along the east side of 16th Avenue S across the street from single-family residences (see KOP 9, Exhibit 9b, in Appendix C). The alignment would be inconsistent with the residential character of this area. The removal of vegetation along the east side of 16th Avenue S would be noticed, as would passing trains and a sound wall, which would reduce the average visual quality of this part of the station option corridor to low. If the potential mitigation measures discussed in Section 4.5.5 related to landscaping and sound walls were implemented next to the guideway, visual quality could be restored to average after approximately 5 to 8 years as plants matured. North of S 304th Street, the option would become elevated and re-enter the SR 99 median. This portion of the S 272nd Redondo Trench Station Option would not be inconsistent with the character of nearby areas, and would not lower the visual quality of these areas.

Compared to the section of the SR 99 Alternative it would replace, the S 272nd Redondo Trench Station Option would pass near slightly more residences than the SR 99 Alternative and lower the visual quality of more areas near these residences. The main difference between the S 272nd Redondo Trench Station Option and the SR 99 Alternative is that the option would impact residences located along the west side of SR 99 or located on streets below and west of SR 99, whereas the SR 99 Alternative would impact residences along SR 99, most of which would be on the east side of SR 99.

The potential mitigation measures identified in Section 4, Potential Mitigation Measures, would be somewhat effective in reducing impacts from the at-grade portions of the station options. Within 5 to 8 years (as vegetation matured), views of the sound wall, OCS, and passing trains could be screened or blocked. These potential mitigation measures would be much less effective in mitigating impacts from the elevated sections of the alignment and in some areas would not restore visual quality of the corridor to average.

Views

The S 272nd Redondo Trench Station Option would intrude on views of Puget Sound and the Olympic Mountains from some of the multi-story residential buildings located along the west side of SR 99, although views to the west from these residences may already be blocked by trees in some areas. The removal of trees along the alignment of this option may open up views to the Puget Sound and the

Olympic Mountains for some residents, although these features would be seen beyond the cleared right-of-way and elevated guideway of the station option.

Light and Glare

Although headlights from trains on the portions of the station option next to residences that would have sound walls would be blocked by the walls, interior lights from passing trains would likely be seen over the sound walls from some of the residences and some residents could find them disturbing, to varying degrees. Mitigation measures related to lighting in Section 4, Potential Mitigation Measures, would reduce potential impacts associated with lights from the stations.

3.4.2.9 Federal Way SR 99 Station Option

Visual Quality

The portion of the Federal Way SR 99 Station Option alignment that differs from the SR 99 Alternative would pass through an area of the SR 99 corridor with low visual quality and would not pass areas with concentrations of sensitive viewers. This station option would not be inconsistent with the existing character of areas nearby and would not lower visual quality along parts of the corridor near sensitive viewers.

Views

The portion of the Federal Way SR 99 Station Option alignment that differs from the SR 99 Alternative would not intrude on views of Puget Sound and the Olympic Mountains.

Light and Glare

The portion of the Federal Way SR 99 Station Option alignment that differs from the SR 99 Alternative would not produce impacts on sensitive viewers from light and glare.

3.4.3 I-5 Alternative

The greatest potential impact from the I-5 Alternative would be the removal of approximately 35 acres of vegetation, including stands of mature trees along the west side of I-5. Some residences in neighborhoods west of I-5 would also be removed where the alignment is located outside of the I-5 right-of-way.

In addition to removing vegetation within the construction footprint, potentially dangerous trees outside of the construction footprint that might fall onto the guideway could be removed after consultation with an arborist, possibly including some on private property. The loss of trees would result in the FWLE elements being visible from some adjacent properties and by motorists on I-5. Although the policy requirements of the WSDOT *Roadside Policy Manual* (WSDOT, 2014b) regarding removing and replacing trees within and adjacent to a highway right-of-way such as I-5 would be followed, the removal of trees in the I-5 corridor would change the character of the corridor to that of a more urbanized environment with less tree canopy.

The evaluation of impacts associated with the I-5 Alternative focuses on how the alternative would change the visual quality of portions of the I-5 Alternative corridor that have average visual quality and are adjacent to sensitive viewers (residents). Many of the neighborhoods along the corridor (particularly south of Kent-Des Moines Road in Landscape Units 2 and 3) are established neighborhoods that are heavily vegetated with mature trees and shrubs. Because of the presence of

mature vegetation in combination with houses and garages, views towards I-5 are screened or blocked from most neighborhoods that are not immediately adjacent to the SR 99 Alternative alignment. Therefore, while changes associated with the I-5 Alternative may be seen from these more distant residences, impacts where visual quality would be reduced from average to low would generally be limited to viewers in adjacent or nearby residences.

Although the evaluation focuses on impacts to residents, the changes along the I-5 corridor that would occur with this alternative would be seen by motorists driving on I-5. The removal of trees along I-5 would be noticed by most motorists. The amount and type of vegetation that lines this part of I-5 is not uncommon along sections of I-5 in the greater Seattle metropolitan area, but offers a contrast to areas adjacent to I-5 that do not have such vegetation and allow views of adjacent urban land uses. After construction of the I-5 Alternative, the screening value of the parts of the freeway where trees currently screen views of properties to the west would be diminished or lost. Where properties west of I-5 would become more visible, views of urbanized uses (primarily residential) would replace views of areas adjacent to the freeway that currently have a forested appearance.

3.4.3.1 Visual Quality

Landscape Unit 1

Most of the I-5 Alternative in Landscape Unit 1 that would be adjacent to areas with concentrations of sensitive viewers would be at-grade or in a trench and would not be as visible as an elevated profile would be. Some parts of the at-grade portions of the I-5 Alternative near sensitive viewers would require sections of retained fill, such as near Midway Park (see KOP 12, Exhibit 12b, in Appendix C). Construction of the I-5 Alternative would require the removal of a number of single-family residences and multi-story residential buildings at the southern end of the I-5 corridor in Landscape Unit 1 (see KOP 13, Exhibit 13b, in Appendix C). The single-family residences that would be removed would generally be on the east side of north-south oriented streets such as 31st Avenue S, or at the east ends of roads such as S 224th Place that dead-end against I-5. Residences adjacent to locations where buildings, vegetation, and tall trees lining I-5 would be removed would be affected the most. Because most of the neighborhoods west of I-5 contain mature vegetation along streets and in yards, views toward the I-5 Alternative would be screened or blocked by vegetation and buildings from most neighborhood locations other than those adjacent to the alignment. Removing residences and/or vegetation for this alternative would result in residences located between S 211th Street and the Kent-Des Moines Road having largely uninterrupted views of the elevated and at-grade portions of the I-5 Alternative. The visual quality of views towards the I-5 Alternative corridor from these areas would be reduced from average to low.

Landscape Unit 2

Landscape Unit 2 contains two areas with concentrations of sensitive viewers. Much of the mature vegetation within the I-5 Alternative corridor would be removed, and the presence of the at-grade alignment, sound walls, OCS, and passing trains would not be consistent with the residential character of this area. The visual quality of this part of the I-5 corridor would be reduced from average to low. Some of the elevated guideway would be seen from the edges of multi-story residential buildings south of S 259th Street, but remaining vegetation in the large undeveloped area east and south of the

complex would help screen views of the alternative; therefore, the average visual quality of this part of the corridor would not change. Avoidance and minimization measures would help soften and screen views of the alternative from some of this area.

Where the I-5 Alternative would cross over streets such as the S 259th Place I-5 underpass (see KOP 14, Exhibit 14b, Appendix C), its appearance would be similar in form, scale, and character to that of existing I-5 crossings and would not change visual quality. North of the Star Lake Park-and-Ride facility, the trenched alignment would require the removal of residences and vegetation on the east side of 28th Avenue S (see KOP 15, Exhibit 15b, in Appendix C). Although most of the alignment in this residential area would be trenched, the presence of a trench with a fence or sound wall and the OCS lines and poles near the remaining residences located on the east side of 28th Avenue S would be noticed. The presence of the trench in conjunction with the loss of trees lining I-5 would reduce the existing average visual quality of this part of the corridor to low. The presence of the S 272nd Star Lake Station west of the southbound I-5 off-ramp and north of S 272nd Street would be consistent with the transportation character of the I-5 corridor and nearby parking area. The station would add some architectural interest to this area and would somewhat improve the visual quality of this portion of the I-5 corridor, but not enough to improve visual quality from low to average.

Landscape Unit 3

In the northern section of Landscape Unit 3 between S 272nd Street and S 288th Street, the I-5 Alternative would require the removal of many trees along the western edge of the I-5 corridor that back up to residential areas. The tree removal, along with the I-5 Alternative at-grade alignment and passing trains, would not be consistent with the residential character of adjacent areas and would reduce the visual quality of this part of the I-5 corridor from average to low.

South of S 288th Street, the removal of the trees and the existing I-5 sound wall would be noticed by residents adjacent to I-5, particularly at the Camelot Mobile Home Park (see KOP 16, Exhibit 16b, in Appendix C). The removal of the trees along I-5 and the closeness of the at-grade alignment (supported in some locations with retained fill) to this residential area would reduce the visual quality of the corridor from average to low. South of the mobile home park, the I-5 Alternative would continue at-grade past residential areas and cross over Military Road S.

From Military Road S to S 317th Street, the alignment would be at-grade or in a trench and would pass near sensitive viewers in residences west of the alignment. The removal of vegetation along I-5 and the presence of passing trains would be inconsistent with the residential character of some of the residential areas adjacent to the alignment. The visual quality of this section of the I-5 corridor would be reduced from average to low in many areas. Most residents in the neighborhoods near the alignment would not be impacted nearly as much as adjacent residents because remaining vegetation and buildings in the areas west of the I-5 corridor would tend to screen views of the alignment.

From S 317th Street, the alignment would continue west in a trench and then elevate to a station near the Federal Way Transit Center. This part of the I-5 Alternative would pass a mixture of land uses that contain extensive areas for parking and buildings set within the parking areas. The visual quality of this part of the I-5 Alternative corridor is low and the nearest sensitive viewers are in multi-story residential

buildings north of S 317th Street. The I-5 Alternative would not be inconsistent with the character of this area and, despite the elevated nature of the alignment and station, would not further reduce the low visual quality if this area.

Mitigation measures such as landscaping near the alignment in residential areas would in time (approximately 5 to 8 years) likely restore visual quality to average in most areas described above where visual quality would be reduced to low following construction.

3.4.3.2 Views

In Landscape Unit 3, the residences near the southern part of the I-5 Alternative north of S 317th Street that have views of Mt. Rainier would not have views of it intruded upon or blocked because this part of the I-5 Alternative would be in a trench or at-grade.

3.4.3.3 Light and Glare

In Landscape Unit 1, the residents that were identified as having uninterrupted views of the elevated and at-grade portions of the I-5 Alternative would also have uninterrupted views of trains passing at night. Although sound walls would likely block the headlights from trains on the portions of the alignment next to residences that would have sound walls, interior lights from passing trains would likely be seen over the sound walls.

Residents adjacent to the I-5 Alternative corridor in parts of Landscape Unit 2 where the alignment would be elevated (primarily between S 252nd Street and S 260th Street) may have views of the interiors of passing trains. Residents would likely not see train headlights because of sound walls. Lights from trains passing residences at-grade would not be as likely to be seen as along elevated sections, and lights from trains in trenched sections such as near 28th Avenue S would not be seen.

The residential areas in Landscape Unit 3 that would be adjacent to the I-5 Alternative and would have the visual quality of areas near them reduced from average to low would also potentially see the lights of passing trains.

Where seen, lights from passing trains could be disturbing to viewers to varying degrees. Mitigation measures related to landscaping that are described in Section 4, Potential Mitigation Measures, would also be effective in screening views of passing trains at night from at-grade locations.

3.4.4 I-5 Alternative Station Options

The following subsections discuss the options associated with the I-5 Alternative that would result in a lowering of visual quality next to areas with concentrations of sensitive viewers, would have impacts to views, or would have impacts from light and glare.

3.4.4.1 Kent/Des Moines At-Grade Station Option

There would be no change in impacts with this option.

3.4.4.2 Kent/Des Moines SR 99 East Station Option

Visual Quality

The Kent/Des Moines SR 99 East Station Option (elevated) adjacent to SR 99 in Landscape Unit 2 would be in a portion of the SR 99 corridor that has low visual quality. The closest area with concentrations of

sensitive viewers would be from a residential area along 30th Avenue S and several multi-story residential buildings located near S 240th Street and 30th Avenue S. Both residential areas would be approximately 400 feet east of the station location. The presence of the elevated guideway, station, and adjacent parking area would be consistent with the arterial corridor character of this part of SR 99 and the utilitarian character of nearby areas. The elevated station would add an interesting architectural element but would not improve the low visual quality of the corridor near it.

Views

The station would not intrude on views by residents of Puget Sound or the Olympic Mountains.

Light and Glare

Light from the station and passing trains would likely be seen by some residents (although they would be approximately 400 feet from it) and could disturb some residents to varying degrees. Mitigation measures related to lighting at the station described in Section 4, Potential Mitigation Measures, would reduce any potential impacts associated with lights from stations.

3.4.4.3 Landfill Median Alignment Option

Visual Quality

The north end of this option would pass through an area with low visual quality and would require the removal of some trees lining the west side of the I-5 corridor. However, most of the elevated guideway would be located in the I-5 median and would pass east of the Midway Landfill along a section of the I-5 corridor with low visual quality. The edge of the I-5 corridor near the landfill is not lined with trees and views of the landfill and methane collection equipment can be seen from I-5. There are no areas with concentrations of sensitive viewers along the west side of the portion of the alignment option that is located in the median, although there are residences along the east side whose views of I-5 and the landfill are generally screened by trees. South of the landfill, the elevated guideway would pass by the few locations along the east side of I-5 where there are gaps in the trees that permit views of the Midway Landfill by residents, from which the guideway would be seen. The presence of the elevated guideway would be consistent with the transportation character of this section of the I-5 corridor and would not further reduce the low visual quality of this part of the corridor.

Views

Where there are views of Mt. Rainier along the two sections of the option that cross over the southbound lanes of I-5, there could be very brief blockages of the view to motorists driving on I-5.

Light and Glare

Light from passing trains could be seen by some residents on the east side of I-5 in several places and could disturb some of residents to varying degrees.

3.4.4.4 Federal Way I-5 Station Option

Visual Quality

The Federal Way I-5 Station Option in Landscape Unit 3 would pass through areas with average and low visual quality and would not be located near areas with concentrations of sensitive viewers. The station associated with this option would be partially at-grade and partially in a trench. The presence of the station option would add some vividness to views in this area, but not enough to improve the visual quality of the area near it from low to average. The presence of a parking structure at the station

would be consistent with transportation character of this area and would not further lower the existing low visual quality.

Views
There would be no view blockage with this option.

Light and Glare
There would be no impacts from light and glare with this option.

3.4.4.5 Federal Way S 320th Park-and-Ride Station Option

Visual Quality
The Federal Way S 320th Park-and-Ride Station would be located adjacent to I-5 and at an existing park-and-ride lot. Tail tracks would extend southeast into the northeast corner of a mobile home park (which contains sensitive viewers). The station and associated park-and-ride lot (and possibly structured parking) would be located in an area currently used for parking that has low visual quality. This station option would not further lower the already low visual quality of views towards I-5 from nearby areas. The station option would result in the removal of residences along the east side of the mobile home park and their replacement with a fenced trench. The presence of the project components would not be consistent with the residential character of the mobile home park, although the eastern portion of the mobile home park is adjacent to I-5. The option would further reduce the low visual quality of this portion of the corridor.

Views
There would be no view blockage of Mt. Rainier with this option.

Light and Glare
Light associated with operation of the tail tracks could be noticed by some nearby residents, although the potential mitigation measures identified in Section 4 would reduce the visibility of the lights and light spill-over.

3.4.5 SR 99 to I-5 Alternative

From the Angle Lake Station to just north of Kent-Des Moines Road, the SR 99 to I-5 Alternative would follow the same route as the SR 99 Alternative and would have the same impacts as the SR 99 Alternative in this area. From south of Kent-Des Moines Road to approximately S 240th Street, the alternative would pass through areas that currently contain parking lots, residential areas (several scattered single-family residences, a mobile home park, and a small multi-story residential complex of several building), a low-rise office building complex, the backside of a big box retail building, vacant land, and outdoor storage. The area along this portion of the alternative does not have a consistent character and has low visual quality. One area containing sensitive viewers (the multi-story residential buildings located near S 240th Street and 30th Avenue S) would remain after construction. The presence of the elevated guideway would be larger in scale than surrounding structures except the big box retail store, but would not be inconsistent with the mixed character of this area and would not further decrease the low visual quality of this part of the alternative corridor. South of S 240th Street, it would have the same impacts as the I-5 Alternative.

Visual impacts from options associated with the SR 99 to I-5 Alternative (the S 216th Station Option, the Landfill Median Alignment Option, the Federal Way I-5 Station Option, and the Federal Way S 320th Park-and Ride Station Option) would be the same as described under the SR 99 Alternative and I-5 Alternative.

3.4.6 I-5 to SR 99 Alternative

The I-5 to SR 99 Alternative would follow the route of the I-5 Alternative from the Angle Lake Station to just north of Kent-Des Moines Road, and would have the same impacts as the I-5 Alternative in this area. The portion of the alignment between Kent-Des Moines Road south to approximately S 240th Street would pass though and by a mixture of land uses, such as outdoor storage, parking lots, residential areas (including several scattered single-family residences, a mobile home park, and a small multi-story residential complex of several building), the parking lot of a big box retail building, and vacant land. These areas have low visual quality. Several of the scattered single-family residences and the multi-story residential buildings would remain after construction. The presence of the elevated guideway would be larger in scale than surrounding structures except the big box retail store, but would not be inconsistent with the mixed character of this area and would not further decrease the low visual quality of this part of the alternative corridor. After reaching the SR 99 median south of S 240th Street, the I-5 to SR 99 Alternative would follow the same route as the SR 99 Alternative. Impacts in this area would be the same as the SR 99 Alternative.

Visual impacts from options associated with the I-5 to SR 99 Alternative (the S 260th Station Option, the S 272nd Redondo Trench Station Option, and the Federal Way SR 99 Station Option) would be the same as described under the SR 99 Alternative.

3.4.7 Indirect Impacts

The FWLE could support changes to nearby land uses, as allowed in adopted plans, and increases in the density of development could occur. This may result in additional changes to the visual and aesthetic setting of the areas where the FWLE would create changes.

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4.0 Potential Mitigation Measures

In addition to the avoidance and minimization measures described in Section 3.2, Build Alternatives, supplemental measures might be appropriate to reduce visual impacts of the FWLE at various locations, particularly near areas with concentrations of sensitive viewers (residents). Areas with residences where existing visual quality would be lowered and mitigation would be appropriate are identified in Exhibits 1-1 to 1-3. To mitigate impacts, particularly at locations adjacent to at-grade alignments, the potential mitigation measures in this section could be applied as appropriate. Specific residences and places within the general areas depicted in the exhibits where mitigation would be appropriate would be determined in consultation with local jurisdictions, as alignment designs are refined for the Preferred Alternative. Most of the following potential measures are related to the placement and design of the light rail facilities, or the use of landscaping or other elements to help screen or soften views of facilities:

- Where Sound Transit may need to acquire property beyond the footprint of light rail facilities, particularly in residential areas, there might be opportunities for additional landscaping and buffers to screen views of the facilities from adjacent neighborhoods. Where buildings would be removed, appropriate vegetation could be planted in order to provide screening of FWLE facilities or to screen areas exposed by the removal of the residences.
- In areas where the elevated guideway would remove existing landscaped medians for guideway columns, Sound Transit could replace landscaping between the guideway columns. The type of vegetation may be different, as the existing species of trees would eventually be too tall to be planted underneath the elevated structure.
- Tree removal along the I-5 corridor (both within and outside of WSDOT landscape areas) would be minimized in association with the I-5 and SR 99 to I-5 alternatives and would be mitigated according to the WSDOT *Roadside Policy Manual*.
- Where retaining walls are required, they could include landscaped areas, as practical, that would soften their appearance when viewed from adjacent residential neighborhoods. Retaining walls, at-grade sound walls, or other major structural elements near areas with concentrations of visually sensitive viewers could be designed with visually interesting elements, such as design treatments that incorporate texture, patterns, and color.
- Stations and park-and-ride facilities could include context-sensitive design and islands of landscaping within areas of pavement and around their perimeter as required by local codes.
- Exterior lighting at stations and park-and-ride lots would be designed to minimize height and would use source shielding to avoid luminaries (bulbs) that would be directly visible from residential areas, streets, and highways. Shielding would also limit spillover light and glare in residential areas.

- Architectural aspects of the FWLE would be coordinated in color, texture, and materials to be consistent with the existing architectural features in the corridor.

5.0 References

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King County. 2013. GIS data for streets, tax parcels, building footprint, zoning, census data, city boundaries, parks and open spaces, transit facilities, slopes, wetlands, wellhead protection areas, and streams. http://www5.kingcounty.gov/gisdataportal/.

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Appendix A

FHWA Visual Impact Methodology Used for FWLE, Existing Visual Quality, and Impacts of Alternatives on Visual Quality

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Appendix A

FHWA Visual Impact Methodology Used for FWLE, Existing Visual Quality, and Impacts of Alternatives on Visual Quality

A.1 Introduction

The purpose of this appendix is to document how the visual and aesthetic resource analysis was conducted based on the formalized approach of the Federal Highway Administration's (FHWA) Visual Impact Assessment methodology. The FHWA methodology uses accepted assessment criteria and terminology (see Terminology section below) for describing visual quality, as set forth in FHWA's *Visual Impact Assessment for Highway Projects* manual (FHWA, 1988).

Visual quality assessments examine the composition of character-defining features for specific, selected views, or key observation points (KOPs), and determine how a project might affect the features of the view and thus visual quality. The FHWA methodology can also be used to characterize the general visual quality of segments of a linear project such as the FWLE. A segment is defined as a unit of similar context, such as an area containing a commercial boulevard with similar building set-backs and streetscape or a residential neighborhood with similar housing types. Although characterizing the existing visual quality of segments of a proposed project and determining if/how a project would change the visual quality is not as precise as doing so for a KOP (with a photograph of a specific view), characterization of segments can be very useful for determining potential impacts along segments of a proposed project.

Existing visual quality for the FWLE was determined through multiple site visits that involved driving the alignments of the alternatives, referring to photographs that were taken during the site visits, examining aerial photographs of the alignments and nearby areas, and consulting GoogleEarth images (which also assisted at times in determining what can be viewed and what may be changed or blocked by the FWLE). Potential impacts on visual quality were determined by reviewing simulations of the various alternatives and extrapolating where those impacts would have similar or different impacts from each other.

A.2 Visual Quality

Visual quality is an assessment of the composition of the character-defining features for selected views of landscapes. A visual quality assessment asks: Is this particular view common or dramatic? Is it a pleasing composition (with a mixture of elements that seem to belong together) or not (with a mixture of elements that either do not belong together or are eyesores and contrast with the other elements in the surroundings)? Visual quality is evaluated in terms of vividness, intactness, and unity. These three characteristics are described below:

- ***Vividness*** is the degree of drama, memorability, or distinctiveness of the landscape components. Vividness is composed of the following four elements that usually influence the degree of vividness:
  - Landform
  - Vegetation
  - Water-features
  - Human-made elements
- ***Intactness*** is a measure of the visual integrity of the natural and human-built landscape and its freedom from encroaching elements. This factor can be present in well-kept urban and rural landscapes, as well as in natural settings. High intactness means that the landscape is free of eyesores and is not broken up by features that appear to be out of place. Intactness is composed of the following two primary elements that influence the degree of intactness:
  - Development
  - Encroachment
- ***Unity*** is the degree of visual coherence and compositional harmony of the landscape considered as a whole. High unity frequently attests to the careful design of individual components and their relationship in the landscape.

The FHWA's Visual Impact Assessment methodology assigns numeric ratings to the three characteristics that determine visual quality and then averages the ratings to establish an overall visual quality score. The characteristics discussed above are rated between 1 (low) and 7 (high). The visual quality ratings and their descriptors are as follows:

1. Very Low
2. Low
3. Moderately Low
4. Average
5. Moderately High
6. High
7. Very High

The ratings of the three characteristics (vividness, intactness, and unity) are then averaged to determine a total visual quality rating, which is also between 1 (very low) and 7 (very high). For example, if a view had a vividness rating of 6, an intactness rating of 7, and a unity rating of 5, the three ratings would be added and divided by 3, which would produce an average total visual quality rating of 6.

The concepts of rating vividness, intactness, and unity numerically from 1 to 7 may be somewhat esoteric for the general reader, and therefore they are not referred to in Section 4.5, Visual and Aesthetic Resources, of the FWLE Draft Environmental Impact Statement (Draft EIS). The seven-point scale is used in Table A-1 of this appendix to determine the existing visual quality categories of segments of the alternatives and how (or if) the visual quality categories would change in these

segments if the alternatives were constructed. The seven-point visual quality scale used in Table A-1 was simplified to low, average, and high for all other text references to visual quality in this technical report, in the graphic representation of existing visual quality in Exhibits 1-1 to 1-3, and in Section 4.5 of the Draft EIS.

The three summarized visual quality categories are described below:

- **Low Visual Quality:** Areas with low visual quality have some combination of features that seem visually out of place, lack drama or memorability, do not have visual coherence, do not have compositional harmony, and/or might contain encroaching elements. For this assessment, an FHWA visual quality rating of between 1 and 3.5 is considered low.
- **Average Visual Quality:** Areas with average visual quality are commonly occurring or average-appearing landscapes that have a generally pleasant appearance but might lack enough distinctiveness, memorability, drama, and compositional harmony to place them in the high visual quality category. This is generally the most frequent category. For this assessment, an FHWA visual quality rating of between 3.6 and 5 is considered average.
- **High Visual Quality:** Areas with high visual quality must be outstanding in terms of being very memorable, distinctive, unique (in a positive way), and/or intact—they can be natural, park-like, or urban (with urban areas displaying distinctive, outstanding, and consistent architectural and urban design features). There were no areas of high visual quality along the corridors of the alternatives and options.

A.3 Terminology

The following terminology from the FHWA methodology is used in this technical report and in the Draft Environmental Impact Statement.

Key Observation Points. KOPs are selected from within a project viewshed to provide representative views of a proposed project from various locations or to depict sensitive views (views that may be affected) of a project. KOPs are also used to describe existing visual conditions and to evaluate changes to the viewed landscape (usually from simulations) that would occur if a proposed project were built.

Views. Note that in this technical report, general areas with views of Puget Sound, the Olympic Mountains, and Mt. Rainier are also identified, and potential intrusion on or blockage of views of these features is one of the three factors used to evaluate impacts.

Viewers. These are people who would have views of a proposed project. Viewers are usually discussed in terms of general categories of activities (such as residents, workers, recreationists, motorists [both commuters and leisure travelers]). Viewers may have views “of” a proposed transportation project from adjacent areas or views “from” a project (after it would be constructed).

Viewer Sensitivity. People who view a landscape (viewers) can be categorized as having low, medium, or high sensitivity to changes in the viewed environment. Viewer sensitivity is strongly influenced by a viewer’s awareness of his or her surroundings, the activities they are engaged in, and the amount of

time spent looking at a view (viewer duration). People such as residents and park users who see a landscape multiple times for long periods of time and are familiar with it would be aware of changes in the landscape and are assumed to have high viewer sensitivity.

Viewers with medium viewer sensitivity include workers and customers who might expect a somewhat pleasant visual setting for the establishments they work in or visit, but they are in the locations for purposes other than enjoying its scenery or visual quality. Students, faculty, and members of religious congregations would also be expected to have medium viewer sensitivity. People who view a landscape infrequently, view it for short periods of time, or are not attentive to it because they are focused on other activities (such as working) are often less sensitive to changes and are assumed to have low viewer sensitivity. People sightseeing on highways or driving through their neighborhood are considered to have high to medium viewer sensitivity. Commuters and other drivers are considered to have low viewer sensitivity because they often become accustomed to and indifferent to the views along their travel routes due to repetition and short viewing duration.

Visual Character. Visual character is an impartial description of what the viewed landscape consists of and is defined by the relationships between the existing visible natural and built landscape features. These relationships are considered in terms of dominance, scale, diversity, and continuity. Visual character-defining resources and features include the following:

- Landforms – types, gradients, and scale
- Vegetation – types, size, maturity, and continuity
- Land uses – height, bulk, scale, and architectural detail of associated buildings and ancillary site uses
- Transportation facilities – types, sizes, scale, and directional orientation
- Overhead utility structures and lighting – types, sizes, and scale
- Open space – type (e.g., parks, reserves, greenbelts, and undeveloped land), extent, and continuity
- Water bodies, historic structures, and downtown skylines
- Apparent “grain” or texture, such as the size and distribution of structures and unbuilt properties or open spaces of the landscape
- Apparent upkeep and maintenance

Simulations. Digitally enhanced images or simulations of visible components of a proposed project that are created based on photographs taken of existing conditions. Simulations are developed to illustrate probable visible changes associated with the project compared to existing visual conditions and allow visual specialists to rate changes to the viewed landscape.

A.4 Existing Visual Quality and Changes in Visual Quality near Areas with Concentrations of Sensitive Viewers by Alternative

Table A-1 describes the existing visual quality of segments of the FWLE alternatives that are adjacent to areas with concentrations of sensitive viewers. Areas that do not contain concentrations of sensitive

viewers were not assessed because the emphasis of this evaluation was on how alternatives would potentially affect viewers with high visual sensitivity. The segments are subcategories of landscape units that are smaller in size than landscape units and similar in character. Table A-1 briefly explains why and if project alternatives would change the existing visual quality enough to lower the category of the portion of the alternative described. In many cases, an alternative would change the visual quality of an area but would not change it enough to lower the visual quality category.

A.5 References

Federal Highway Administration (FHWA). 1988. *Visual Impact Assessment for Highway Projects.* FHWA-HI-88-054. Available at: www.dot.ca.gov/ser/downloads/visual/FHWAVisualImpactAssmt.pdf.

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
SR 99 Alternative (Landscape Units 1, 2, and 3)								
Landscape Unit 1								
S 204th Street to approximately 1.000 feet north of S 216th Street								
Existing		Large buildings with extensive parking areas interspersed with vacant parcels. Low vividness.	3	Mix of building types with large parking-storage areas, some vehicle storage.	2	The landscaped median and street side plantings are the most unifying elements.	3	2.7
With SR 99 Alternative		Elevated structure would not reduce vividness along this part of SR 99 corridor.	3	Large scale of elevated structure would not be out of scale with nearby large-scale elements.	2	Would replace some vegetation in landscaped medians.	2	2.3
Approximately 1,000 feet north of S 216th Street to S 216th Street								
Existing	Sensitive viewers (multi-story residential buildings).	Multi-story residential development on east side of SR 99 north of S 216th Street produces average vividness.	4	Moderate degree of intactness, primarily due to multi-story residential building complex on east side of SR 99.	4	Variety of land uses results in low unity.	3	3.7
With SR 99 Alternative		Presence of elevated structure over the median would somewhat reduce the vividness.	3	Would add a large-scale transportation element to section of the corridor that has large-scale elements such as buildings and parking lots, so would not decrease intactness enough to lower the rating.	2	Would eliminate all or parts of existing landscaped medians, which contribute to this part of the corridor's unity. When replacement landscaping would become reestablished it would help reinforce unity.	2	2.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
S 216th Street to S 220th Street								
Existing	Sensitive viewers (mobile-home park).	Similar to previous section, but fewer large-scale developments and large parking areas.	3	Fairly consistent appearance along sides of SR 99 and average intactness.	3.5	Wall on east side of SR 99, landscaping and large undeveloped area with trees help with unity.	4	3.5
With SR 99 Alternative		The elevated structure would not detract much from the low degree of vividness seen by nearby residents because views of structure from within the mobile home park blocked by a wall and/or vegetation and other mobile homes.	3	The elevated structure would add an object in the view over the wall that surrounds the mobile home park.	3	Would eliminate all or parts of existing landscaped medians, which contribute to this part of the corridor's unity. When replacement landscaping would become reestablished it would help reinforce unity.	3	3
S 220th Street to Kent-Des Moines Road								
Existing	No areas with concentrations of sensitive viewers.	Fewer large-scale parking lots than other areas along SR 99 and more smaller, well- maintained properties with landscaping, etc.	3	Average degree of intactness along this section.	4	The landscaped median and street side plantings provide some visual unity in this area.	3.5	3.5
With SR 99 Alternative		Presence of elevated structure would not change moderately low degree of vividness.	3	Would slightly lower intactness.	3	Would eliminate all or parts of existing landscaped medians, which contribute to this part of the corridor's unity. When replacement landscaping would become reestablished it would help reinforce unity.	3	3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
Landscape Unit 2								
Kent-Des Moines Road to S 260th Street								
Existing	Sensitive viewers (mobile home park).	Mix of large-scale developments with extensive parking areas for customers, storage units, vehicle storage and sales.	2	Wide variety of properties and vacant lots with little intactness.	2	Few unifying elements, little in the way of streetscape improvements to bolster unity.	2	2
With SR 99 Alternative		Elevated guideway and Kent/Des Moines West Station along west side of SR 99 would not change low vividness rating. Trees and vegetation on west side of mobile home park (located on east of SR 99) would partially screen views of elevated structure.	2	Would not change intactness rating.	2	Would somewhat improve unity (but not enough to increase rating) by providing a consistent element along this section of SR 99.	2	2
S 260th Street to S 268th Street								
Existing	Sensitive viewers (single- family residences and library).	This segment is relatively vivid compared to areas near it and contains a large swath of undeveloped land (and also some commercial properties) on east side of SR 99 residential subdivisions and the Woodmont Library on the west side.	4	Similarity of quality of buildings (except for commercial buildings surrounded by the undeveloped area) produces moderately high degree of intactness.	5	Average unity because of similar developments and presence of vegetation along this section of SR 99.	4	4.3
With SR 99 Alternative		The elevated structure would be seen from nearby sensitive viewers and have a slightly lower vividness rating.	3	The elevated structure would add a larger-scale element to the viewed landscape.	4	Unity would decrease slightly, but not enough to lower the rating.	4	3.7

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
S 268th Street to S 272nd Street								
Existing	No areas with concentrations of sensitive viewers.	Extensive parking areas for customers and variety of commercial businesses and buildings.	2	Wide variety of properties and vacant lots with little intactness.	2	Few unifying elements, little in the way of vegetation or other streetscape improvements to improve unity.	3	2.3
With SR 99 Alternative		Presence of elevated structure would not further lower vividness.	2	Would not change intactness rating.	2	Would somewhat improve unity (but not enough to increase rating) by providing a consistent element along this section of SR 99.	3	2.3
Landscape Unit 3								
S 272nd Street to intersection with 279th Avenue S								
Existing	Sensitive viewers (mobile home park and multi-family residential buildings)	The mixture of land uses (large box retail, park-and-ride parking lot, mobile home park, vehicle storage, vacant lot) do not create a memorable area.	3	Intactness of this area with its wide variety of development types is low.	3	Median and streetscape improvements (particularly in north half of this segment) help promote average degree of unity.	4	3.3
With SR 99 Alternative		Elevated S 272nd Redondo Station (on east side of SR 99) would introduce interesting architectural element, which would slightly improve vividness in this area.	4	Intactness would improve somewhat, but not enough to increase rating.	3	Would keep existing unity rating at average.	4	3.7

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
279th Avenue S to S 283rd Street								
Existing	Sensitive viewers (multi-story residential buildings).	Trees are adjacent to west side of SR 99 for most of this part of the corridor. Moderately high vividness.	4	Moderately high attention paid to street side improvements, landscaping, and entries to multi-story residential developments. Trees on either side create a visually contained "canyon."	5	The presence of vegetation and landscaped areas adjacent to SR 99 along much of this section of SR 99 provides moderately high unity.	5	4.7
With SR 99 Alternative		Having alignment in median would avoid removing existing vegetation on either side but would intrude on some views along corridor.	4	Presence of elevated structure within this contained "canyon" would intrude and decrease intactness.	3	The elevated structure can be visually unifying presence, but in this setting it would reduce the existing moderately high visual unity with its scale and form.	3	3.3
S 283rd Street to S 288th Street								
Existing	Sensitive viewers (multi-story residential buildings).	Fewer trees on west side of street compared to segment above. Roofs of multi-story residential developments and roofs of garages below the grade of SR 99 seen from SR 99. Some multi-story residential units on east side of SR 99 are elevated above it and have views down on SR 99. Average vividness along this section of SR 99.	4	The roofs of buildings to west block street views. Much of east side is lined with retaining walls and/or steep slopes with parking areas at top of grade above SR 99. Average intactness.	4	Area has a multi-story residential character that is fairly unified.	5	4.3

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Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
With SR 99 Alternative	.	Elevated guideway would be a large-scale feature that would be even with, or lower than, the viewing elevation from residences to the east and may be seen (from the backs) of residences to the west. Presence of structure would not lower the average vividness of the view greatly.	3.5	Elevated structure would encroach on north and south views along this section of the SR 99 corridor that has residential character, as well as potentially encroaching on west views from the east side of SR 99, and would lower intactness.	3	The elevated structure would add a large-scale transportation element, which would be consistent to a certain degree with the character of SR 99 but would not be a unifying element in a residential area.	3	3.2
S 288th Street to Dash Point Road								
Existing	Sensitive viewers (multi-story residential).	Residential areas to east of SR 99 and residential area to west (below grade of SR 99 west of parking area) produce average vividness.	4	Despite presence of street side parking, this section of SR 99 has an average degree of intactness.	4	Streetscape and median landscaping, along with the presence of nearby trees and similarly scaled developments, contribute to the unity of this segment of SR 99.	4	4
With SR 99 Alternative		Elevated guideway along the median would intrude on some views by residents to the east, which would lower vividness.	3	The scale and presence of elevated guideway would not be consistent with nearby residential areas near it.	3	Unity along this part of the SR 99 corridor would be lowered with the presence of the elevated guideway in the median of SR 99.	3	3
Dash Point Road to S 303rd Street								
Existing	A sensitive viewers (multi-story residential) near Dash Point Road.	Sacajawea Park, undeveloped and heavily vegetated areas, and Federal Way High School are moderately high vivid elements in this area.	5	Average degree of intactness along this section of SR 99.	4	This section has average unity; relatively recent streetscape (medians and along sidewalks) has improved unity.	4	4.3

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
With SR 99 Alternative		Elevated guideway along east side of SR 99 and lower vividness.	3	Elevated guideway would add large-scale element to this area.	3	Elevated guideway would somewhat add to unity, but not enough to raise rating.	4	**3.3**
S 303rd Street to Federal Way Transit Center								
Existing	Sensitive viewers (multi-story residential).	The area the alignment would pass through a mix of building types and scales and extensive parking lots. Low vividness.	3	Low degree of intactness along the alignment.	2	Variety of building and parking lot sizes and design reduce visual unity.	2	2
With SR 99 Alternative	Would not lower visual quality of area near sensitive viewers or block/intrude upon views or area near existing station.	The presence of the elevated guideway would have a neutral effect on vividness. The elevated Federal Way Transit Center Station would slightly improve vividness in this area. The overall vividness rating would not change.	3	Little change to degree of intactness.	2	Presence of elevated guideway would add some unity to areas along its alignment, as would the station. Replacement of existing buildings with parking areas would have a negative influence on unity.	2	2
S 216th Station Options – West Station Option (Landscape Unit 1)								
S 204th Street to approximately 1,000 feet north of S 216th Street								
Existing	No areas with concentrations of sensitive viewers.	Large buildings with extensive parking areas interspersed with vacant parcels. Low vividness.	3	Mix of building types with large parking-storage areas, some vehicle storage.	2	The landscaped median and street side plantings are the most unifying elements.	3	2.7
With SR 99 Alternative		Elevated alignment and alignment in trench would not alter vividness along this part of SR 99 corridor.	3	Large scale of elevated structure portion of alignment would not be out of scale with nearby large-scale elements.	2	Would replace some vegetation in landscaped medians.	2	2.3

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Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
1,000 feet north of S 216th Street to S 216th Street								
Existing	Sensitive viewers (multi-story residential buildings).	Multi-story development on east side of SR 99 north of S 216th Street produces average vividness.	4	Moderate degree of intactness, primarily due to multi-story building complex on east side of SR 99.	4	Varity of land uses results in low unity.	3	3.7
With SR 99 Alternative		Presence of alignment and station in trench would not lower average vividness.	4	Intactness would not decrease enough to lower the rating.	4	Would remove some buildings that somewhat provide unity to this part of SR 99, but would not lower existing unity rating.	3	3.7
End of station to connection with SR 99 median (south of S 220th Street)								
Existing	No areas with concentrations of sensitive viewers.	Similar to previous section, but fewer large-scale developments and large parking areas.	3	Fairly consistent appearance along sides of SR 99 and average intactness.	3	Wall on east side of SR 99, landscaping, and large undeveloped area with trees help with unity.	4	3.3
With S 216th West Station Option	Station in trench on west side of SR 99.	Station would not improve vividness enough to increase rating.	3	Station and trenched alignment along west side of SR 99 would not change the low degree of intactness along alignment.	3	Unity would remain very similar to existing.	4	3.3

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Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
S 216th Station Options – East Station Option (Landscape Units 1 and 2)								
From where alignment leaves SR 99 (south of S 211th Street) to cross to east side of SR 99 to north end of station								
Existing	Sensitive viewers (multi-story residential buildings).	Multi-story development on east side of SR 99 north of S 216th Street produces average vividness.	4	Moderate degree of intactness, primarily due to multi-story building complex on east side of SR 99.	4	Varity of land uses results in low unity.	3	3.7
With S 216th East Station Option		Where transitions to east side the alignment would be closer to some units in multi-story residential buildings than SR 99 Alternative and lower vividness.	3	Elevated guideway would be decrease the intactness of the view of the SR 99 corridor from residences.	2	Would add another use along this section of SR 99.	2	2.3
End of station to connection with SR 99 Median (south of S 220th Street)								
Existing	Sensitive viewers (mobile home park).	Similar to previous section, but fewer large-scale developments and large parking areas.	3	Fairly consistent appearance along sides of SR 99 and average intactness.	3	Wall on east side of SR 99, landscaping, and large undeveloped area with trees help with unity.	4	3.3
With S 216th East Station Option	Would transition to east side of SR 99 and station would be built on part of a mobile home park.	Elevated station would be visible from mobile home park and would somewhat improve vividness.	4	Scale and closeness of station to mobile home park would reduce intactness.	2	Unity along this section of SR 99 and in the view from the mobile home park would improve, but not enough to increase rating to 5.	4	3.3

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
Kent/Des Moines Station Options – Kent/Des Moines HC Campus Option (Landscape Units 1 and 2)								
Landscape Unit 1								
S 224th Street to Kent/Des Moines Road								
Existing	Sensitive viewers (from backs of multi-story residential buildings and parking areas)	Alignment would pass through utilitarian areas (parking and storage) with low vividness.	2	The mix of properties and development has low intactness.	2	The area the alignment would pass through has a fairly consistent utilitarian appearance.	3	2.3
With Kent/Des Moines HC Campus Option		Vividness along the alignment would remain low.	2	The elevated guideway would add a large-scale overhead object to this area, but would not further reduce intactness.	2	The addition of the guideway in trench (and where elevates over Kent/Des Moines Road) would slightly decrease unity.	2	2
Landscape Unit 2								
Kent/Des Moines Road to North Boundary of HC								
Existing	Sensitive viewers (single-family residences).	Average degree of vividness near Kent-Des Moines Road, wetland area, and 28th Avenue S.	4	The backs of some commercial properties that front SR 99 can be seen behind residences along the east side of 28th Avenue S, which lowers intactness.	3	The portion of the alignment along 28th Avenue S is fairly unified.	4	3.7
With Kent/Des Moines HC Campus Option		Would pass over Kent-Des Moines Road and wetland area and reach grade, and pass at-grade and in a trench along the east side of 28th Avenue S (and remove single-story residences) and lower vividness.	3	Would lower intactness along this section of the alignment.	2	The alignment would remove single-story residences and vegetation and expose more of the backs of commercial properties that line SR 99. Unity would be reduced.	3	2.7

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
HC Campus Parking Lot								
Existing	No areas with concentrations of sensitive viewers.	Unremarkable area – parking lot with some vegetation.	3	No contributing features in parking lot.	3	Parking lot adjacent to entry to campus has average degree of unity.	4	3.3
With Kent/Des Moines HC Campus Option	Station located in this segment	Would enter parking lot at-grade and enter a trench to the station.	3	Presence would not further lower intactness.	3	Trench would somewhat decrease unity in this part of parking lot.	3	3
Kent/Des Moines HC Campus Station Option from the S 216th West Station Option (Landscape Units 1 and 2)								
Landscape Unit 1								
S 204th Street to approximately 1,000 feet north of S 216th Street								
Existing	No areas with concentrations of sensitive viewers.	Large buildings with extensive parking areas interspersed with vacant parcels. Low vividness.	3	Mix of building types with large parking-storage areas, some vehicle storage.	2	The landscaped median and street side plantings are the most unifying elements.	3	2.7
With Kent/Des Moines HC Campus Station Option from the S 216th West Station Option		Elevated alignment and alignment in trench would not alter vividness along this part of SR 99 corridor.	3	Large scale of elevated structure portion of alignment would not be out of scale with nearby large-scale elements.	2	Would replace some vegetation in landscaped medians.	2	2.3
1,000 feet north of S 216th Street to S 216th Street								
Existing	Sensitive viewers (multi-story residential buildings).	Multi-story development on east side of SR 99 north of S 216th Street produces average vividness.	4	Moderate degree of intactness, primarily due to multi-story building complex on east side of SR 99.	4	Varity of land uses results in low unity.	3	3.7

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
With Kent/Des Moines HC Campus Station Option from the S 216th West Station Option		Presence of alignment and station in trench would not lower average vividness.	4	Intactness would not decrease enough to lower the rating.	4	Would remove some buildings that somewhat provide unity to this part of SR 99, but would not lower existing unity rating.	3	3.7
End of station to S 224th Street								
Existing	No areas with concentrations of sensitive viewers along alignment (are some multi-family buildings facing west and downhill of alignment that are west of buildings along SR 99).	Similar to previous section.	3	Fairly consistent appearance along sides of SR 99 and average intactness.	3	Wall on east side of SR 99, landscaping, and large undeveloped area with trees help with unity.	4	3.3
With Kent/Des Moines HC Campus Station Option from the S 216th West Station Option	From south of station would continue south in trench on west side of SR 99.	Removal of buildings on west side of SR 99 would change commercial appearance of some areas.	3	Trenched alignment along west side of SR 99 would not change the low degree of intactness along alignment.	3	Removal of buildings and presence of alignment trench would somewhat lower existing unity.	3	3
S 224th Street								
Existing	Sensitive viewers (backs of multi-story residential buildings)	Alignment would pass through utilitarian areas (parking and storage) with low vividness.	2	The mix of properties and development has low intactness.	2	The area the alignment would pass through has a fairly consistent utilitarian appearance.	3	2.3

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
With Kent/Des Moines HC Campus Station Option from the S 216th West Station Option		Trench would not change vividness along the alignment which would remain low.	2	Would not further reduce intactness.	2	Would not decrease unity.	3	2.3
Landscape Unit 2								
Kent-Des Moines Road to North Boundary of HC								
Existing	Sensitive viewers (single-family residences).	Average degree of vividness near Kent-Des Moines Road, wetland area, and 28th Avenue S.	4	The backs of some commercial properties that front SR 99 can be seen behind residences along the east side of 28th Avenue S, which lowers intactness.	3	The portion of the alignment along 28th Avenue S is fairly unified.	4	3.7
With Kent/Des Moines HC Campus Station Option from the S 216th West Station Option		Would pass over Kent-Des Moines Road, reach grade, and pass over (elevated) a wetland area and transition to a trench along the east side of 28th Avenue S (and remove single-story residences) and lower vividness.	3	Would lower intactness along this section of the alignment.	2	The alignment would remove single-story residences and vegetation and expose more of the backs of commercial properties that line SR 99. Unity would be reduced.	3	2.7
North end of HC Campus Parking Lot								
Existing	No areas with concentrations of sensitive viewers.	Unremarkable area – parking lot with some vegetation.	3	No contributing features in parking lot.	3	Parking lot adjacent to entry to campus has average degree of unity.	4	3.3
With Kent/Des Moines HC Campus Station Option from the S	Would enter parking area in a trench.	Presence of trench would have little influence on visual quality.	3	Presence would not further lower intactness.	3	Trench would somewhat decrease unity in this part of parking lot.	3	3

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
216th West Station Option								
Kent/Des Moines Station Options – Kent/Des Moines SR 99 Median Station Option (Landscape Units 1 and 2)								
From where leaves SR 99 Median (north of Kent-Des Moines Road) to Station (north of S 240th Street) to south of station								
Existing	Sensitive viewers (mobile homes, multi-story residences).	The area the alignment would pass through consists of parking areas, scattered commercial buildings, and is not memorable.	3	Mix of land uses and building types and sizes, abandoned properties, along with extensive areas for parking results in low degree of intactness.	3	Lack of visual cohesion results in low unity.	3	3
With SR 99 Median Station Option	Would potentially partially be seen from mobile home park and multi-story buildings to east (sensitive viewers).	Elevated station and guideway would improve the vividness of areas near them, but not enough to raise the rating to 4.	3	Development of station and associated parking would not change degree of intactness.	3	Unity would improve somewhat but not enough to increase rating.	3	3
Kent/Des Moines Station Options – Kent/Des Moines SR 99 East Station Option (Landscape Units 1 and 2)								
Landscape Unit 1								
From where transitions from SR 99 median to east side of SR 99 to Kent-Des Moines Road								
Existing	Sensitive viewers east of 30th Avenue S; mobile home park and multi-story residential buildings.	Area alignment would pass through consists of parking areas, scattered commercial buildings, a mobile home park, and small multi-story buildings and is not memorable.	3	Mix of land uses and building types and sizes, abandoned properties, along with extensive areas for parking results in low degree of intactness.	3	Lack of visual cohesion results in low unity.	3	3
With SR 99 East Station Option	Would be seen from sensitive viewers east of 30th Avenue S - mobile home park and multi-story residential building (views from	Elevated station and guideway would increase the vividness of areas near them, but not enough to raise the rating to 4.	3	Development of station and associated parking along east side of SR 99 would remove a variety of land use types, but would not change degree of intactness.	3	Unity would improve because the variety of land uses would be consolidated.	4	3.3

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
	which, with other options, would be screened by trees in lot west of it that would be removed with this option).							
S 260th Station Options – S 260th West Station (Landscape Unit 2)								
From S 240th Street to S 260th (and Station)								
Existing	Sensitive viewers (mobile home park) north of S 260th Street. Vacant lot, storage areas, vegetation somewhat screen views of SR 99.	Mix of buildings and vacant lots along this section of SR 99, many set back behind large parking areas. Low degree of memorability.	2	Variety of land uses and large numbers of utilitarian buildings and properties result in a low degree of intactness for most of this section of SR 99.	2	With variety of land uses, scales of development, the unity along most of this section of SR 99 is low.	2	2
With S 260th West Station Option		The presence of the elevated guideway and station would provide more visual interest to this section of SR 99 and slightly improve vividness.	3	Would not improve intactness enough to raise rating.	2	Would help unity this section of SR 99 and increase unity rating.	3	2.7
S 260th Street to where joins SR 99 median								
Existing	Sensitive viewers west of SR 99 (subdivision and Woodmont Library).	Segment has more vivid elements compared to areas near it and contains a large swath of undeveloped land side (and also some commercial properties) on east side of SR 99, with two areas of residential subdivisions and the Woodmont Library on the west side of SR 99.	4	Similarity of quality of buildings (except for commercial buildings surrounded by the undeveloped area) produces moderately high degree of intactness.	4	Average unity because of similar developments and presence of vegetation along this section of SR 99.	5	4.3

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		Vividness	Rating	Intactness	Rating	Unity	Rating	
With S 260th West Station Option		Elevated guideway would remove trees along west side of SR 99 that screen views to east.	4	Elevated guideway would cross from west to median near the subdivision and require two straddle bents over southbound lanes of SR 99.	3	Unity rating would be lowered from views from subdivision and library of SR 99 corridor. .	4	3.7
S 260th Station Options – S 260th East Station (Landscape Unit 2)								
From where leaves SR 99 median (south of S 252nd Street to Station (over S 260th Street)								
Existing	Sensitive viewers (mobile home park) north of S 260th Street, east of SR 99.	Mix of commercial buildings and parking areas along east side of SR 99.	2	Variety of land uses and large numbers of utilitarian buildings and properties result in a low degree of intactness for most of this section of SR 99.	2	With variety of land uses, scales of development, the unity along most of this section of SR 99 is low.	2	2
With S 260th East Station Option		Elevated guideway and Kent/Des Moines West Station along east side of SR 99 would not change low vividness rating.	2	Elevated guideway and station would be clearly seen from adjacent mobile home park. Would not change intactness rating.	2	Would somewhat improve unity (but not enough to increase rating) by providing a consistent element along this section of SR 99	2	2
From Station to S 268th Street								
Existing	Sensitive viewers (residential subdivision and Woodmont Library).	Segment has more vivid elements compared to areas near it and contains a large swath of undeveloped land side (and also some commercial properties) on east side of SR 99, with two areas of residential subdivisions and the Woodmont Library on the west side.	4	Similarity of quality of buildings (except for commercial buildings surrounded by the undeveloped area) produces moderately high degree of intactness.	4	Average unity because of similar developments and presence of vegetation along this section of SR 99.	5	4.3

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Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
With S 260th East Station Option		The elevated structure along east side of SR 99 would be seen from sensitive viewers on west side of SR 99 and have slightly lower vividness rating, but not enough to lower it from to 3.	4	The elevated structure would add a larger-scale element to the viewed landscape that would somewhat intrude on views of the SR 99 corridor.	3	Unity would decrease slightly, but not enough to lower the rating.	4	3.7
S 268th Street to S 272nd Street								
Existing	No areas with concentrations of sensitive viewers.	Extensive parking areas for customers and variety of commercial businesses and buildings.	2	Wide variety of properties and vacant lots with little intactness.	2	Few unifying elements, little in the way of vegetation or other streetscape improvements to improve unity.	3	2.3
With S 260th East Station Option		Presence of elevated structure on east side of SR 99 would not further lower vividness.	2	Would not change intactness rating.	2	Would not change unity rating.	3	2.3
S 272nd Redondo Trench Station Option (Landscape Unit 3)								
S 279th Street to S 288th Street								
Existing	Sensitive viewers in multi-story residential buildings east of SR 99 and single-family residences further to the south on the west side.	Multi-story developments on west side are lower than SR 99 and are higher than SR 99 on the east side. Small-scale commercial developments at south end of this segment.	4	The segment of SR 99 has a strong, fairly new multi-story development character that creates a moderately high degree of intactness.	5	Up to S 284th Street, trees are present on slope west of SR 99 and are a unifying element. In addition, the slope to the east of this section creates a somewhat enclosed “valley” through which SR 99 travels.	5	4.7
With S 272nd Redondo Trench Station Option		Trees along the west side of SR 99 would be removed but many would remain behind the elevated structure. The elevated structure would be seen by	4	The presence of the elevated structure would add a large-scale element to a residential-scaled and designed section of SR 99,	3	The elevated structure would introduce a large-scale element into the “valley” and distract from the area’s unity.	3	3.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
		residents where trees have been removed and would lower the area's vividness.		and would decrease the area's intactness.				
S 288th to Dash Point Road								
Existing	Sensitive viewers. Most of the existing utility corridor passes through heavily vegetated areas past the "backside" of residences to the west (generally screened by trees) and the west side of a multi-story development with views to the west of the utility lines.	The corridor contains utility support structures, lines, a cleared right-of-way, and an unpaved access road, and has a low degree of vividness. Most of the areas on either side of it are lined with vegetation so residents to the west (15th Place S) would have uphill views of vegetation.	4	The utility corridor, areas leading to it, and areas adjacent to it have average degrees of visual intactness.	4	Most of the areas on either side of the corridor are heavily vegetated and have a moderately high degree of unity.	5	4.3
With S 272nd Redondo Trench Station Option		Residents to the east would have elevated views of the S 272nd Redondo Trench Station Option components. The removal of vegetation along the utility corridor and presence of the elevated structure would reduce vividness to below average.	3.5	The removal of vegetation along the utility corridor and the presence of the elevated structure seen from the multi-story development on SR 99 and the single-story dwellings along 15th Place S would detract from the current intactness of views toward the utility corridor.	3	The moderately high degree of visual unity would be reduced to moderately low.	3	3.2
Dash Point Road to S 304th Street								
Existing	Residences along 16th Avenue S (sensitive viewers)	Part of alignment would pass along east side of 16th Avenue S through a heavily vegetated area that is the backdrop of residences to the west. Current degree of	4	16th Avenue S has a single-story residential character with an average degree of intactness.	4	The line of vegetation provides a moderately high degree of visual unity.	5	4.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
		vividness along 16th Avenue S is average.						
With S 272nd Redondo Trench Station Option		The at-grade alignment would require the removal of some existing vegetation on the east side of 16th Avenue S and replace the somewhat natural appearing area with a linear transportation feature. These changes would reduce views somewhat, but not enough to reduce lower than the existing average rating.	4	The presence of the sound wall along the alignment, OCS, and trains would reduce intactness.	3	The unity of this residential area would be lowered with the presence of the at-grade alignment.	4	3.7
Federal Way SR 99 Station Option								
S 312th Street to end (north of S 320th Street)								
Existing	No areas with sensitive viewers.	Alignment would pass through areas with extensive parking lots with low vividness.	2	Intactness is low as a result of extensive parking lots.	2	Little unity along the alignment.	2	2
With Federal Way SR 99 Station Option	Elevated station would straddle S 316th Street and have 400 structured parking spaces.	Elevated station would introduce interesting architectural element, which would slightly improve vividness in this area.	3	Intactness would improve somewhat, but not enough to increase rating.	2	Presence of elevated guideway and station would slightly improve unity, but not enough to increase rating.	2	2.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
I-5 Alternative								
Landscape Unit 1								
S 204th Street to vacant area north of S 208th Street								
Existing	No areas with sensitive viewers.	Would pass through vacant properties, areas containing commercial complexes and parking. Moderately low vividness.	2	Variety of land uses and appearances result in low intactness rating.	2	Low unit ratings along this part of the alignment.	2	2.3
With I-5 Alternative		Elevated guideway would somewhat improve vividness.	3	No improvement to intactness.	2	Elevated guideway passing though this area would add some unity to this area.	3	2.7
North of S 208th Street to Highline Water District property								
Existing	Sensitive viewers (single-family residences).	Heavily vegetated areas, along with cleared areas for SR 509 behind residences.	4	Consistent residential – open space character along this portion of alignment, large water storage facilities detract from intactness.	4	Average degree of unity along most of this part of alignment.	4	4
With I-5 Alternative		Portions of alignments that are elevated and at-grade would add a somewhat vivid element to area, but would not increase rating.	4	Elevated and at-grade alignments along with removal of vegetation would detract from intactness.	3	Unity would somewhat decrease with presence of elevated guideway.	3	3.2
From Highline Water District property to south of S 225th Street								
Existing	Sensitive viewers (single-family residences, mobile home park, multi-story and a park).	Numerous trees in these neighborhoods and many small roads that end against I-5 in cul-de-sacs or dead ends. A pleasant	4	Areas along the alignment have a strong single-family residential character that is interrupted by the presence of a major water storage facility with several different	5	An average degree of unity given the extensive single-family residents found on the many side streets in this area. Views from I-5 are of consistent tree cover along	4	4.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
		neighborhood, but not memorable.		types of large-scale tanks and a substation. Average intactness.		west side of I-5 with a relatively high degree of unity.		
With I-5 Alternative		The removal of trees, residences, and presence of the at-grade alignment and trains passing by would be seen from some nearby areas, but would not lower vividness to below average.	4	The removal of vegetation and some residences would lower intactness along the alignment when viewed from some areas west of I-5 and from I-5.	3	From I-5, visual unity would remain above average but from many adjacent residential areas unity would decrease from average.	3	3.3
S 225th Street to Kent-Des Moines Road								
Existing	Sensitive viewers (multi-story residential buildings and complexes).	A series of well-maintained complexes located between 30th Avenue S and I-5 are organized around parking areas and have average vividness.	4	Views of I-5 and the extensive parking areas decrease the intactness to average.	4	The area has moderate, fairly strong unity because of the similarity of building types and organization around parking lots.	4	4
With I-5 Alternative		Removal of residences and trees would not lower generally average degree of vividness to below average.	4	Removal of buildings and trees along with presence of at-grade and trenched alignments and passing trains would not be consistent with residential character and would lower intactness to less than average when viewed from west and also when viewed from I-5.	3	Unity would be decreased with loss of trees and buildings from areas to the west.	3	3.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
Landscape Unit 2								
Kent-Des Moines Road to S 252nd Street								
Existing	Sensitive viewers (mobile home park).	Alignment would pass through areas containing light industrial uses, commercial, outside storage, vacant land, and the Midway Landfill. Little vividness along this section of the alignment.	3	Utilitarian and vacant appearance of much of the segment produces low degree of intactness.	2	Mix of uses, appearance, and scale of properties results in areas with low visual unity when viewed from the west. Views from I-5 are fairly unified, other than along Midway Landfill.	3	2.7
With I-5 Alternative	Elevated guideway would not pass near sensitive viewers - the Kent/Des Moines 30th Avenue East Station and parking area would be located where a mobile home park currently that would be removed.	Would not change low vividness ratings although removal of trees would be noticed from I-5 and would somewhat lower vividness.	3	Intactness would not change with the presence of the I-5 alternative.	2	The low unity of most of the section of the alignment would somewhat improve with the presence of the elevated Kent/Des Moines 30th Avenue East Station, but not enough to raise it to average.	3	2.7
S 252nd Street to S 259th Street								
Existing	Sensitive viewers (single- family residential and multi-story residential building).	Has the appearance of an older, established, single-family neighborhood.	4	Average degree of development and design in this area.	4	Strong residential character with many trees creates visual unity. The somewhat disconnected street grid decreases visual unity.	5	4.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
With I-5 Alternative	Would be elevated or raised as goes past residences next to I-5 on S 253rd, 256th, 259th streets and 31st Avenue.	Many residences in this area would have views of changes screened by remaining vegetation, but the visual unity from some adjacent residences would be lowered.	3	Removal of vegetation along I-5 and presence of elevated and at-grade alignment would lower average intactness rating.	3	Visual unity would be reduced for single-family residences that would remain next to areas where other single-family residences and mature trees lining I-5 would be removed.	3	3
S 259th Street to S 272nd Street								
Existing	Sensitive viewers (multi-story residential buildings and single-family subdivision).	The two residential areas along this section of the alignment are typical of similar types of development in the assessment area, and have average vividness.	4	The two residential areas along this section of the alignment are isolated from other developments, well-maintained, and produce an average degree of intactness.	4	The residential areas along this section of the alignment are composed of similar-appearing buildings and are surrounded by heavy vegetation. This results in a moderately high degree of unity.	5	4.3
With I-5 Alternative		Removal of trees adjacent to I-5 would lower the average vividness of this area. The presence of S 272nd Star Lake Station in a trench would not improve vividness at the park-and-ride facility.	3	The presence of the alignment (elevated, at-grade, and trenched) would reduce intactness when viewed from residences and I-5.	3	Unity would be lowered next to residences that would be adjacent to the alignments and when viewed from I-5.	3	3
Landscape Unit 3								
S 272nd Street to S 288th Street								
Existing	Sensitive viewers (multi-story residential buildings and single-family residential areas) are adjacent to most of this part of the alignment.	Views toward I-5 from residential areas to the west are generally blocked by vegetation (including many large trees) that lines the I-5 right-of-way and private lands adjacent to it. There are many trees in these	4	Areas along the alignment have the character of a subdivision built in a forested area, with numerous trees remaining within and adjacent to residences.	5	The uniform building types, street layouts, and presence of numerous trees produces a setting of moderately high visual unity.	5	4.7

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
		residential areas, so the presence of trees adjacent to I-5 does not contribute to the overall average vividness of these areas.						
With I-5 Alternative	At-grade (much with retained fill) along much of alignment behind single-family residences.	Vividness would be reduced for adjacent residences.	3	The presence of the alignment and passing trains would lower intactness.	4	Unity would be reduced with the removal of trees and views of I-5 and alignment.	3	3.2
S 288th Street to complex north of S 298th Street								
Existing	Sensitive viewers (mobile home park and single-family residential).	Mobile home park backs up against I-5 and is screened from it by a sound wall and vegetation. Well-maintained mobile home park is not particularly memorable.	4	No exceptionally positive or negative structures or objects within the area or seen from it, average degree of intactness.	4	Mobile home park is screened from areas beyond its boundary and has fairly high visual unity.	4	4
With I-5 Alternative		Changes along alignment would reduce vividness to less than average for adjacent mobile homes.	3	Presence of retained fill wall supporting at-grade alignment and trains passing by would reduce intactness rating.	3	Removal of trees along I-5 corridor and alignment would reduce unity for adjacent mobile homes.	3	3
From complex south of S 298th Street to S 317th Street								
Existing	Visually sensitive areas (single-family dwellings and multi-story dwellings).	Areas have appearance of suburban – semi-rural neighborhoods with a variety of lot sizes and single-family residences. Multi-story residences with views toward Mt. Rainer (over I-5) at south end of this segment. The area is not memorable and of average vividness.	4	Some variety of land uses and building sizes and property maintenance. Average intactness.	4	Consistency of uses, scale, character, and presence of many trees produces moderately high unity.	5	4.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
With I-5 Alternative		Mostly at-grade alignment near sensitive viewers would not reduce vividness, but in conjunction with the removal of trees along I-5 would reduce vividness to less than average.	3	The intactness of eastern views from some adjacent residences would be lowered to less than average.	3	For some residences, the current degree of unity of views to the east would be reduced by removal of trees and presence of at-grade alignment.	3	3
South of S 317th Street to Federal Way Transit Center Station								
Existing	Alignment passes south of Truman High School (in a trench) as it travels through parking areas (and would require removal of a building) to the Federal Way Transit Center Station.	The alignment would pass through an unremarkable area composed of scattered large-scale buildings and parking areas.	3	The mixture of extensive parking areas and scattered buildings produces below average degrees of intactness.	3	Unity in this area is also below average.	3	3
With I-5 Alternative		Vividness is low and would stay low, despite the elevated station.	3	The station south of the Federal Way Transit Center would be elevated. Its presence would not reduce the existing low intactness rating to a rating lower than its current rating.		The I-5 Alternative would not improve unity along the alignment.	3	3
Kent/Des Moines Station Options – At-Grade Station Option								
Existing	Undeveloped area between I-5 to the east and Lowes to the west, S 240th Street to north and Midway Landfill to south.	Flat, gently sloping lot with scattered trees, surrounded by industrial-commercial uses, low vividness.	3	Average intactness in center of parcel, low intactness around rest because of mix of uses seen on nearby properties	4	Mix of uses surrounding undeveloped parcel.	3	3.3
With At-Grade Option	At-grade station.	Station location would be west of trees lining I-5, parking area would be	3	Station would be a positive element for intactness, while	4	Visual characteristics of station and parking area would slightly improve unity,	3	3.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
		located in vacant lot, which would not improve low vividness.		parking area would decrease it. No change to rating.		but not enough to increase rating.		
Kent/Des Moines Station Options - SR 99 East Station Option								
Existing	Adjacent to mobile home park (sensitive viewers).	Views of parking and storage areas and buildings do not produce vivid images.	3	Low degree of intactness.	2	Scattered buildings and parking areas produce low unity.	2	2.3
With SR 99 East Station Option	Elevated on east side of SR 99.	Elevated station and approach would improve vividness in this area.	4	Slight improvement in intactness because of station.	3	With consolidated development unity would improve.	3	3.3
Landfill Median Alignment Option								
Existing	The alignment along the I-5 median that this option would follow parallels the Midway Landfill.	Vividness along this section of I-5 is low except for the unusual and somewhat memorable view of the landfill, which provides a large engineered clearing along this generally tree-lined section of the I-5 corridor.	4	Gas capture equipment in the landfill provides a somewhat industrial character to the landfill, and lowers intactness.	3	The landfill has an engineered appearance and low visual unity with its surroundings.	3	3
With Landfill Median Alignment Option		The elevated guideway in the median would be the only part of the project in the median and would not lower the average vividness.	3	The option would not lower further the intactness of the view of the landfill.	3	The option would not further reduce the low unity of the view.	3	3
Federal Way City Center Options – I-5 Station Option								
Existing	No areas with concentrations of sensitive viewers.	The location of this option is largely a parking area (with buildings that would be removed).	3	Low intactness with this mix of parking lots, access roads, and buildings.	3	Low degree of visual unity in this area.	3	3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
With I-5 Station Option	Would be partially in a trench at-grade.	Removal of buildings and replacement with a station would not improve low vividness rating.	3	Removal of buildings and replacement with a station would not improve low intactness rating.	3	Removal of buildings and replacement with a station would not improve low unity rating.	3	3
Federal Way City Center Options – S 320th Park-and-Ride Station Option								
Existing	Visually sensitive area (the tail tracks would be within a mobile home park and require the removal of units).	This option parallels I-5 to an existing park-and-ride. The alignment has low vividness. The portion of the tail tracks that would extend into the east edge of the mobile home park is adjacent to I-5 and also has a low degree of vividness.	3	Low intactness with this area adjacent to I-5 with parking lots and access roads.	3	Low degree of visual unity in this area.	3	3
With S 320th Park-and-Ride Station Option		The at-grade station and parking structure would not improve vividness of this area.	3	Intactness would not improve with the presence of the station and parking structure.	3	The parking structure would be similar to other structures in the general area and would not improve unity.	3	3
SR 99 to I-5 Alternative (transition area from SR 99 to I-5 Between Kent-Des Moines Road and approximately S 240th Street)								
Existing	Visually sensitive area (mobile home park would be removed, but residents in multi-story residences would remain).	Mix of land uses and character including areas of commercial (buildings and extensive parking areas), industrial, storage, residential, and vacant land. These areas are not memorable.	2	Low degree of intactness along this alignment.	3	Unity is low given the mix of uses, scales, etc.	2	2.3

TABLE A-1
Existing Visual Quality and Changes in Visual Quality Near Areas with Concentrations of Sensitive Viewers by Alternative

Segment	Notes	Elements of Visual Quality						Visual Quality Category 7 = very high 6 = high 5 = moderately High 4 = average 3 = moderately low 2 = low 1= very low
		Vividness	Rating	Intactness	Rating	Unity	Rating	
With SR 99 to I-5 Alternative	Would cross from northwest to southeast through this area.	The elevated guideway and station, along with the parking areas, would slightly improve the low degree of vividness along this alignment.	3	The elevated station in particular would improve intactness to areas near it, but overall intactness would remain low.	3	The development associated with this option would somewhat improve visual unity, which overall would still be low.	3	3
I-5 to SR 99 Alternative (transition area from I-5 to SR 99 Between Kent-Des Moines Road and approximately S 240th Street)								
Existing	Visually sensitive area (mobile home park).	Mix of land uses and character including areas of commercial (buildings and extensive parking areas), industrial, storage, residential, and vacant land. These areas are not memorable.	2	Low degree of intactness along this alignment.	3	Unity is low given the mix of uses, scales, etc.	2	2.3
With I-5 to SR 99 Alternative	Would cross from northeast to southwest through this area and avoid mobile home park.	The elevated guideway and station, along with the parking areas, would slightly improve vividness along this alignment and from the mobile home park.	3	The elevated station in particular would improve intactness to areas near it, but overall intactness would remain low.	3	The development associated with this option would somewhat improve visual unity, which overall would still be low.	3	3

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Appendix B

Key Observation Point Analysis

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Appendix B

Key Observation Point Analysis

This appendix depicts and explains how the Federal Way Link Extension (FWLE) alternatives would affect the visual quality of the corridors the alternatives would pass through as seen from selected locations, or key observation points (KOPs), found along the alternatives' alignments. The Key Map on the next page shows the locations of the 16 KOPs. Areas where the visual quality (see text box) of the view from the KOPs would change are noted, as are KOPs where views of Puget Sound or the Olympic Mountains might be blocked or intruded upon by FWLE alternative components such as elevated guideways.

Visual Quality Components

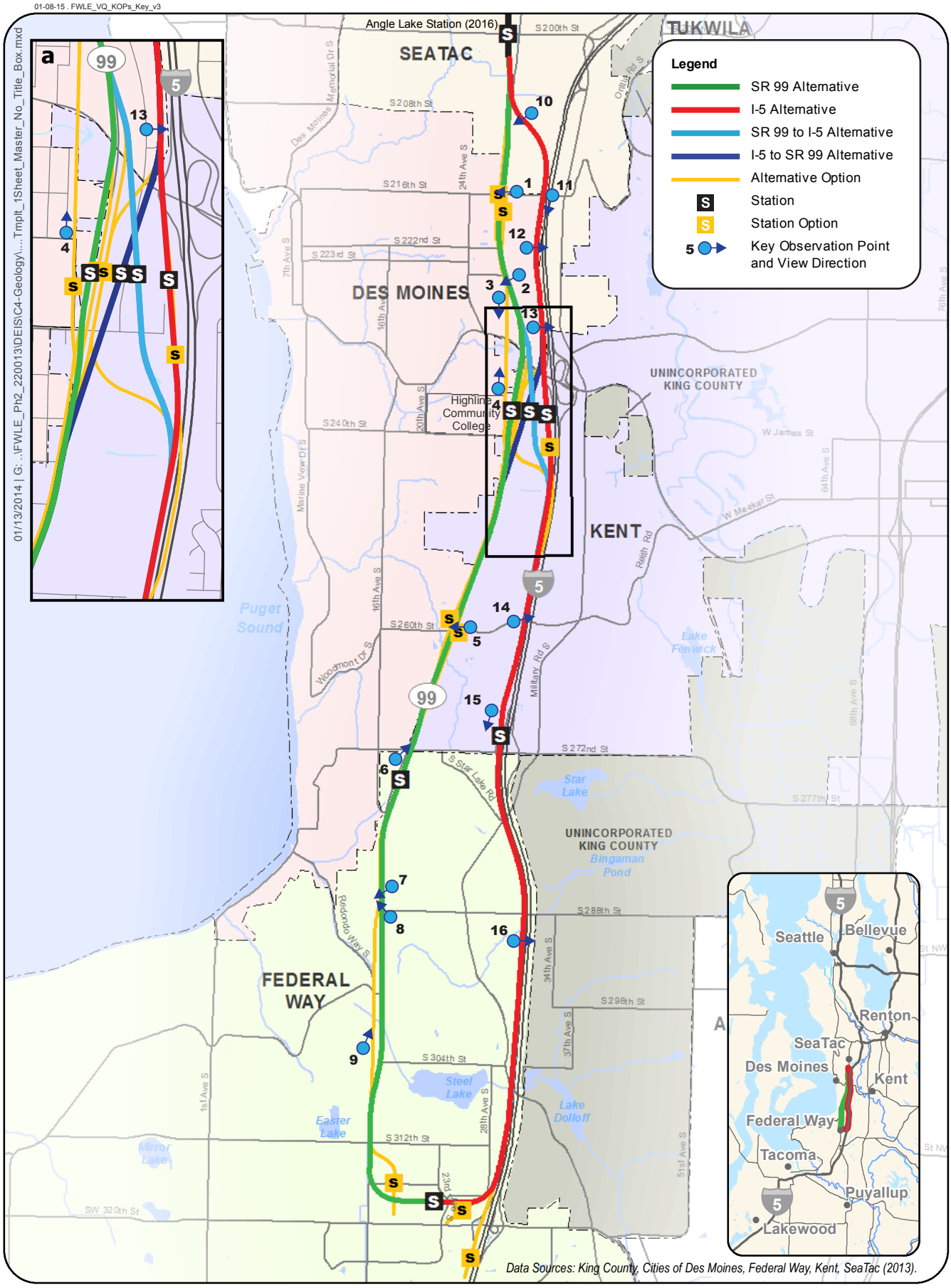
Vividness is the degree of drama, memorability, or distinctiveness of the landscape. Vividness is composed of four elements—landform, vegetation, water features, and human-made elements—that usually influence the degree of vividness.

Intactness is a measure of the visual integrity of the natural and human-built landscape and its freedom from encroaching elements. Intactness is composed of two primary elements—development and encroachment—that influence the degree of intactness.

Unity is the degree of visual coherence and compositional harmony of the landscape when it is considered as a whole. High unity frequently attests to the careful design of individual components and their relationship in the landscape.

This analysis is based upon, but does not strictly follow, the visual assessment methodology developed by the Federal Highway Administration (FHWA), which is described in Appendix A, FHWA Visual Impact Methodology, Existing Visual Quality, and Impacts of Alternatives on Visual Quality, to Appendix G5, Visual and Aesthetic Resources Technical Report (Technical Report). As described in Appendix A, visual quality is an assessment of the composition of the character-defining features for selected views of landscapes. A visual quality assessment asks: Is this particular view common or dramatic? Is it a pleasing composition (with a mixture of elements that seem to belong together) or not (with a mixture of elements that either do not belong together or are visual intrusions that contrast with the other elements in the surroundings)? Visual quality is evaluated in terms of vividness, intactness, and unity. Note that in this assessment, views of Puget Sound and the Olympic Mountains are considered to contribute to vividness, and as a result, are contributors to visual quality. The consideration of a "view" (of Puget Sound, the Olympic Mountains, or Mt. Rainer) is considered to be a stand-alone factor used to assist in evaluating impacts to visual and aesthetic resources. Changes to visual quality; intrusion upon or blockage of views Puget Sound, the Olympic Mountains, or Mt. Rainer; and impacts associated with light and glare are the three factors used to assess impacts on visual and aesthetic resources in this technical report.

The visual quality category of the sections of the alternative corridors seen from the KOPs is generally the same as for that of segments of the corridors described in Table A-1 of Appendix A. However, because the KOPs represent one view along the corridor, there may be a difference in visual quality category between the KOP view and the section of the corridor as whole.



Key Map and View Direction
Location of Key Observation Points
Federal Way Link Extension

B.1 Components of Visual Quality

As described in Appendix A, the three components of visual quality are considered together to determine overall visual quality. The seven-point scale used in the FHWA system was simplified to three levels of visual quality for this assessment: low, average, and high (see text box on page B-3).

Visual Quality

Low Visual Quality: Areas with low visual quality have some combination of features that seem visually out of place, lack visual coherence, do not have compositional harmony, and/or might contain unsightly elements.

Average Visual Quality: Areas with average visual quality are commonly occurring or average-appearing landscapes that have a generally pleasant appearance but might lack enough distinctiveness, memorability, drama, and compositional harmony to place them in the high visual quality category. This is generally the most frequent category.

High Visual Quality: Areas with high visual quality must be outstanding in terms of being very memorable, distinctive, unique (in a positive way), and/or intact—they can be natural, park-like, or urban, with urban areas displaying strong and consistent architectural and urban design features.

The 16 KOPs described in this appendix were selected in consultation with jurisdictions along the alignments. They depict a range of locations and types of views such as views looking perpendicular toward alternatives to represent views from adjacent areas, and in some locations where potential view blockage of Puget Sound and the Olympic Mountains would occur, views looking along the lengths of the I-5 and SR 99 corridors, views seen by nearby residents, and views seen from the street representing what pedestrains or motorists would see. Both types of views can represent the views that residents, pedestrians, and motorists would have of the alternatives. KOPs from areas with concentrations of sensitive viewers such as residents or people recreating in parks were selected, as well as from areas that do not contain sensitive viewers but were chosen by local jurisdictions as important. Exhibits 1-1 through 1-3 in the Visual and Aesthetic Resources Technical Report identify areas with concentrations of sensitive viewers along the alignments of the alternatives.

The following sections describe the KOPs that were selected for each alternative and option. This organization provides a way of depicting how the alternatives and options would appear from locations along their alignments and assists in evaluating potential impacts associated with the alternatives and options.

B.2 SR 99 Alternative

Six KOPs along the SR 99 Alternative alignment were selected to assist in evaluating the impacts of this alternative. The KOPs associated with SR 99 Alternative options are discussed below. The SR 99 Alternative KOPs are located within Landscape Unit 1 (KOPs 1 and 2), Landscape Unit 2 (KOP 5), and Landscape Unit 3 (KOPs 6, 7, and 8). The existing conditions and visual quality of each KOP are described below, as are the potential impacts of the SR 99 Alternative on the existing conditions and visual quality of each KOP.

KOP 1, Looking West from S 216th Street toward SR 99

Existing Condition (see Appendix C, Exhibit 1a)

This location depicts views that local motorists (mostly people living in nearby neighborhoods) or pedestrians heading west on S 216th Street toward SR 99 see. The character of the part of SR 99 seen

from this location is that of an arterial transportation corridor and the character of areas adjacent to SR 99 are largely commercial with residential areas beyond (and downhill of) the SR 99 commercial corridor.

The view encompasses the roadways of S 216th Street and SR 99, one- and two-story commercial and residential buildings (and the roofs of some), the signalized intersection of S 216th Street and SR 99, and glimpses of Puget Sound and areas beyond, including the Olympic Mountains. The overall view is unremarkable, but the presence of Puget Sound in conjunction with a number of trees west of SR 99 improves the vividness rating of the view to average, as is the visual quality of the view from KOP 1.

With the SR 99 Alternative (see Appendix A, Exhibit 1b)

The SR 99 Alternative would follow SR 99 and add a second north-south transportation element into the view that would be seen by motorists and pedestrians. It would not be inconsistent with the character of the SR 99 corridor, but it would introduce a larger-scale transportation element into the view. From KOP 1, parts of the elevated guideway and the overhead catenary system (OCS) would be silhouetted against the sky. The elevated guideway would intrude upon the view of Puget Sound (which would still be seen "under" the structure). The SR 99 Alternative would lower the vividness and unity of the view from average to low. Visual quality would also be reduced to low.

Visual Quality Rating – Existing (with SR 99 Alternative)

- Vividness = average (low)
- Intactness = average (low)
- Unity = average (low)
- *Visual Quality = Average (Low)*

KOP 2, Looking West from S 224th Street toward SR 99

Existing Condition (see Appendix A, Exhibit 2a)

KOP 2 depicts views that people (mostly local residents from nearby neighborhoods) driving west on S 224th Street toward the SR 99 corridor see. It also represents views to the west toward Puget Sound that some guests in a hotel being constructed on the southeast corner of the S 224th Street and SR 99 would have. The view from this location includes SR 99; S 224th Street, including the extension of it downhill beyond SR 99; utility poles and lines; a number of trees; and glimpses of Puget Sound. Properties that are adjacent to the SR 99 corridor are commercial in character. Residential areas can be seen in the distance beyond the SR 99 corridor. The building west of SR 99 and north of S 224th Street contributes intactness and unity to the viewed landscape, as do numerous trees. The portion of Puget Sound and landforms beyond it can be seen in the background add to the vividness of the view. The visual quality of the view from KOP 2 is average.

With the SR 99 Alternative (see Appendix C, Exhibit 2b)

The SR 99 Alternative would add a second transportation element along the SR 99 corridor that would not be inconsistent with the character of this part of the SR 99 corridor. Because the elevated guideway would not be silhouetted against the sky from this location, the portion of the SR 99 Alternative seen from KOP 2 would not be as much of a visual encroachment to the corridor as it would be from KOP 1. The OCS would be silhouetted, but because of the presence of other overhead lines

that can be seen from this location, the OCS overhead lines would not be particularly noticeable. The elevated guideway would echo the strong horizontal lines of the background land forms, buildings, SR 99, and utility lines, but would be larger in scale. The views of Puget Sound that contribute to the vividness of the view would be blocked. The average visual quality of the part of the SR 99 corridor seen from this location would be reduced to low.

Visual Quality Rating – Existing (with SR 99 Alternative)

- Vividness = average (low)
- Intactness = average (low)
- Unity = average (average)
- *Visual Quality = Average (Low)*

KOP 5, Looking West from S 260th Street toward SR 99

Existing Condition (see Appendix C, Exhibit 5a)

KOP 5 is adjacent to a residential area where views of the SR 99 corridor and S 260th Street are largely blocked by nearby structures, a perimeter fence, and vegetation. KOP 5 represents the views that motorists (mostly residents of neighborhoods to the east) and pedestrians heading west on S 260th Street toward the SR 99 corridor see. The land near the intersection of SR 99 and S 260th Street is commercial in use and gives the intersection area a transportation corridor/commercial character. The view from KOP 5 along S 260th Street toward SR 99 and beyond is unremarkable and vividness is low. The view includes S 260th Street, parking areas and adjacent buildings, the intersection of S 260th Street and SR 99, utility poles and lines, and a gas station east of SR 99, which together produce an intactness rating of low. The trees that can be seen along S 260th Street and the rising terrain S 260th Street follows in the distance contribute to an average degree of unity. The visual quality of the view from KOP 5 is low.

With the SR 99 Alternative (see Appendix C, Exhibit 5b)

The SR 99 Alternative would not be inconsistent with the character of the portion of the SR 99 corridor seen from KOP 5 by motorists and pedestrians. The elevated guideway would be partially silhouetted against the sky from this location and would somewhat encroach on views of the rising terrain in the background, but would not block the view of the terrain. The rising terrain in the background would be seen under the elevated guideway. The presence of the elevated structure would somewhat add to the vividness of the unremarkable eastern view from this location, but not enough to increase the vividness rating from low to average. The elevated guideway would add a new large-scale transportation element from this view that would pass over S 260th Street. Its presence would somewhat further reduce the low visual quality of the view from this location.

Visual Quality Rating – Existing (with SR 99 Alternative)

- Vividness = low (low)
- Intactness = low (low)
- Unity = average (low)
- *Visual Quality = Low (Low)*

KOP 6, Looking Northeast from SR 99 toward S 272nd Street

Existing Condition (see Appendix C, Exhibit 6a)

The expansive view along the SR 99 corridor from KOP 6 toward the S 272nd Street intersection represents a view toward a section of the corridor where the differences among the SR 99 Alternative and the S 272nd Redondo Trench Station Option discussed later in this appendix would be very apparent to people traveling on this section of SR 99. Viewers include a range of motorists (primarily local residents and commuters) and to a lesser extent, pedestrians. Features that can be seen from this location include the SR 99 roadway and sidewalks, areas for sidewalk and median landscaping (although the median landscaping in this view is less attractive than segments of the median to the northeast), commercial buildings located adjacent to the street as well as set back away from it, parking lots, light standards, utility poles and their associated lines, and vegetation in the background. This view is typical of views along commercial sections adjacent to the SR 99 corridor that include small businesses (on the left side of Exhibit 6a) and larger businesses containing large parking areas (on the right side of Exhibit 6a). The character of this view is typical of an arterial transportation corridor with adjacent heavy commercial land uses. The view from KOP 6 is unremarkable and intactness and unity are low, as is visual quality.

With the SR 99 Alternative (see Appendix C, Exhibit 6b)

The SR 99 Alternative would introduce an elevated transportation element along the corridor that would not be inconsistent with the existing major arterial character of the corridor, but would be much larger in scale than other elements seen along this part of the corridor. Buildings and vegetation along the east side of SR 99 would be removed, which would somewhat change the commercial character of those parts of the corridor but have little to no effect on visual quality. The elevated structure would become the skyline element in this view of the corridor. Vegetation beyond the elevated guideway would still be seen under parts of it. The presence of the SR 99 Alternative would further contribute to a reduction in the low visual quality of the portion of the SR 99 corridor seen from this location.

Visual Quality Rating – Existing (with SR 99 Alternative)

- Vividness = low (low)
- Intactness = low (low)
- Unity = low (low)
- *Visual Quality = Low (Low)*

KOP 7, Looking Southwest along SR 99 near the Intersection with S 288th Street

Existing Condition (see Appendix C, Exhibit 7a)

KOP 7 is situated in a parking area of a series of residential buildings located along the east side of the SR 99 corridor and represents views that residents in the parking area have. This portion of the SR 99 corridor contains a number of areas with concentrations of sensitive viewers residing in multi-story residential buildings. The elevated view from KOP 7 includes the SR 99 roadway, a landscaped median and landscaped sidewalk areas, a series of small-scale commercial buildings, a number of utility poles and light standards, and vegetated hillsides in the background. Although the view from this KOP is oriented along the SR 99 corridor, views to west from nearby residential units include Puget Sound and

the Olympic Mountains. The view along the SR 99 corridor from KOP 7 represents a mix of land uses, including commercial and residential, that influences the character of this part of the SR 99 corridor. The vividness, intactness, and unity of the view from KOP 7 are average, as is visual quality.

With the SR 99 Alternative (see Appendix C, Exhibit 7b)

Although the SR 99 Alternative would not be inconsistent with the character of the SR 99 corridor seen from KOP 7 and would not remove adjacent commercial buildings, the elevated guideway would introduce a large-scale horizontal transportation element into the view. The median over which the elevated structure would pass could be replanted, but vegetation would not include young trees of the species that the current median contains. The structure would pass through the view and be silhouetted against the sky. The presence of the elevated guideway would decrease the visual connection with areas to the southwest and would reduce the vividness of this portion of the corridor seen from KOP 7 from average to low. The elevated guideway would encroach on views of the SR 99 corridor, and intactness of the corridor would be reduced to low. Unity would be somewhat lowered but not enough to lower it from average to low. The visual quality of the portion of the SR 99 corridor seen from KOP 7 would be reduced from average to low.

Visual Quality Rating - Existing (with SR 99 Alternative)

- Vividness = average (low)
- Intactness = average (low)
- Unity = average (average)
- *Visual Quality = Average (Low)*

KOP 8, Looking Northwest toward the S 288th Street and SR 99 Intersection from SR 99

Existing Condition (see Appendix C, Exhibit 8a)

KOP 8 is situated along a section of SR 99 that represents views that motorists (commuters, people passing through the SR 99 corridor, and residents in nearby neighborhoods to the east and west) see near an important corridor intersection. The intersection is lined with small businesses (that give it a commercial character), behind which trees from residential areas can be seen. Puget Sound and areas beyond contribute to vividness, while the low-rise commercial buildings of similar appearance and scale in conjunction with the trees seen in the background produce average unity. Utility poles along with the street and traffic control lights associated with the intersection intrude into western views from this location and reduce intactness to low. The visual quality of the view of the SR 99 corridor from KOP 8 is average.

With the SR 99 Alternative (see Appendix C, Exhibit 8b)

The elevated guideway that would pass over this view would be a major visual transportation element. It would not be inconsistent with the existing character of this part of the SR 99 corridor, but would be larger in scale than nearby features and a dominant visual feature. Although the elevated guideway would not block views of Puget Sound for people driving or walking by this location, it would intrude on views and its presence would lower the vividness of this part of the corridor as well as reduce visual unity. Intactness would continue to be low. The visual quality of the view from KOP 8 would be reduced from average to low.

Visual Quality Rating – Existing (with SR 99 Alternative)

- Vividness = average (low)
- Intactness = low (low)
- Unity = average (low)
- *Visual Quality = Average (Low)*

B.2.1 SR 99 Alternative, S 216th West Station Option

KOP 1 in Landscape Unit 1 was chosen to assist in evaluating the impacts of the S 216th West Station Option. It is described below.

KOP 1, Looking West from S 216th Street at SR 99

Existing Condition (see Appendix C, Exhibit 1a)

The existing condition for KOP 1 with this station option is the same as the described above for KOP 1 under the SR 99 Alternative.

With S 216th West Station Option (see Appendix C, Exhibit 1c)

By locating the alignment and station in a trench, this option would not incorporate a large-scale structure into this part of the SR 99 corridor. Westward views of Puget Sound would continue to be seen and contribute to the vividness of this part of the corridor. Existing buildings along the west side of SR 99 would be removed, which would somewhat change the commercial character of this area, but would not affect visual quality. Streetscape elements associated with the station (but not depicted in Exhibit 1c) would somewhat improve intactness along this part of SR 99. Although this option would slightly improve visual quality of the view from KOP 1, the visual quality would remain average.

Visual Quality Rating – Existing (with S 216th West Station Option)

- Vividness = average (average)
- Intactness = average (average)
- Unity = average (average)
- *Visual Quality = Average (Average)*

B.2.2 SR 99 Alternative, S 216th East Station Option

KOP 1 was selected to assist in evaluating impacts of the S 216th East Station Option. It is located in Landscape Unit 1 and described below.

KOP 1, Looking West from S 216th Street at SR 99

Existing Condition (see Appendix C, Exhibit 1a)

The existing condition for KOP 1 with this station option is the same as the described above for KOP 1 under the SR 99 Alternative.

With the S 216th East Station Option (see Appendix C, Exhibit 1d)

The S 216th East Station Option that would pass along the east side of SR 99 would not be inconsistent with the character of this portion of the SR 99 corridor. The existing commercial building on the east side of the street that is visible from this location would be removed, and the elevated guideway and the OCS would be silhouetted against the sky. The station would be located south of this location and would not be visible from KOP 1. The elevated guideway would block views of motorists and

pedestrians of landforms in the distance beyond Puget Sound and would intrude upon the view of Puget Sound (which would be seen under the elevated guideway), all of which would lower vividness. The large scale of the elevated guideway would encroach on this view and reduce the intactness and unity of this part of the corridor to low. The visual quality of the portion of SR 99 corridor seen from KOP 1 would be reduced from average to low.

Visual Quality Rating – Existing (with S 216th East Option)

- Vividness = average (low)
- Intactness = average (low)
- Unity = average (low)
- *Visual Quality = Average (Low)*

B.2.3 SR 99 Alternative, Kent/Des Moines HC Campus Station Option

KOPs 2, 3, and 4 in Landscape Unit 1 were selected to assist in evaluating the impacts of the Kent/Des Moines HC Campus Station Option and are described below.

KOP 2, Looking West from S 224th Street toward SR 99

Existing Condition (see Appendix C, Exhibit 2a)

The existing condition for KOP 2 with this station option is the same as described above for KOP 2 under the SR 99 Alternative.

With the Kent/Des Moines HC Campus Station Option (see Appendix C, Exhibit 2d)

The Kent/Des Moines HC Campus Station Option elevated guideway seen from KOP 2 would not be inconsistent with the major arterial character of this portion of the SR 99 corridor. The elevated structure would be larger in scale than other elements seen along this part of the corridor. The elevated structure would block views of Puget Sound and areas beyond, which would contribute to a lowering of the average vividness of this part of the corridor to low. The average intactness of this part of the corridor would be reduced by the encroachment of the guideway, and unity would likewise be reduced from average to low. This station option's impact to the part of the corridor seen from this KOP would be very similar to that of the SR 99 Alternative described above and would reduce the existing average visual quality to low.

Visual Quality Rating – Existing (with Kent/Des Moines HC Campus Station Option)

- Vividness = average (low)
- Intactness = average (low)
- Unity = average (low)
- *Visual Quality = Average (Low)*

KOP 3, Looking South from S 226th Street at Area between 28th Avenue S and SR 99

Existing Condition (see Appendix C, Exhibit 3a)

KOP 3 is located in a parking area that serves several residential buildings lining the east side of 28th Avenue S. Although this location represents views from the parking area (units in the buildings have view windows and balconies on the west, or view, side of the buildings), the parking area is used by residents. The Kent/Des Moines HC Campus Station Option would pass east of the parking area

through the rear portions of commercial properties that contain buildings and outdoor storage areas and are accessed via SR 99 (which is higher in elevation than the parking area). The area this station option would pass through has a utilitarian appearance that is commercial/parking lot in character. The viewed area has low vividness, intactness, and unity. The visual quality of the parking area and adjacent commercial properties is low.

With the Kent/Des Moines HC Campus Station Option (see Appendix C, Exhibit 3b)

With the Kent/Des Moines HC Campus Station Option, the corridor of elevated guideway would pass next to the parking areas associated with multi-family buildings and would be a large-scale overhead element. The station option would add a transportation element to the character of the area, which is currently a mix of residential, parking lot, and commercial (with outside storage areas). Residents would see the elevated guideway and trains as they walked between the parking areas and their units and from units that have windows facing east. Most of the units do not have eastern views of trees, they have views across the parking area of the apartments of the backs of businesses, parking and storage areas, and vegetated areas largely composed of blackberry bushes.

Visual Quality Rating – Existing (with Kent/Des Moines HC Campus Station Option)

- Vividness = low (low)
- Intactness = low (low)
- Unity = low (low)
- *Visual Quality = Low (Low)*

KOP 4, 28th Avenue S Looking North

Existing Condition (see Appendix C, Exhibit 4a)

KOP 4 was selected to represent views of residents along the west side of 28th Avenue S as well as views of motorists who live in the neighborhood driving on 28th Avenue. The view from KOP 4 is of the east side of 28th Avenue S looking north. The area is residential in character, and vegetation in the fronts of yards tends to screen north-south views of residences along 28th Avenue S. The character of the viewed landscape is that of a pleasant, well-maintained, typical residential neighborhood with average vividness. Utility poles and lines, which are the primary negative visual features, do not lower intactness below average. The unity rating of this view is high, and visual quality is average.

With the Kent/Des Moines HC Campus Station Option (see Appendix C, Exhibit 4b)

The Kent/Des Moines HC Campus Station Option would require the removal of all the residences and landscaping associated with the residences along the east (right) side of 28th Avenue S. Near this location, the alignment would enter a trench. Part of this option's sound wall would be seen above the retained-cut wall. The sound wall would block views of trains passing through the trench but not the OCS. The Kent/Des Moines HC Campus Option would change the character of the portion of its corridor along the east side of 28th Avenue S from residential to transportation and would lower the average vividness and intactness of the view. The removal of trees and residences and the strong horizontal appearance of the sound wall would lower the average degree of unity of the existing view from average to low. The visual quality of this part of the station option would be reduced from average to

low. Mitigation measures, such as treating the sound wall and the landscaping as conceptually displayed in Exhibit 4b, would improve visual quality to average within approximately 5 to 8 years.

Visual Quality Rating – Existing (with Kent/Des Moines HC Campus Station Option)

- Vividness = average (low)
- Intactness = average (average)
- Unity = average (low)
- *Visual Quality = Average (Low)*

B.2.4 SR 99 Alternative, with the Kent/Des Moines HC Station Campus Option from S 216th West Station Option

In Landscape Unit 1, two KOPs (KOPs 2 and 3) were selected to assist in evaluating impacts of the S 216th West Station option combined with the Kent/Des Moines HC Campus Station Option. They are described below.

KOP 2, Looking West from S 224th Street toward SR 99

Existing Condition (see Appendix C, Exhibit 2a)

The existing condition for KOP 2 with this station option is the same as the described above for KOP 2 under the SR 99 Alternative.

Kent/Des Moines HC Campus Station Option from S 216th West Station Option (see Appendix C, Exhibit 2d)

The simulation depicts the S 216th West Station Option combined with the Kent/Des Moines HC Campus Station Option. Because the profile of this option along the portion the SR 99 corridor seen from KOP 2 would be in a trench, it would be less visually prominent to motorists, pedestrians, and future hotel guests than the elevated SR 99 Alternative alignment would be. It would not block or intrude on views of Puget Sound and the Olympic Mountains. This station option would not change the average visual quality of the part of the SR 99 corridor viewed from KOP 2.

Visual Quality Rating – Existing (with S 216th West Station Option)

- Vividness = average (average)
- Intactness = average (average)
- Unity = average (average)
- *Visual Quality = Average (Average)*

KOP 3, Looking South from S 226th Street at Area between 28th Avenue S and SR 99

Existing Condition (see Appendix C, Exhibit 3a)

The existing condition description for this KOP is the same as the description for KOP 3 under the SR 99 Alternative, Kent/Des Moines HC Campus Station Option.

With Kent/Des Moines HC Campus Station Option from S 216th West Station Option (see Appendix C, Exhibit 3c)

With the Kent/Des Moines HC Campus Station Option from the S 216th West Station Option, the portion of the alignment passing this location would be in a trench approximately 20 feet below the adjacent grade. The top of the retaining wall would be seen, as would a fence on top of the wall. The

large trees east of the alignment would be removed. Residents would see the wall and fence as they walk between the parking areas and their units, and some elevated units would have views into the trench. The wall and fence would not change the existing low visual quality of the area it would pass over, and they would not intrude on views. Mitigation measures such as treating the sound wall and the landscaping would improve visual quality, but not enough to raise it to average.

Visual Quality Rating – Existing (with Kent/Des Moines HC Campus Station Option)

- Vividness = low (low)
- Intactness = low (low)
- Unity = low (low)
- *Visual Quality = Low (Low)*

B.2.5 SR 99 Alternative, S 260th West Station Option

KOP 5 in Landscape Unit 2 near the S 260th West Station Option's crossing of S 260th Street was selected to assist in evaluating impacts from this station option.

KOP 5, Looking West from S 260th Street toward SR 99

Existing Condition (see Appendix C, Exhibit 5a)

The existing condition for KOP 5 with this station option is the same as that described above for KOP 5 under the SR 99 Alternative.

With the S 260th West Station Option (see Appendix C, Exhibit 5c)

From KOP 5, the elevated guideway passing along the west side of the SR 99 corridor would be partially silhouetted against the sky when viewed by motorists and pedestrians from this location east of SR 99. The S 260th West Station Option alignment would be farther from KOP 5 than the SR 99 Alternative alignment, so it would be slightly less visually prominent. The presence of the elevated guideway would not be inconsistent with the character of the portion of the SR 99 corridor viewed from KOP 5. The elevated guideway would introduce a large-scale transportation element into this view, but not further lower the existing low vividness, intactness, unity, or visual quality of the view.

Visual Quality Rating – Existing (with S 260th West Station Option)

- Vividness = low (low)
- Intactness = low (low)
- Unity = low (low)
- *Visual Quality = Low (Low)*

B.2.6 SR 99 Alternative, S 260th East Station Option

KOP 5 near the S 260th East Station Option's crossing of S 260th Street was selected to assist in the evaluation of impacts from this option. It is described below.

KOP 5, Looking West from S 260th Street at SR 99

Existing Condition (see Appendix C, Exhibit 5a)

The existing condition for KOP 5 with this station option is the same as the described above for KOP 5 under the SR 99 Alternative.

With the S 260th East Station Option (see Appendix C, Exhibit 5d)

From KOP 5, the elevated S 260th East Station would be seen between this location and SR 99 and would be partially silhouetted against the sky. The station would add a large-scale horizontal element crossing over S 260th Street to the view that would be different in character that the current utilitarian transportation character of the part of the SR 99 corridor seen from KOP 5. The presence of the elevated structure would increase the low vividness of this part of the SR 99 corridor to average. It would not improve intactness and unity. The low visual quality of part of the SR 99 corridor would not change.

Visual Quality Rating – Existing (with S 260th East Station Option)

- Vividness = low (average)
- Intactness = low (low)
- Unity = low (low)
- *Visual Quality = Low (Low)*

B.2.7 SR 99 Alternative, S 272nd Redondo Trench Station Option

Four KOPs in Landscape Unit 3 (KOPs 6, 7, 8, and 9) were selected to assist in evaluating the impacts associated with the S 272nd Redondo Trench Station Option. They are described below.

KOP 6, Looking Northeast from SR 99 toward S 272nd Street

Existing Condition (see Appendix C, Exhibit 6a)

The existing condition for KOP 6 with this station option is the same as the described above for KOP 6 under the SR 99 Alternative.

With the S 272nd Redondo Trench Station Option (see Appendix C, Exhibit 6c)

The aspect of the S 272nd Redondo Trench Station Option that would be most noticeable to motorists and pedestrians from this location would be the removal of existing buildings and trees and the presence of fencing associated with the trench on the east side of SR 99. Changes to the SR 99 corridor as a result of this station option would not be inconsistent with the character of this part of the SR 99 corridor. The station option would slightly improve on the intactness and unity of the view from KOP 6, but not enough to change them from low to average. Visual quality would remain low with this station option.

Visual Quality Rating – Existing (with S 272nd Redondo Trench Station Option)

- Vividness = low (low)
- Intactness = low (low)
- Unity = low (low)
- *Visual Quality = Low (Low)*

KOP 7, Looking Southwest along SR 99 near the Intersection of S 288th Street

Existing Condition (see Appendix C, Exhibit 7a)

The existing condition for KOP 7 with this station option is the same as the described above for KOP 7 under the SR 99 Alternative.

With the S 272nd Redondo Trench Station Option (see Appendix C, Exhibit 7c)

Changes to the SR 99 corridor that would be seen by residents in the parking area would be minor with the S 272nd Redondo Trench Station Option (a few trees along the west side of SR 99 would be removed). This station option would be consistent with the complex character of this view (commercial, transportation, and residential) and would not change the average visual quality of the portion of the SR 99 corridor seen from KOP 7.

Visual Quality Rating – Existing (with S 272nd Redondo Trench Station Option)

- Vividness = high (high)
- Intactness = low (low)
- Unity = average (average)
- *Visual Quality = Average (Average)*

KOP 8, Looking Northwest along SR 99 near the Intersection of S 288th Street

Existing Condition (see Appendix C, Exhibit 8a)

The existing condition for KOP 8 with this station option is the same as the described above for KOP 8 under the SR 99 Alternative.

With the S 272nd Redondo Trench Station Option (see Appendix C, Exhibit 8c)

Changes to the portion of the SR 99 corridor seen from this location as a result of this station option would be difficult to see due to the alignment's location on a slope west of SR 99 at S 288th Street Wires associated with the OSC would be seen from this location and are depicted on the left side of Exhibit 8c. The S 272nd Redondo Trench Station Option would not change the appearance of the part of the SR 99 corridor or reduce the existing average visual quality.

Visual Quality Rating – Existing (with S 272nd Redondo Trench Station Option)

- Vividness = average (average)
- Intactness = average (average
- Unity = average (average)
- *Visual Quality = Average (Average)*

KOP 9, Looking Northeast on 16th Avenue S near S 303rd Street

Existing Condition (see Appendix C, Exhibit 9a)

KOP 9 is located in a visually sensitive area along the northern part of a residential area that lines the west side of 16th Avenue S. The view from this location of the station option route would be seen by nearby residents and people in the neighborhood driving on 16th Avenue S. The view includes a residence on the west side of the street and the undeveloped and heavily vegetated area across the street between 16th Avenue S and SR 99. This portion of 16th Avenue S has a suburban/semi-rural/undeveloped character. The view does not contain memorable, vivid elements but has a high degree of intactness and unity and average overall visual quality.

With the S 272nd Redondo Trench Station Option (see Appendix C, Exhibit 9b)

This portion of the S 272nd Redondo Trench Station Option corridor seen from KOP 9 would be at-grade and require the removal of well established trees along the east side of 16th Avenue S, although

trees behind the ones that would be removed would still be seen. A sound wall would parallel 16th Avenue S. The station option would introduce a transportation element that would be inconsistent with the residential, rural character of this area. The OCS would be seen above the sound wall, as would the tops of passing trains. The introduction of these elements would lower vividness and intactness of this part of the option to low, and unity would be reduced from high to average. Visual quality would be reduced from average to low. Mitigation measures, such as treating the sound wall and landscaping, could restore visual quality to average in approximately 5 to 8 years.

Visual Quality Rating – Existing (with S 272nd Redondo Trench Station Option)

- Vividness = average (low)
- Intactness = average (low)
- Unity = high (average)
- *Visual Quality = Average (Low)*

B.3 I-5 Alternative

Seven KOPs were selected to assist in evaluating impacts from the I-5 Alternative. Four KOPs (10 through 13) were selected in Landscape Unit 1, two (KOP 14 and 15) in Landscape Unit 2, and one (KOP 16) in Landscape Unit 3.

KOP 10, Looking Southwest from S 208th Street toward SR 99 and Future SR 509 Right-of-Way

Existing Condition (see Appendix C, Exhibit 10a)

KOP 10 provides a view of the future SR 509 right-of-way alignment and the I-5 Alternative corridor that would be seen by motorists (mostly residents of areas between this location and I-5). The SR 509 right-of-way to the south of S 208th Street has been cleared of buildings and most vegetation (although vegetation remains along the edge of the cleared lot and S 208th Street) and has the appearance and character of a vacant lot. The view is unremarkable with low intactness. The presence of vegetation lining both sides of S 208th produces an average degree of visual unity. The visual quality of the view from KOP 10 is low.

With the I-5 Alternative (see Appendix C, Exhibit 10b)

The elevated guideway passing over S 208th Street and part of the adjacent vacant lot would add a large-scale elevated horizontal element to the portion of the I-5 Alternative corridor seen from this location by motorists, but would not change the vacant lot character of the property to the left of S 208th Street. The low vividness of the view would be increased to average. The presence of the elevated guideway would not alter the existing low visual quality of the portion of the corridor seen from KOP 10.

Visual Quality Rating – Existing (with I-5 Alternative)

- Vividness = low (average)
- Intactness = low (low)
- Unity = average (low)
- *Visual Quality = Low (Low)*

KOP 11, Looking South from the S 216th Avenue Overpass at I-5

Existing Condition (see Appendix C, Exhibit 11a)

KOP 11 is located on the S 216th Street I-5 overpass and was selected to depict a view of a section of the I-5 corridor with largely intact vegetation lining the freeway that would be seen by motorists and pedestrians from an overpass. The view from this KOP is typical of views of sections of the I-5 right-of-way that are lined with well established vegetation including tall trees. The character of this view is that of a major highway adjacent to what (from this viewing angle) appears to be forest. The degree of vividness, intactness, and unity is average, as is overall visual quality.

With the I-5 Alternative (see Appendix C, Exhibit 11b)

Construction of the at-grade I-5 Alternative along this section of the I-5 Alternative corridor would require the removal of vegetation within the I-5 right-of-way as well as excavation into the slope west of I-5 and construction of a retaining wall. The reduction in the number of trees within the right-of-way would be very noticeable from KOP 11 as would the at-grade profile of the alignment and retaining wall. The character of the west side of the I-5 right-of-way would change from forested, to a major transportation corridor containing a freeway and light rail alignment with a fringe of vegetation along its edge. The vividness of the view of the west side of I-5 would remain average. The alignment would reduce intactness and unity to low. Visual quality would be reduced from average to low.

Visual Quality Rating - Existing (with I-5 Alternative)

- Vividness = average (average)
- Intactness = average (low)
- Unity = high (low)
- *Visual Quality = Average (Low)*

KOP 12, Looking East from Midway Park toward I-5

Existing Condition (see Appendix C, Exhibit 12a)

The eastern portion of Midway Park is about 500 feet west of I-5 and north of an electrical substation (to the right of the photograph in Exhibit 12a). The substation property directly adjacent to the park is vacant with maintained grass. From KOP 12, views of I-5 are screened by vegetation within the park and along the freeway corridor. Park users (primarily local residents) using playground equipment or walking by this location are the viewers from KOP 12 and are considered sensitive viewers. The portion of Midway Park that can be seen from this location has a park-like character that is not particularly memorable but does have average intactness and unity. The presence of utility poles and lines detract from intactness and unity. The visual quality of the portion of the I-5 Alternative corridor seen from KOP 12 is average.

With the I-5 Alternative (see Appendix C, Exhibit 12b)

A short retained-fill wall associated with the I-5 Alternative and the OCS would be seen beyond the far end of the park, as would passing trains behind a sound wall. The presence of the walls, train, and OCS (which would not be that much different in appearance that the utility lines that are quite visible) along the Alternative I-5 corridor would be somewhat inconsistent with the character of a park (as is the adjacent substation) to some park users. These elements would slightly lower visual unity but not

enough to lower it from average to low. The presence of the sound walls and passing light rail trains would lower Intactness from average to low and would somewhat lower unity, but not enough to lower it from average to low. Vividness would remain average. The average visual quality of the view of the I-5 Alternative corridor from KOP 12 would be reduced but not enough to lower it from average to low.

Visual Quality Rating – Existing (with I-5 Alternative)

- Vividness = average (average)
- Intactness = average (low)
- Unity = average (average)
- *Visual Quality = Average (Average)*

KOP 13, Looking East from 30th Avenue S toward I-5

Existing Condition (see Appendix C, Exhibit 13a)

KOP 13 is located along a section of the I-5 Alternative corridor that is east of 30th Avenue S. This section of the corridor contains a number of multi-story residential developments of varying sizes. Many of the developments abut I-5. KOP 13 is located adjacent to one of the developments, and its view toward the corridor is along the development's driveway that leads to its parking area. Viewers from KOP 13 include residents arriving at the parking area depicted in Exhibit 13a and passing motorists (consisting largely of nearby residents). The part of the corridor that can be seen from this location includes two residential buildings, a parking area, and an existing fence adjacent to I-5 that screens views of the freeway. Vividness is average (primarily due to the mature trees lining the entrance), as is unity. The presence of the driveway, parking areas, buildings, and sound wall decrease visual unity to low. The visual quality of the portion of the I-5 Alternative corridor that can be seen from KOP 13 is average.

With the I-5 Alternative (see Appendix C, Exhibit 13b)

The portion of the I-5 Alternative seen by residents or passing motorists from this location would be the area where the building closest to I-5 would be removed to construct a new retaining wall to support the at-grade guideway and new sound walls. These changes would add a transportation component to the parking lot character of the area, which would not be consistent with the existing character of this portion of the corridor. The removal of a building and the presence of the retaining wall, sound walls, OCS, and passing of trains would reduce the average vividness and unity but not the intactness of this view. Visual quality would be reduced from average to low. Mitigation measures, such as treating the sound wall and landscaping, could restore visual quality to average in approximately 5 to 8 years.

Visual Quality Rating – Existing (with I-5 Alternative)

- Vividness = average (low)
- Intactness = low (low)
- Unity = average (low)
- *Visual Quality = Average (Low)*

KOP 14, Looking East along S 259th Place toward I-5 Overpass

Existing Condition (see Appendix C, Exhibit 14a)

From the KOP 14 location on S 259th Place, the existing I-5 overpass can be seen. This portion of the I-5 Alternative corridor is residential in use and character. Viewers from KOP 14 include local motorists and nearby residents. The I-5 overpass is a somewhat vivid feature in an area that has a rural or suburban character. The visual quality of this portion of the-5 Alternative corridor is average.

With the I-5 Alternative (see Appendix C, Exhibit 14b)

The elevated guideway would add a second overpass to the view from KOP 14. The I-5 Alternative would require removing some vegetation, which would not greatly change the appearance of this view to motorists or its character. The impact of the I-5 Alternative would be the addition of a second, large-scale transportation element, which would somewhat lower intactness. The visual quality of the portion of the I-5 Alternative corridor seen from KOP 14 would be somewhat reduced, but not enough to lower the existing average visual quality to low.

Visual Quality Rating – Existing (with I-5 Alternative)

- Vividness = average (average)
- Intactness = average (low)
- Unity = average (average)
- *Visual Quality = Average (Average)*

KOP 15, Looking South along S 28th Avenue

Existing Condition (see Appendix C, Exhibit 15a)

KOP 15 is adjacent to a portion of the I-5 Alternative corridor that is near a residential area north of the Star Lake Park-and-Ride. Single-family residences line the east side of 28th Avenue S (most of which would be removed with the I-5 Alternative), and a number of residences within a subdivision west of 28th Avenue S back up to 28th Avenue S and have glimpses of the east side of 28th Avenue S and the trees that line I-5. The view from this KOP to the south along the corridor is seen by local residents driving south on 28th Avenue S. The view includes the location where 28th Avenue S begins to curve to the west around the north end of the Star Lake Park-and-Ride. Fences along the back of residences in the subdivision can be seen on the west side of the street (right side of Exhibit 15a), and residential vegetation as well as the I-5 corridor can be seen. This pleasant, heavily vegetated section of 28th Avenue S with its mature trees is somewhat memorable and has average vividness and intactness. The unity of the area is high, and the overall visual quality is average.

With the I-5 Alternative (see Appendix C, Exhibit 15b)

With the I-5 Alternative, the residences and most of the mature vegetation along the east side of 28th Avenue S that is adjacent to I-5 would be removed along this section of 28th Avenue S. The top of the trench retaining wall would be seen, but the OCS and trains would not be seen. The removal of the vegetation and residences would change the vividness of the portion of the corridor seen from this KOP from average to low. The low profile of the alignment would not be visually dominant, but the removal or vegetation would reduce the existing average vividness and intactness to low. The existing high unity would be lowered to average, and the average visual quality of this portion of the corridor

reduced to low. Mitigation measures, such as landscaping, could restore visual quality to average in approximately 5 to 8 years.

Visual Quality Rating – Existing (with I-5 Alternative)

- Vividness = average (low)
- Intactness = average (average)
- Unity = high (low)
- *Visual Quality = Average (Low)*

KOP 16, Looking East between S 288th Street and S 304th Street toward I-5 from within the Camelot Mobile Home Park

Existing Condition (see Appendix C, Exhibit 16a)

KOP 16, which represents views of the I-5 Alternative corridor by residents within the Camelot Mobile Home Park, is located within a portion of the mobile home park that has views of I-5. In areas of the mobile home park that are adjacent to I-5, sound walls have been constructed (as seen in Exhibit 16a). The sound walls and nearby vegetation (much of which is within the I-5 right-of-way) screen views of I-5 from most of the mobile home park and provide an attractive backdrop (particularly the trees). The character of the mobile home park is typical of that of a well-maintained residential area with a backdrop of trees. This view has average degree of vividness and intactness and high unity. The visual quality is average.

With the I-5 Alternative (see Appendix C, Exhibit 16b)

The I-5 Alternative would remove much of the vegetation within the I-5 right-of-way along the boundary of the mobile home park that serves as a backdrop for much of the mobile home park. A retaining wall and sound wall for the at-grade alignment would replace the existing sound wall. The horizontal elements of the alternative along with passing trains would not be consistent with the existing residential character of the portion of the I-5 Alternative corridor seen from KOP 16. The vividness of the view would remain average, but the removal of trees and presence of the retaining wall and sound wall would lower intactness and unity. The existing average visual quality of the corridor seen from this area would be reduced to low. Mitigation measures, such as landscaping would improve visual quality to average within approximately 5 to 8 years.

Visual Quality Rating – Existing (with I-5 Alternative)

- Vividness = average (average)
- Intactness = average (low)
- Unity = high (low)
- *Visual Quality = Average (Low)*

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