Visual Impact Assessment
for the
Westside Solar Project

October 2019

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List of Abbreviations and Acronyms

Applicant	Westside Solar, LLC
BLM	Bureau of Land Management
CP	Character Photo
FHWA	Federal Highway Administration
Project	Westside Solar Project
PV	Photovoltaic
SEPA	Washington State Environmental Policy Act
VP	Viewpoint

1 Introduction

Westside Solar, LLC (the Applicant) is proposing to construct and operate the Westside Solar Project (Project), a utility-scale photovoltaic (PV) solar power production facility with a nameplate capacity of 4.999 megawatts. The Project would be located in Kittitas County, Washington, off of Westside Road, and comprise six parcels (Kittitas County tax parcel identification numbers 19440, 19441, 19442, 10577, 10579, and 10580) totaling approximately 46 acres.

Section 2 describes the existing environmental setting and discusses impacts associated with construction and operation of the Project with respect to aesthetic resources. Section 3 describes the methodology for describing the existing environmental setting of the Project, and Section 4 discusses the anticipated aesthetic impacts of the Project and mitigation measures.

2 Environmental Setting

The landscape surrounding the Project site is predominantly undeveloped with some rural residential properties in the area. The terrain of the Project site is generally flat, with some low hills adjacent to the site and steeper hills and low mountains in the greater surroundings. Vegetation in the area of the Project is primarily heavily forested with a mix of tall conifers, deciduous riparian corridors, and grassy meadows. Mature trees along the southern boundary of the property at Westside Road screen much of the view into the site; these trees would remain undisturbed. The nearest community to the Project site is the town of South Cle Elum, located approximately 0.5 mile northeast of the site. The closest residence to the Project site is located approximately 50 feet west, adjacent to the Project boundary.

The existing visual character of the Project site is predominantly rural and natural. Specific elements that contribute to its rural, natural character include sparse, scattered development and areas of thick forest vegetation and grass fields. Many roadways in the area are two-lane and the land in the region is primarily used for agricultural practices and rural single-family residential.

The visual quality of the area is generally moderate to high due to the few visual intrusions and the natural state of the Project site.

2.1 Sensitive Receptors

Sensitive receptors in the area include nearby residents, visitors to the Washington State Park Trail and historic area (described below), and drivers on Westside Road, which is located along the southern boundary of the Project site.

As previously mentioned, the closest residence to the Project site is located approximately 50 feet west, adjacent to the Project boundary. Depending on topography and vegetation, some area residents would likely experience views of the Project from certain locations on Westside Road. Likewise, drivers on Westside Road who are familiar with the area of the Project and routinely drive through would likely experience brief views of the Project site.

The portion of the Palouse to Cascades State Park Trail (Iron Horse Trail) located adjacent to the Project site's northern boundary is a small portion of the 212-mile trail, which runs from west of North Bend, Washington, to the Columbia River near Vantage, Washington, continuing on from the town of Lind, Washington, to the Washington-Idaho border (Washington State Parks 2019). The trail follows a historic rail line (part of the Chicago, Milwaukee, St. Paul, and Pacific Railroad) and includes a National Historic District rail yard and depot in the town of South Cle Elum, located approximately 0.4 mile northeast of the Project site. Situated on 12 acres and owned by Washington State Parks, the South Cle Elum Rail Yard National Historic District was created in the early 2000s to preserve the Milwaukee Road facilities at South Cle Elum (Cascade Rail Foundation 2019).

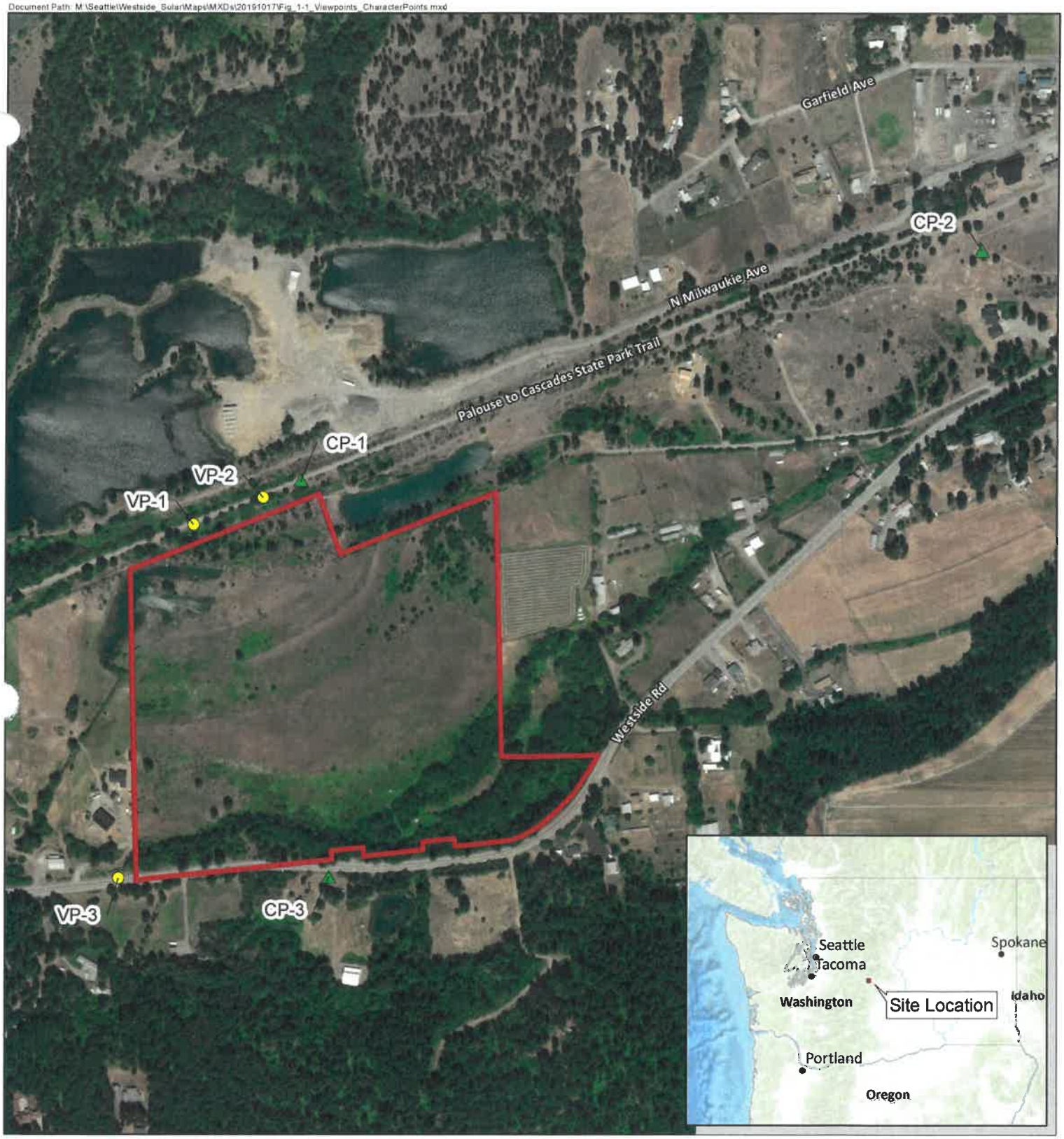
In 2006, a 2,200-foot, 18-stop interpretive trail through the historic rail yard was established to highlight important structures and technologies that spurred development of the rail line and surrounding communities. The interpretive trail extends toward the Project site, passing within 0.4 mile at the closest point. Due to intervening terrain and dense vegetation, the Project would not be visible from the interpretive trail in the historic rail yard or any of the other facilities that are part of the South Cle Elum Rail Yard National Historic District.

2.2 Viewpoints and Character Photos

The Project site within the six parcels is situated such that the majority of Project equipment would be shielded from offsite viewpoints (VPs). To establish the baseline environmental setting, three VPs were identified to represent typical views in the areas around the Project. These three VPs (VP 1, VP 2, and VP 3) were selected as they would show the areas where the Project may affect the viewshed. Figure 1-1 shows the location of each of the three VPs within the vicinity of the Project site. Figure 1-2, Figure 1-3, and Figure 1-4 show the current views into the Project site from VP 1, VP 2, and VP 3, respectively. Descriptions of the visual character, visual quality, and viewer sensitivity for the three VPs are provided with each of the corresponding figures. Viewer sensitivity describes a viewer's expectation or concern for a view based on viewer activity and awareness.

In addition to the VP photos, character photos (CPs) are also provided in this visual impact assessment The locations of the CPs are also provided on Figure 1-1, and the CPs and their corresponding descriptions are provided in Section 4 (see Figures 1-8 through 1-10). While the VPs are used for photo simulations (further discussed in Section 4 and presented as Figures 1-5 through 1-7), the CPs are used for context and are only provided to further illustrate the existing environmental setting.

Document Path: M:\Seattle\Westside_Solar\Maps\MXDs\20191017\Fig_1-1_Viewpoints_CharacterPoints.mxd



Viewpoint

Character Photo

Site Location

Figure 1-1
Viewpoints and Character Photos

Kittitas County, Washington
October 2019

0 100 200 300
Meters

Figure 1-2 Viewpoint 1

VP 1 offers a view from the Iron Horse Trail, near the northwest corner of the Project site. The trail is located adjacent to the Project site's northern boundary. The terrain is flat at the Project site, with smaller hills in the background and steeper hills and mountains in the far background. The visual character of this view is primarily natural and undeveloped. Views from the areas surrounding this VP to the Project site are partially screened by thick vegetation. As users walk/run/bike along the Iron Horse Trail in the vicinity of the Project site, views of the Project are intermittent and brief. Thick vegetation is located between the trail and the Project site with small openings where views would be possible. This existing screening between the trail and the Project site would remain undisturbed by the development. Viewer sensitivity and visual quality from this VP is high as it is a Washington State Park trail with many recreational users. Visitors traveling along this trail pass a variety of existing land uses within the viewshed along the trail.

Figure 1-3 Viewpoint 2

VP 2 is also located on the Iron Horse Trail, northeast of VP 1. The visual character of this view is also natural and undeveloped, with terrain and vegetation similar to VP 1. Similarly, views from the areas surrounding VP 2 to the Project site are brief and partially screened by the dense vegetation (existing vegetation would remain undisturbed by construction and operation of the Project). Viewer sensitivity and visual quality from this VP is high, as it is a state park trail with various recreational users. Visitors traveling along this trail pass a variety of existing land uses within the viewshed along the trail.

Figure 1-4 Viewpoint 3

VP 3 offers a view from Westside Road on the southwest corner of the Project site. Westside Road is a small, two-lane road located adjacent to the southern boundary of the Project site and is primarily used by residents of the area. The terrain viewed from this VP is flat with rolling and steeper hills in the background. The visual character of this view is natural and undeveloped. Similar to VP 1 and VP 2, the views from the surrounding areas are brief and partially blocked by dense vegetation. The area between the Project site and Westside Road contains a dense stand of mature trees and vegetation, which limits the views to the Project site for drivers traveling along most parts of Westside Road (existing vegetation would remain undisturbed by construction and operation of the Project). VP 3 was selected as the location along Westside Road with the most visibility into the Project site. Viewer sensitivity from this VP is moderate because this portion of Kittitas County is rural and the road is used primarily by nearby residents.

2.3 National and State Scenic Highways

There are no Washington State Scenic Byways or Kittitas County scenic drives in or near the Project site. The nearest National Scenic Byway is the Mountains to Sound Greenway, which follows Interstate 90 in the area of the Project. The byway is a 100-mile-long scenic highway that starts in downtown Seattle, Washington, and ends in downtown Ellensburg, Washington. At the nearest location, the National Scenic Byway is located approximately 0.8 mile northwest of the Project. The Project would not be visible to motorists from the interstate due to the distance, uneven terrain, and dense vegetation between the highway and the Project site.

2.4 Nighttime Lighting

Nighttime lighting in the Project area is limited to the scattered, single-family residential properties in the immediate vicinity. Westside Road is not lit in this area, and there are no other streetlights, traffic signals, or other major lighting sources. No permanent nighttime lighting is proposed as part of the Project.

3 Methodology and Significance Criteria

The methodology for describing the existing environmental setting of the Project and assessing aesthetic impacts of the Project relies on concepts, terminology, and established procedures for visual/aesthetic impact assessments developed by federal agencies, including the Federal Highway Administration (FHWA) and the Bureau of Land Management (BLM). This visual impact assessment process involves identification of:

- The aesthetic character and quality of the Project area (see Section 2);
- Important viewing locations (e.g., roads, trails, residential neighborhoods, parks, and overlooks) and the general visibility of the Project area and the Project site using descriptions and photographs (see Section 2.1 and 2.2);
- Viewer groups and their sensitivity (i.e., general viewer awareness and concern for views and changes to those views) (see Section 2.1);
- Aesthetic impacts of the Project and their level of significance (see Section 4); and
- Mitigation measures that would reduce aesthetic impacts of the Project and reduce significant impacts to less than significant levels (see Section 4).

4 Environmental Impacts and Mitigation Measures

Potential impacts on aesthetics were evaluated in accordance with the checklist items presented in the Washington State Department of Ecology's State Environmental Policy Act (SEPA) checklist guidance, Section B: Aesthetics, and further described below.

What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Kittitas County Code Section 17.61C.090 limits the height of all equipment to a maximum height of 20 feet as measured from grade at the base of the equipment to its highest point during operation. Solar panels, inverters, transformers, and interconnection equipment would typically be less than 12.9 feet in height at their highest point during operation, based on the final Project design. Because the panels would slowly rotate east to west each day to track the sun across the site, the panels would only be at their maximum height for less than one hour in the morning and less than one hour in the evening on any given day. The exact amount of time spent at the maximum tilt each day would vary based on the time of year. An 8-foot-tall wildlife friendly, woven-wire, perimeter fence would be installed for security purposes and compliance with the National Electrical Code. A 25-foot-wide landscaped buffer would be planted along the eastern and western property lines to screen views of the fence and interior of the Project site.

Other than the solar panels, fencing, and interconnection equipment, no other structures would be built for the Project. As such, the principal exterior building material proposed are the solar panels themselves.

What views in the immediate vicinity would be altered or obstructed?

Views in the immediate vicinity may be somewhat altered during the short construction period and the operation of the Project. However, none of these views would be permanently obstructed.

Construction

Construction activities in and near the Project site would be noticeable to the nearby residents and slightly noticeable to travelers along Westside Road. VP 3 (Figure 1-4) shows existing views for travelers along Westside Road. Views of construction activities would be intermittent and only briefly visible from this and other locations along the road due to the moderate to high travel speeds of most travelers using the road. The dense vegetation between the road and the Project site would screen the majority of the views for motorists. Additionally, users of the Iron Horse Trail would notice construction activities on the Project site (Figures 1-2 and 1-3 show existing views from the trail). While their views would be altered, they would not be significant due to the fairly short length of time for construction (3 months).

Construction activities and features that may alter the visual character and potentially reduce the visual quality of the landscape of the surrounding area and Project site include:

- Staging and construction workspace areas;
- Vehicles and equipment used for excavation and grading activities, transporting and lifting, watering to control dust, worker transport, and construction activities;
- Soil and vegetation removal and grading for the Project facilities and new or improved access roads; and
- Temporary outdoor storage of materials, stockpiling of spoils from excavation, security fencing, and construction signage.

Construction of the Project facilities would occur during a period of approximately 3 months. The presence of construction activities and equipment at locations throughout the Project area would somewhat alter the views for nearby sensitive receptors. However, the adverse effects on aesthetics for any particular location during construction activities would be short-term and temporary, lasting approximately 3 months.

Operation

The VPs described in Section 2.2 and shown on Figures 1-2 through 1-4, were used to develop visual simulations to show what the Project would look like upon completion. Figures 1-5 through 1-7 illustrate the visual simulations for VPs 1 through 3. All simulated conditions show the panels at their maximum tilt. Because the panels would slowly rotate east to west each day to track the sun across the site, the panels would only be at this maximum height for less than one hour in the morning and less than one hour in the evening on any given day. The exact amount of time spent at the maximum tilt each day would vary based on the time of year.

Figure 1-5 illustrates how the Project would appear from VP 1 on the Iron Horse Trail, near the northwest corner of the Project site. As the panels would rotate throughout the day to track the movement of the sun, views from VP 1 would change, depending on the direction the solar panels are facing (Figure 1-5 illustrates the panels facing west). While the visual character and quality of the area would be somewhat reduced as a result of the Project, overall, views of the Project would be so limited that the majority of residents and visitors to the trail would only notice small glimpses where the vegetation opens up (as shown on Figures 1-5 and 1-8). In the open areas, such as that represented by VP 1, visitors to the trail would notice the large solar development and would experience moderate visual impacts as a result. The Project would introduce an industrial development to an otherwise undeveloped and natural area of the trail. Other industrial developments in the vicinity of the site include a quarry to the north (0.25 miles away) an existing substation (0.5 miles away) and a mini-storage facility (0.75 miles away).

Figure 1-6 illustrates how the Project would appear from VP 2, also on the Iron Horse Trail, northeast of VP 1. As the panels would rotate throughout the day to track the movement of the sun, views from VP 2 would change depending on where the solar panels are facing (Figure 1-6 illustrates the panels facing west). Visual impacts to VP 2 would be similar as those to VP 1. The

visual character and quality of the area would be somewhat reduced as a result of the Project due to the introduction of an industrial development to what is currently an undeveloped and natural site. Users of the Iron Horse Trail would notice the solar panels where the vegetation is open; however, views for the majority of the area along the trail would remain shielded. For VP 2, visitors would experience moderate visual impacts.

Figure 1-7 illustrates how the Project would appear from VP 3 on Westside Road, near the southwest corner of the Project site. As the panels would rotate throughout the day to track the movement of the sun, views from VP 3 would change depending on where the solar panels are facing (Figure 1-7 illustrates the panels facing west). VP 3 illustrates the maximum visual impact of how the Project may appear from Westside Road. Similar to VP 1 and VP 2, views along Westside Road are extremely limited due to the dense vegetation. The location of VP 3 is one of the few areas where views of the Project are provided from Westside Road. From VP 3, visual impacts would be significant to travelers along the road. As the current visual character of the area is natural and undeveloped, the addition of the Project would drastically alter the views for nearby residents and travelers. From this view, the Project would introduce a developed, industrial character to the landscape. While visual impacts would be significant, they would be highly minimized to the exact area where VP 3 is located. Dense vegetation buffers Westside Road from the Project site; therefore, for the majority of time that travelers use the roadway, their views would be largely shielded from the Project.

Photo Information

View looking south-southeast from Iron Horse Trail.

Longitude (W): 47.179
Latitude (N): -120.971
Elevation: 1946.5 ft.
Distance to Project Area: 117.59 meters

Camera: Canon EOS DIGITAL REBEL XT
Lens: Canon EFS 18-55mm
Lens Setting: 35mm
Camera Bearing: SSE
Height of Camera: 5 ft.

Date: 6/3/19
Time: 10:45 a.m.
Weather: Clear to partly cloudy
Visibility: Fair

Westside Solar Project
Visual Simulation

Viewpoint 1

Figure 1-5
Cle Elum, Washington

Not to scale. Not intended to be an exact representation. Artistic rendering for demonstration purposes only.

October 2019

Photo Information

View looking south from Iron Horse Trail.

Longitude (W): 47.179
Latitude (N): -120.970
Elevation: 1945.2 ft.
Distance to Project Area: 89.86 meters

Camera: Canon EOS DIGITAL REBEL XT
Lens: Canon EFS 18-55mm
Lens Setting: 35mm
Camera Bearing: S
Height of Camera: 5 ft.

Date: 6/3/19
Time: 11:15 a.m.
Weather: Clear to partly cloudy
Visibility: Fair

Westside Solar Project
Visual Simulation

Viewpoint 2

Figure 1-6
Cle Elum, Washington

Not to scale. Not intended to be an exact representation. Artistic rendering for demonstration purposes only.

October 2019

Westside Solar Project
Visual Simulation

Viewpoint 3

Figure 1-7
Cle Elum, Washington

October 2019

Photo Information

View looking northeast from Westside Rd.
Longitude (W): 47.176
Latitude (N): -120.971
Elevation: 1,940 ft.
Distance to Project Area: 62.79 meters

Camera: Canon EOS DIGITAL REBEL XT
Lens: Canon EFS 18-55mm
Lens Setting: 35mm
Camera Bearing: NE
Height of Camera: 5 ft.

Date: 6/3/19
Time: 1:30 p.m.
Weather: Clear to partly cloudy
Visibility: Fair

Not to scale. Not intended to be an exact representation. Artistic rendering for demonstration purposes only.

Figure 1-8 Character Photo 1

CP 1 is located on the Iron Horse Trail in the vicinity of VP 1 and VP 2. This photo illustrates the dense vegetation located between the trail and the Project site. As shown in CP 1, VP 1, and VP 2, the existing vegetation is very dense in the area and only has small breaks where views to the Project site would be possible.

Figure 1-9 Character Photo 2

CP 2 is located on the interpretive trail within the South Cle Elum Rail Yard National Historic District. This photo is provided to illustrate the dense vegetation between the trail and the Project site. Visitors to the National Historic District would not experience any views of the Project.

Figure 1-10 Character Photo 3

CP 3 is located on Westside Road, east of VP 3. As discussed, the area between the Project site and Westside Road contains a dense stand of mature trees and vegetation that limits the views to the Project site for divers traveling along Westside Road. CP 3 is provided to further illustrate these conditions.

Proposed measures to reduce or control aesthetic impacts, if any:

In effort to reduce visual impacts as a result of the introduction of nighttime lighting at the Project site, the Applicant has committed to not utilize any permanent nighttime lighting. Temporary construction lighting may be used during the short construction period if work before dawn or after dusk is required to maintain the construction schedule. If temporary construction lighting is utilized it would be shielded and downward facing to contain lighting within the perimeter of the facility, to the maximum extent possible.

The dense vegetation that is currently surrounding the Project site and limits views from Iron Horse Trail and Westside Road would be left in place to provide visual mitigation. Additionally, the Project would be surrounded by an 8-foot-tall perimeter fence. The Applicant also proposes to utilize planted vegetative buffers on the eastern and western borders of the property to further reduce visual impacts of the Project on nearby residents and visitors. In addition, the Applicant has proposed critical area enhancement measures that would involve planting additional vegetation in the critical areas adjacent to VP 1, VP2, and VP 3. Once established, this new vegetation would further buffer the view of the Project from these VPs.

5 References

Cascade Rail Foundation. 2019. About. Available at: https://www.milwelectric.org/about/. Accessed June 10, 2019.

Washington State Parks. 2019. Palouse to Cascades State Park Trail. Available at: https://parks.state.wa.us/521/Palouse-to-Cascades. Accessed June 10, 2019.