3.9 Visual and Aesthetic Qualities

Highways and major transit facilities are highly visible public resources that can noticeably affect the visual character of surrounding landscapes and the perception of visual resources. Such changes can be of keen interest to local residents and jurisdictions as well as to travelers using the facilities.

This section describes and evaluates existing visual resources and their context in order to assess potential positive and negative effects to these resources from the CRC project, specifically from construction and operation of the locally preferred alternative (LPA). Understanding these effects contributes to the development of well-designed transportation facilities that fit appropriately with their settings and benefit their communities. This section addresses all areas of the project, though no visual impacts have been identified for the modification to the Steel Bridge in Portland. Findings in this section are based on the CRC Visual and Aesthetics Technical Report, included as an electronic appendix to this FEIS.

A comparison of impacts from the LPA and the DEIS alternatives is summarized in Exhibit 3.9-5. A more detailed description of the impacts of the DEIS alternatives on visual quality is in the DEIS starting on page 3-255.

3.9.1 New Information Developed Since the Draft EIS

Since the publication of the DEIS, additional information relating to visual and aesthetic qualities of the project has been developed:

- The CRC Urban Design Advisory Group (UDAG) has updated their project design guidelines, intended for the CRC design team to use for project development from conceptual through final design and construction. Although some elements of the design guidelines are reflected in the LPA, the guidelines will be most relevant to later project design stages.
- The UDAG developed an architectural design concept to provide guidance and direction for the design of the bridges crossing the Columbia River mainstem and North Portland Harbor.
- A preliminary sign plan was developed that included anticipated changes
 to transportation signage needed for safe operation of the proposed LPA
 facility. The project team examined the proposed signage changes and
 determined that overall, no adverse visual impacts would result from
 implementation of the preliminary sign plan.
- The project team provided additional analysis of potential changes in light and glare resulting from the LPA. Choices made during final design would be the primary drivers of light and glare impacts. Therefore, the light and glare analysis focuses on prescribing the issues to be addressed in

UDAG

The Urban Design Advisory Group (UDAG) advised CRC on the appearance and design of bridge, transit and highway improvements. Members are from both Oregon and Washington and contribute diverse professional and community perspectives on a variety of topics including architecture, aesthetic design, community connections, and sustainability. The group's focus was developing the LPA and creating guidelines for the final design work that will follow a Record of Decision.

- final design, including materials and/or features that would minimize and mitigate for light and glare impacts.
- The project team identified two public art installations—the brick arches, located at the northern edge of the SR 14 interchange, and the Boat of Discovery, located on Columbia Boulevard near the north end of the existing bridges—that would be relocated by the LPA, and identified the public process that would be used in their relocation.
- More visualizations have been developed since the publication of the DEIS. Some of these are photo simulations, for example, showing transit stations. Other visualizations are more general computer model outputs that have enabled the completion of a more refined visual analysis.
- The Bridge Review Panel (BRP), comprised of individuals with national and international experience designing and constructing large bridge projects, delivered a report to the governors of Oregon and Washington in February 2011. The panel suggested that the LPA's open web box design be abandoned and offered three bridge types for further consideration. After additional public involvement and analysis, the composite deck truss was advanced because it is the most affordable, maintains the project schedule, minimizes environmental impacts, and provides the least risk. More information on the review process and findings by ODOT and WSDOT can be found in the memo Columbia River Crossing: Key Findings and Recommendation related to Bridge Type, February 2011 (WSDOT and ODOT 2011).

In addition to new information developed since the DEIS, the FEIS includes refinements in design, impacts and mitigation measures. Where new information or design changes could potentially create new significant environmental impacts not previously evaluated in the DEIS, or could be meaningful to the decision-making process, this information and these changes were applied to all alternatives, as appropriate. However, most of the new information did not warrant updating analysis of the non-preferred alternatives because it would not meaningfully change the impacts, would not result in new significant impacts, and would not change other factors that led to the choice of the LPA. Therefore, most of the refinements were applied only to the LPA. As allowed under Section 6002 of SAFETEA-LU [23 USC 139(f)(4)(D)], to facilitate development of mitigation measures and compliance with other environmental laws, the project has developed the LPA to a higher level of detail than the other alternatives. This detail has allowed the project to develop more specific mitigation measures and to facilitate compliance with other environmental laws and regulations, such as Section 4(f) of the DOT Act, Section 106 of the National Historic Preservation Act, Section 7 of the Endangered Species Act, and Section 404 of the Clean Water Act. FTA and FHWA prepared NEPA re-evaluations and a documented categorical exclusion (DCE) to analyze changes in the project and project impacts that have occurred since the DEIS. Both agencies concluded from these evaluations that these changes and new information would not result in any new significant environmental impacts that were not previously considered in the DEIS. These changes in impacts are described in the re-evaluations

and DCE included in Appendix O of this FEIS. Relevant refinements in information, design, impacts and mitigation are described in the following text.

The new information described above is discussed further in the CRC Visual and Aesthetics Technical Report, included as an electronic appendix to this FEIS.

3.9.2 Existing Conditions

A viewshed is the portion of the landscape that can be seen from within the project area and that has views of the project area. The boundaries of a viewshed are determined by the surrounding topography, vegetation, and built environment. The CRC viewshed includes unobstructed, long-distance views up and down the Columbia River, views from and along the I-5 corridor, and views from parks, neighborhoods, and other sites near the project. There are also unique views where the built environment and topographic features allow for longer views of the LPA's corridor and structures. Views of the bridge structures from distant hills on Grand Boulevard, as shown in Exhibit 3.9-1, are examples of these unique reaches of the viewshed.

Exhibit 3.9-1 Vancouver Grand Boulevard, View of I-5 Bridges



In order to describe the existing visual environment and understand the level of visual changes that could occur with the project, five distinct "landscape units" have been defined. These five landscape units are shown in Exhibit 3.9-2; their existing characters and key resources are described in Exhibit 3.9-3.

68th St **Burnt Bridge** Lincoln 54th St Creek Š 49th St 15th 45th St 5 44th St Vancouver 33rd St (500) Downtown Grand Residential St. John's ळ 15th St McLoughlin Blvd CSt Greater Mill Plain Blvd 8th St 6th St Central Columbia **Park** River Columbia Way 14 Columbia River **Columbia Slough** Columbia Slough Landscape Units N Not to scale.

Exhibit 3.9-2 **Location of Landscape Units**

Exhibit 3.9-3 **Visual Character and Resources of Landscape Units**

Landscape Unit	Visual Character	Visual Resource		
Burnt Bridge Creek	Riparian corridor and residential	Green highway corridor (driver's perspective)		
Vancouver Downtown-Residential	Primarily residential with urban core	Esther Short Park, Tualatin Hills, Columbia River, Mt Hood, portions of the Portland skyline		
Greater Central Park	Open space of campus and park	Officers Row, the Fort Stockade, open space		
Columbia River	Riverine, industrial	Mt. Hood, Tualatin Hills, Columbia River and its shoreline		
Columbia Slough	Mixed industrial-commercial and sports fields, marinas	Columbia Slough Scenic Corridor, Tualatin Hills, Mount St. Helens, Washington Cascades, stands of mature trees, Vanport Wetlands (west of I-5)		

The study team analyzed the degree to which viewers (the people who would have views of or from the project area) in each landscape unit are likely to be sensitive to changes in views and the visual character of the landscape. Viewer sensitivity considers the combined effect of the activities a viewer is engaged in, the visual context, and the values, expectations, and interests of a viewer. The existing visual quality of each landscape unit was also evaluated. Visual quality is the subjective value of the visual experience; it is composed of the memorability or distinctiveness of the landscape (vividness), the degree to which the landscape is a harmonious mix of elements (unity), and the degree to which the landscape is free of "eyesores" or elements that do not fit with the overall landscape (intactness). The viewer sensitivity and visual quality of the project's five landscape units are summarized in Exhibit 3.9-4.

Exhibit 3.9-4

Viewer Sensitivity and Visual Quality Ratings for all Landscape Units

Landscape Unit	Landscape Unit Viewer Sensitivity		Unity	Vividness	
Burnt Bridge Creek	Low to Moderate	Moderate	Moderate	Low	
Greater Central Park	Moderate to High	High	High	Moderate to High	
Vancouver Downtown- Residential	Moderate to High	High	Moderate	High	
Columbia River	High	Low to Moderate	Low to Moderate	High	
Columbia Slough	Low (drivers) to High (recreational users)	Moderate	Moderate Moderate		

The landscape units and their existing conditions, viewer sensitivity, and visual quality are described in greater detail in the CRC Visual and Aesthetics Technical Report, included as an electronic appendix to this FEIS.

3.9.3 Long-term Effects

Exhibit 3.9-5 is a high-level comparison of the long-term visual and aesthetics effects of the LPA with those of the other build and No-Build alternatives. The comparison is based on the degree of overall change expected in visual quality and character, and is influenced by the relative number of viewers that would be impacted as well as by their viewer sensitivity.

Exhibit 3.9-5 **Comparison of Long-term Effects on Visual Resources**

	Locally Preferred Alternative			Alt 2:	Alt 3:	Alt 4:	Alt 5:
Landscape Unit	LPA Option A ^a	LPA Option B ^a	No-Build	Repl Crossing with BRT	Repl Crossing with LRT	Suppl Crossing with BRT	Suppl Crossing with LRT
Burnt Bridge Creek	Visual effects in the landscape unit would be minor. (No Change in Visual Impact)	Same as Option A	No Change in Visual Impact	Same as LPA	Same as LPA	Same as LPA	Same as LPA
Greater Central Park	Impact from SR 14 structures, other views improve with the Evergreen Community Connector.	Same as Option A	No Change in Visual Impact	Same as LPA	Same as LPA	Greater impact from SR 14 structures, other views improve with the Evergreen Community Connector	Greater impact from SR 14 structures, other views improve with the Evergreen Community Connector
Vancouver Downtown	Replace views of bridge towers with new bridges	Same as Option A	No Change in Visual Impact	Same as LPA	Same as LPA	Different style bridges could degrade views	Different style bridges could degrade views
Columbia River	Visual change from higher bridges, removal of bridge towers	Very similar to Option A	No Change in Visual Impact	Same as LPA	Same as LPA	Visual change from higher bridge. Impact from incompatible bridge designs	Visual change from higher bridge. Impact from incompatible bridge designs
Columbia Slough	Visual effects in the landscape unit and Scenic Corridor would be minor	Same as Option A	No Change in Visual Impact	Same as LPA	Same as LPA	Same as LPA	Same as LPA

Note: The impacts for the LPA are relative to No-Build Alternative and existing conditions.

The primary elements of the LPA that would affect visual quality and character are the new bridge structures across North Portland Harbor and the Columbia River, transit stations, park and ride facilities, and guideways. The visual quality of the entire length of the corridor and all landscape units would be at least slightly affected. Visual impacts would occur from:

- The greater heights and widths of the new structures across the Columbia River;
- The wider or higher ramps for reconfigured interchanges at Marine Drive, Hayden Island, SR 14, Mill Plain Boulevard, and SR 500;

a Information in parentheses indicates impacts if the LPA Option A or B is constructed with highway phasing.

- The effective widening of the I-5 corridor due to the addition of auxiliary lanes along I-5; and
- The heights, massing, and architectural treatment of the three planned park and ride facilities.

The more notable impacts of the LPA are described below. More detail on these impacts and information on less noticeable impacts are included in the CRC Visual and Aesthetics Technical Report. The following section describes project impacts in the Columbia River, Greater Central Park, and Vancouver Downtown landscape units, followed by a general discussion of impacts related to the highway footprint, tolling, and other project elements.

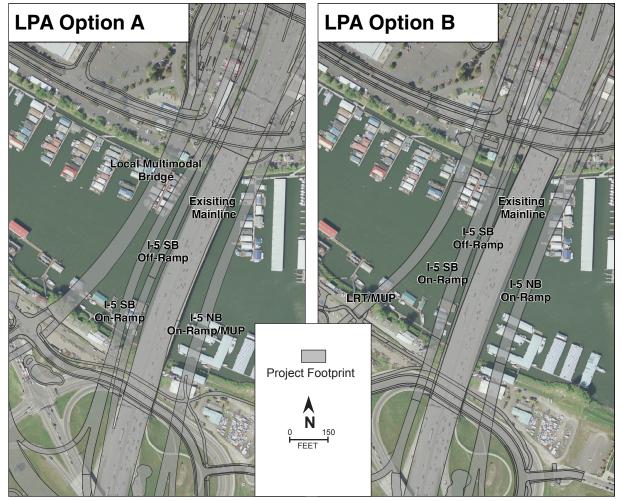
Columbia River Landscape Unit

Impacts to the Columbia River main channel would be mostly positive. Potential impacts would include:

- Removal of the visually complicated truss structures and lift towers of the existing I-5 bridges, which obstruct views from the river, from the Interstate bridges themselves, and from the shoreline. This action would remove an important contributor to the area's historic context (the I-5 bridges) and a character-defining aspect of interstate travel.
- From I-5, views of the Portland and Vancouver skylines, distant shorelines, rolling hills, and mountain profiles would generally improve. Toward I-5, views of open water and shorelines from shoreline-level and elevated viewpoints would also generally improve.
- Removal of the lift towers would be interpreted to have a generally positive visual impact on views from downtown Vancouver.
- Modifications to interchanges would increase heights at the Marine Drive, Hayden Island, and SR 14 interchanges, where new ramps and elevated roadways would be higher than any existing facilities in these immediate areas. Even at these interchanges, the degree of change is expected to be moderate, since these areas are already and would continue to be large urban interchanges.
- Removal of the existing bridge structures that currently obstruct views of
 much of the area immediately beneath the bridges, along the river, and
 along the Vancouver waterfront. This would provide for a new southern
 terminus of Main Street, an extension of the view corridor along the
 shoreline, and more light and vegetation under the bridges. These elements
 would all provide positive visual changes to the immediate area and
 adjacent areas.
- The proposed design would present less visual clutter for skyline and horizon views while maintaining the drama (vividness) that large-span bridges add to views. The lighting scheme could add additional interest. The proposed scheme utilizes indirect light in numerous colors. The indirect lighting would be designed to illuminate the bridge structures, resulting in bridges with "glowing" architecture. Although the lighting would contribute to vividness in the corridor, it would be indirect lighting that minimizes uncomfortable glare for those viewing the structure. A lighting scheme will be developed during the final design phase.

North Portland Harbor (a side channel of the Columbia River) would experience moderately negative visual impacts from the addition of piers for the local multimodal bridge and other ramps; these would clutter views along the slough and reduce views of open water. However, LPA Option A provides the opportunity to introduce an interesting new architectural feature with the local multimodal bridge. The LPA Option B would require a slightly different design over the Harbor, with a more narrow transit bridge and wider collector-distributor ramps. Also with Option B, the two collector-distributor ramps west of the mainline would be slightly different than with the LPA Option A (Exhibit 3.9-6).

Exhibit 3.9-6 **Design Differences over North Portland Harbor**



Dimensions are approximate.

Greater Central Park Landscape Unit

The Clark Park and Ride would replace a small, landscaped parking area with a multi-story parking structure. This would be visible from the sports fields just east of the proposed site, and would be inconsistent with the low- to mid-rise buildings of the nearby campus.

Impacts to the VNHR, which includes the most sensitive viewpoints in the project area, would generally be moderate, although certain specific views would experience a high degree of change. In the assessment of effects to

historic resources, this change in visual context contributes to a determination of adverse effect.

- I-5 bridge lift towers would be removed, decreasing the amount of bridge structure visible from within portions of the VNHR, resulting in a positive impact.
- The new SR 14 interchange would cause adverse visual impacts in the vicinity of the old HBC Village. The new SR 14 to I-5 northbound ramp would minimally encroach on the perimeter of the Village area and would be inconsistent with the Village area in scale, uses, and character; however, views of the ramp would likely be buffered by trees and landscaping. The new I-5 to City Center exit ramp loop would be higher than the existing ramp, would be substantially more visually imposing than any existing feature, and would constitute an adverse visual impact.
- The new I-5 alignment would be much closer to the Post Hospital, which would lose a portion of its landscaping and pedestrian access; and this would impact the setting of the hospital. The Evergreen Community Connector would also alter the setting of the hospital, although it is intended to provide improved access and help to restore a portion of the space lost to the expansion of the highway.

Vancouver Downtown Landscape Unit

Transit facilities would result in visual and aesthetic impacts. Visual impacts along the transit alignments in Vancouver are expected to be low. The transit vehicles would operate in the right-of-way and the necessary guideway. Rumble strips, curbs, and advisory signage would not produce a large change nor introduce incompatible structures and furnishings into the streetscape. The light rail guideway would be most visually prominent where it leaves the Columbia River bridge structure and descends to Washington Street. The landing would require a large, solid foundation on Washington Street.

Downtown Vancouver historically was served by a streetcar line. Although light rail vehicles are noticeably modern in appearance, the re-introduction of rail-based transit contributes to the historic visual context of downtown Vancouver. Light rail transit station platforms and associated furnishings such as shelters, benches, paving, and signage would be designed to be compatible with the surroundings and to protect existing sight lines and views (Exhibit 3.9-7). The movement and presence of transit vehicles would not create permanent visual conflicts or changes and are therefore not expected to create visual impacts.

Views in the immediate vicinity of new transit stations would change because the transit vehicles would stop for short durations, adding a new dynamic quality to blocks with stations. The transit vehicles would not impact most views because they would not be permanent parts of any view other than at or near maintenance facilities. Additionally, the transit stations would include new rider amenities such as trash receptacles, rain protection, and signage.

The introduction of frequently running light rail vehicles on 17th Street would result in changes to this currently quiet, underutilized, local road. However, the necessary tracks, rumble strips, curbs, and advisory signage would not produce a large change or introduce incompatible structures or furnishings into the streetscape.

Exhibit 3.9-7

Simulation of Washington and 9th Street Station



The Mill Park and Ride (at Main Street and Mill Plain Boulevard) would be inconsistent with the existing single-story surroundings, but consistent with the projected levels of development for the downtown area, as portrayed in the Vancouver City Center Vision Plan. The context of the Clark County Historic Museum and the similar older buildings in the immediate area would be adversely affected by the presence of the Mill Park and Ride. The Columbia Park and Ride structure would be consistent with the urban fabric of the surrounding area.

Highway Footprint

Across Hayden Island, the LPA's mainline highway footprint would generally be wider and higher than the existing facility, requiring the displacement of numerous businesses on both sides. However, additional highway capacity has been accommodated within a similar footprint by removing the existing, land-consumptive ramps. In addition, based on extensive community involvement, LPA Option A reduces the footprint by two to four lanes and raises the elevation of Tomahawk Island to improve the visual quality.

In Vancouver, the right-of-way required for the LPA is only slightly wider than the existing right-of-way. However, the visual experience to and from the highway would be substantially altered to accommodate additional auxiliary

lanes. The sloping, landscaped borders of the existing facility would be replaced with vertical concrete walls, likely ornamented with patterns and/or climbing plants. A lid (the Community Connector) over I-5 has been conceptually developed as part of the project. The Community Connector would introduce a short tunnel for motorists, intended as a positive experience; vivid features would mark the entrance to the short tunnel. The designs for the interchanges at Marine Drive, Hayden Island, and SR 14 would introduce visually complex systems of ramps at higher elevations than the existing ramps.

Tolling

Visual impacts due to tolling would be very slight for the electronic tolling infrastructure. The overhead tolling technology would use noticeable structures, very similar to overhead signage structures, in views from and toward the highway, but would result in low to no visual impacts.

Ruby Junction Maintenance Facility

TriMet would expand the Ruby Junction Maintenance Facility to better serve current maintenance demand as well as the expected increased maintenance required by both the proposed Milwaukie and CRC light rail extensions. Expanding the existing Ruby Junction Maintenance Facility would be consistent with the surroundings. There are a number of small, single-family homes nearby, surrounded by a mix of undeveloped tracts and industrial two-story box buildings with parking lots. The existing maintenance facility has the character of a rail yard, with large maintenance garages and little landscaping. Visual impacts resulting from this expansion are expected to be low because the added structures and uses are consistent with existing character and uses.

Steel Bridge

The minor modifications to the Steel Bridge will have no impact on views from or to the bridge.

Indirect Effects

The LPA has the potential to encourage development, particularly transit-oriented development (TOD), near proposed transit stations on Hayden Island and in downtown Vancouver. As these areas are already highly urbanized, new development is anticipated to have either no effect or a positive effect on visual character, depending on the quality of design and materials used compared with what is being replaced (primarily existing buildings and parking lots). Views for those using I-5, boaters, air passengers, pedestrians, and bicyclists are unlikely to change significantly as views of new development are likely to be blocked by existing structures or would be in character with existing development. Potential beneficial and adverse aesthetic impacts of alterations to historic properties are discussed in Section 3.8 of this FEIS. Further discussion of potential indirect effects of the LPA, including more information on indirect visual and aesthetics effects, can be found in the CRC Indirect Effects Technical Report.

3.9.4 Temporary Effects

Temporary visual and aesthetics effects are those related to construction of the LPA. Two types of temporary effects have been identified, those resulting from on-site and off-site construction activity.

On-site Construction

During construction, the visual quality of views to and from the project area would be temporarily altered. Construction-related signage and heavy equipment would be visible in the vicinity of construction sites. Vegetation may be removed from some areas to accommodate construction of the bridges, new ramps, and the light rail transit guideway. This would degrade or partially obstruct views or vistas.

Nighttime construction would be necessary to minimize disruption to daytime traffic. Temporary lighting may be necessary for nighttime construction of certain project elements. This temporary lighting would affect residential areas by exposing residents to glare from unshielded light sources and by increasing ambient nighttime light levels. As described in Sections 3.7 and 3.8, the project will work to minimize any impact to VNHR or City of Vancouver events, fairs, and concerts.

Evergreen Boulevard, a designated scenic roadway, connects downtown Vancouver and the VNHR with an overcrossing of I-5. This overcrossing would be closed for approximately 9 to 12 months for project construction, resulting in a temporary traffic detour. Although access to the majority of Evergreen Boulevard would remain open during construction, the detour for traffic crossing over I-5 would result in a temporary negative impact to this scenic roadway.

Off-site Staging and Casting

Construction activities would require at least one large site to stage equipment and materials, and may also require a large site for use as a casting yard for fabricating segments of the bridges.

Staging of equipment and materials would occur in many areas along the project corridor throughout the construction period, generally within existing or newly purchased right-of-way or on nearby vacant parcels. However, at least one large site would be required for construction offices, to stage the larger equipment such as cranes, and to store materials such as rebar and aggregate. This site should be as close as possible to the construction zone but would likely not be possible within public right-of-way, and thus would require temporary use of a nearby parcel.

Three sites have been identified as major staging areas:

- Port of Vancouver Parcel 1A site: This 52-acre site is located along SR 501, near the Port of Vancouver's Terminal 3 North facility. Activities could consist of material storage, material fabrication, equipment storage and repair, and temporary buildings. This site is currently used as a staging area for windmill components, and is zoned for heavy industrial use. Use of this area would result in a low degree of visual change, as the area is already used for storage, light industrial activity, and transportation.
- Red Lion at the Quay Hotel site in Vancouver: This 2.6-acre site would be partially acquired for new right-of-way for the LPA, requiring the demolition of most of the buildings on this site. As such, it could be an ideal area for staging materials and equipment and for some small fabrication. Temporary buildings such as trailers or other mobile units

could be used as construction offices. If the Red Lion site is used for project staging or construction, views of the site would experience a moderate degree of change. The area would be greatly disturbed for construction, and the visual differences between a staging area and a construction area are minimal.

• Vacant Thunderbird Hotel site on Hayden Island: This 5.6-acre site is much like the Red Lion hotel site in that a large portion of the parcel would be acquired for new right-of-way for the LPA. The same types of activities could occur on this site as on the Red Lion hotel site. Some of the existing buildings could be used as construction offices. The area would be disturbed for construction, and the visual differences between a staging area and a construction area are minimal. Given the configuration of the existing property, the anticipated property use for staging or construction, and existing views into the property, views of the site would experience a high degree of change if the property is acquired for project use.

In addition to the staging areas discussed above, two other sites have been identified as possible areas for casting large concrete sections of the proposed bridges: the Port of Vancouver Alcoa/Evergreen West site and the Sundial site. Given that these sites are currently used and planned for industrial activity, there would be no impact from the industrial activities associated with CRC project staging and casting. More detail on these two industrial sites is included in the CRC Visual and Aesthetics Technical Report.

3.9.5 Mitigation or Compensation

Mitigating Long-term Impacts

High-quality design and construction of the proposed highway and transit facilities will be important mitigation tools for visual quality and aesthetics. Dedicated to context sensitive design, the project would minimize visual impacts generally and more specifically to historic and cultural resources, public parks, and open spaces. The following techniques would be employed to improve the visual effects of the CRC project:

- Planting vegetation, street trees, and landscaping for screening or visual quality. The project will adhere to a green-over-grey approach for treatment of many new structures, using climbing vines and non-invasive ivies, where practicable.
- Designing landscape plans and other visual treatments consistent with adopted guidance and plans (such as those developed by the NPS and the two Cities).
- Shielding station and facility lighting from nearby residences and the night sky.
- Minimizing visual impacts to historic and cultural resources, public parks and open spaces (see mitigation in Chapter 5 Final Section 4(f) Evaluation and Sections 3.7 and 3.8).
- Minimizing structural bulk, such as for ramps and columns.
- Designing architectural features to blend with the surrounding community context.

- Collaborating with the City of Portland on the design of Tomahawk Island Drive to maximize a sense of openness and visibility.
- Placement of public art (to be relocated when necessary and added as part of transit stations and gateways).
- Where practicable, integrating lighting with facilities in a manner that produces a positive visual and aesthetic impact, reduces night sky light pollution, reduces possible light trespass into residential units, and contributes to crime prevention through environmental design (CPTED).
- Utilizing the UDAG Design Guidelines, as well as those of both Cities, the transit agencies, and the VNHR.
- Selecting new and replacement pole and utility cabinet locations, colors, and styles in relation to their context and in accordance with municipal lighting standards.

The States of Oregon and Washington and the Cities of Portland and Vancouver will continue to discuss with other stakeholders the aesthetic attributes of the new bridge structures, so as to best mitigate potential visual impacts and to create a noteworthy visual feature. To this end, design guidelines have been developed in light of existing design goals to reflect and respect these assets. These design guidelines (as amended by the UDAG) will be used during the final design phases of the project to guide decisions that impact visual character and quality.

In addition to the general mitigation strategies discussed above, mitigation strategies for specific elements of the project include the following:

- **The I-5 bridges:** For a discussion of the impacts and mitigation associated with removal of the existing bridges as historic structures, refer to Section 3.8 of this FEIS.
- Widened highway corridor: A lid over the interstate (the Community Connector) has been conceptually developed as part of the project. With the lid, the change in visual character and quality would be substantially different from the existing views. The experience for I-5 motorists would also be very different. Though the Connector is not mitigation itself, its design and features would enhance the visual experience for motorists and pedestrians. The final design of the Hayden Island interchange would support and be consistent with the City of Portland's Hayden Island Plan, utilize the UDAG design guidelines, and incorporate the results of local design charrette(s) that would be conducted during final design phase.
- Transit structure "landing" in Vancouver: Mitigation will include landscaping, public art, or other façade treatments for the walls of the structure. The plan will be developed during final design.
- Transit stations and park and ride facilities: Each transit station and park and ride will be designed with consistent design treatments that tie all these facilities together. Each transit station and park and ride will be the subject of a design process incorporating relevant guidelines, which will include UDAG guidelines, design guidelines from both Cities, the VNHR, C-TRAN, the Central Park Plan, downtown stakeholders, and the general public.

Mitigating Temporary Impacts

Mitigation for temporary construction-related effects will include:

- Shielding of construction site lighting to reduce spillover of light onto nearby residences and businesses.
- Locating construction equipment and stockpiling materials in less visually sensitive areas, when feasible, and in areas not visible from the road or to residents and businesses, in order to minimize visual obtrusiveness.
- Re-vegetating areas where vegetation is removed or impacted during construction.

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