

## **APPENDIX O**

# **Visual Analysis Context and Methods**



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## Acronyms and Abbreviations

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ATV	all-terrain vehicle
BLM	U.S. Department of the Interior, Bureau of Land Management
BMA	Block Management Area
DNRC	Montana Department of Natural Resources
Fort Keogh	U.S. Department of Agriculture Fort Keogh Livestock and Range Research Laboratory
GIS	geographic information system
GPS	global positioning system
I-94	Interstate 94
KOP	key observation point
Montana FWP	Montana Fish, Wildlife & Parks
RKOP	rendered key observation point
SR	State Route
VRM	Visual Resource Management

# Appendix O

## Visual Analysis Methods

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This appendix provides background information on visual resources in the study area, analysis methods, terminology and concepts, and the ratings and evaluations of rendered key observation points (RKOPs).<sup>1</sup>

### O.1 Visual Elements in the Natural Environment

The study area comprises five geographic areas, each of which has a unique natural environment and visual characteristics. These characteristics are described below and captured in key observation point (KOP) photographs compiled at the end of the appendix. Figure 10-1 in Chapter 10, *Visual Resources*, illustrates the five geographic areas along with the KOP locations.

#### O.1.1 Tongue River Valley North

The Tongue River Valley North geographic area begins at the project terminus near Miles City and extends south to Birney. In the northern portion, the Tongue River meanders through a wide river valley bounded by gently sloping and hilly terrain. The river valley narrows further south, passing through Ashland, and the hills have more vertical relief. Vistas are from elevated vantage points east and west of the river. The river valley supports agricultural pastures and riparian vegetation along the river corridor. Dead evergreen and cottonwood trees provide standing evidence of fire on the hillsides and along the river.

Views can vary greatly throughout this geographic area when looking in different directions from the same KOP, such as from Fort Keogh (Figure O-1, KOPs 1a and 1b). The landscape is characterized by numerous valleys and streams (Figure O-2, KOPs 2 and 3), flatter areas (Figure O-3, KOPs 4 and 5), and landforms that range in color (Figures O-4 and O-5, KOPs 6a and 7) and land cover types (Figures O-4 and O-5, KOPs 6b and 8). A great variety of scenic views (Figures O-6 and O-7, KOPs 9, 10 and 11) are mostly visible from unpaved roadways such as Tongue River Road (Figure O-7, KOP 12) and from paved roadways such as State Route (SR) 212 (Figure O-8, KOP 13) and paved portions of Tongue River Road (Figure O-8, KOP 14).

The Tongue River Valley North geographic area is visible from public and private lands used for recreation, such as the Twelve Mile Dam State Fishing Access Site (Figure O-9, KOP 15), Fix Ranch (Figures O-9 and O-10, KOPs 16 and 17), Tongue River Ranch (Figures O-10

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<sup>1</sup> This appendix provides supporting information for Chapter 10, *Visual Resources*, of this *Draft Environmental Impact Statement for the Tongue River Railroad*. This information should not be interpreted as stand-alone information and must be read in combination with the associated chapter.

and O-11, KOPs 18 and 19), Hirsch Ranch, Bice Ranch, Fort Keogh, and Pumpkin Creek Ranch and Recreation Area. The Tongue River Valley North is also visible from the Custer National Forest, the largest recreational land use in the study area.

### **O.1.1.1 Custer National Forest**

Custer National Forest provides limited views toward the Tongue River Valley North geographic area. Variable terrain, vegetation, and distance generally limit available views from the forest. The Cook Mountain Hiking and Riding Area is near the forest boundary. Hundred Inch Hill, within this area, is a popular recreational destination with commanding views. Cook Mountain, further south but not within the Cook Mountain Hiking and Riding Area, also has commanding views, including views of the Colstrip Power Plant. Cook Mountain, which was burned in the 2000 fire and is managed for timber, has very low visual quality (U.S. Forest Service 1987). This area is currently accessed via foot and horseback (Ruchman pers. comm.).

South of Ashland, King Mountain has sweeping views. King Mountain was burned in the 2000 fire (Ruchman pers. comm.). A limited number of recreational visitors may use the King Mountain Hiking and Riding Area, which is near the forest boundary, but views are limited by variable terrain, vegetation, and distance.

Farther south, the Tongue River Breaks Hiking and Riding Area attracts recreational users. Poker Jim Butte Lookout is easily accessed in late spring and early fall when the unpaved access roads are dry. The lookout is operated by the Bureau of Land Management (BLM) in the summer and is generally not open to the public. However, when open, the public can ascend the 40-foot-high lookout.

Browns Mountain is a linear ridgeline outside of the Tongue River Breaks Hiking and Riding Area. It is transected by the Custer National Forest boundary so that the southern half of the peak is located in the forest and the northern half is outside of the forest. Browns Mountain has been recommended for a federal wilderness designation but the recommendation has not yet passed. Browns Mountain affords commanding views to the west, although somewhat disrupted by small hills (Ruchman pers. comm.). Below the peak, views to the west are limited. A small number of viewers visit these areas.

### **O.1.2 Moon Creek Valley**

The Moon Creek Valley is broad and is bordered by hilly terrain that is visually more irregular and rugged than the other geographic regions (Figure O-11, KOP 20). The valley and hillsides are vegetated with patchy grasslands and sagebrush, with few riparian trees. Exposed soils and rocky substrate are more prominently visible in the valley and on the hillsides. Moon Creek Valley is visible from public and private lands, including Fort Keogh, and from Interstate 94 (I-94).

### **O.1.3 Greenleaf Road Corridor**

The Greenleaf Road Corridor is composed of a shallow, grassy valley with small, rounded hills that are covered with evergreen trees from Tongue River Road to Rosebud Creek Road (Figure O-12, KOP 21). There is evidence of fire on the hillsides, closer to Tongue River Road, where most of the evergreen trees were burned and stands of dead trees remain.

Across Rosebud Creek Road, the terrain and visual landscape has a number of small buttes and plateaus intermixed with small rangelands (Figures O-12 and O-13, KOPs 22 and 23). In between the buttes and rangelands and the connection with the existing rail line southeast of Colstrip is a small, hilly area vegetated with grasslands and evergreens (Figure O-13 and O-14, KOPs 24 and 25). The Greenleaf Road Corridor geographic area is visible from private lands used for recreation, such as Rocker Six Cattle Company, Greenleaf Land and Livestock, and the historic Lee Community District. The corridor is not visible from the Northern Cheyenne Indian Reservation.

### **O.1.4 Otter Creek Valley**

The Otter Creek Valley is a broad grassland valley that is bordered by rolling hillsides with a backdrop of taller ranges (Figure O-14, KOP 26). A small number of deciduous trees are located throughout the grassy valley, sagebrush grows in scattered patches, and the hillsides are vegetated with grass and evergreen trees. The Otter Creek Valley geographic area is visible from private lands. The Custer National Forest flanks the valley on either side and is visible in the middleground.

### **O.1.5 Tongue River Valley South**

The Tongue River Valley South geographic area begins southwest of the Birney community and continues to the southernmost end of the study area, near the Tongue River Reservoir State Park. The terrain and visual landscape varies in this area. Views from the Wolf Mountains Battlefield National Historic Landmark include the gently rolling terrain in the middleground with a backdrop of steep, striated cliffs along the river (Figure O-15, KOP 27). This area has more topographical relief than the pastoral Tongue River Valley North, Greenleaf Road Corridor, and Otter Creek Valley landscapes, with higher peaks and more hills within a given area (Figure O-15, KOP 28). While it has the characteristic shallow, concave valleys (Figure O-16, KOP 29), the adjacent hills are steep and conically scalloped. These hills are striated with red and tan as they rise from the green river valley into a rugged ridgeline (Figure O-16, KOP 30). Near 4 Mile Creek Road, the landscape is somewhat hillier and more forested (Figure O-17, KOP 31). Views are available from the Tongue River Valley Rural Historic District (which overlaps the Wolf Mountains Battlefield National Historic Landmark), Birney Ranching Rural Historic District (which overlaps Custer National Forest), and the Zook Creek Wilderness Study Area (which overlaps the Tongue River Valley Historic District and Birney Ranching Rural Historic District).

At the southernmost end of the study area, near the Tongue River Reservoir State Park, views closer to the reservoir are limited by the terrain (Figure O-17, KOP 32). The landscape in this area has flatter plateaus that are vegetated with grasses and sages that allow for background views.

## **O.2 Visual Elements in the Built Environment**

### **O.2.1 Developed Areas**

Miles City overlaps a small portion of the study area and is the largest populated area in the region; however, it does not influence the study area's visual resources. Elsewhere, residences and agricultural buildings are situated mostly on flatter terrain. The four largest concentrations of development are Colstrip, the local Amish community located south of the Greenleaf Road/Tongue River Road intersection, Ashland, and along SR 59 southeast of Miles City. The Amish community provides visual interest with a cluster of rustic residences and agricultural buildings, horse-drawn carriages, and traditional dress (Figure O-18, KOP 33).

The Northern Cheyenne Indian Reservation is adjacent to this geographic area (Figure O-18, KOP 34). Assiniboine, Sioux, Gros Ventre, Cheyenne, Crow, Shoshone, Blackfoot, Arapaho, Arikara, Hidatsa, and Mandan once inhabited or used other parts of the study area.

### **O.2.2 Light Sources**

Artificial nighttime lighting is associated with developments on the outskirts of Miles City, Colstrip, and Ashland, scattered rural residences and businesses that are lit by internal and external lighting at night, and vehicle headlights on local roadways at night. I-94 is mostly unlit, except for overhead lighting at the I-94/Business Route 94 interchange. SR 59, Tongue River Road, Greenleaf Road, and smaller local roadways are also unlit. SR 39 is mostly unlit, except for overhead lighting at the SR 39 intersections with roadways such as Power Road, Olive Drive, Castle Rock Lake Drive, Box Elder Avenue, and Homestead Boulevard. Rosebud Creek Road, Greenleaf Road, and smaller local roadways are unlit. Streetlights are located along Tongue River Road near Ashland. Farther south, Highway 314, Tongue River Road, and smaller local roadways are unlit. The forest is unlit and Tongue River Reservoir State Park may have small amounts of nighttime lighting for camper safety. No lighting is associated with the Decker Mine just northwest of the Tongue River Road intersection with Highway 314. Because the study area in its entirety is largely unlit, views of the nighttime sky are unobstructed by urban light. The lack of light pollution also contributes to sunrise and sunset views over the study area's varied terrain.

## O.2.3 Roadways and Infrastructure

Roadways are mostly dirt and gravel, with limited paved segments. Infrastructure is limited to barbed-wire fencing, occasional roadway signage, culverts, low and narrow bridges, and wooden transmission poles that are parallel to local roadways and cross private lands on easements. While wooden transmission poles are a common feature in the landscape, they are not a prevalent visual element.

## O.3 Land Categories in the Study Area

The study area comprises the following land categories, each of which offers unique visual resources.

### O.3.1 Bureau of Land Management Lands

BLM-managed lands are scattered throughout the study area and would be crossed by small portions (0.5 to 4 miles) of all build alternatives (Chapter 12, Section 12.2, *Land Use*). BLM is required to protect the scenic value of the public lands under its management. BLM uses its Visual Resource Management (VRM) system to inventory, analyze, and manage those resources (Section O.7.2, *Scenic Quality Ratings*). VRM mapping covers BLM lands at the landscape scale; it is not site-specific (Bloom pers. comm.). The Miles City Field Office *Draft Resource Management Plan and Environmental Impact Statement* (Bureau of Land Management 2013:2-2) designates the following BLM lands that would be affected by any build alternative.

- Some BLM lands north of State Route (SR) 212, VRM Class III,<sup>2</sup> are managed to partially retain the existing character of the landscape. According to this BLM classification, changes to the environment may attract the viewer's attention but should not dominate or substantially degrade the existing visual environment. These changes may be evident but should not detract from the existing landscape (Bureau of Land Management 2013:3–110).
- Other BLM lands north of SR 212, VRM Class IV, allow for major modification to the existing character of the landscape. According to this BLM classification, changes to the environment can be high and attract the viewer's attention, but every effort should be made to minimize visual impacts. These changes may dominate the view and be a major focus of the viewer's attention but every attempt should be made to minimize impacts through careful siting, minimizing disturbance, and repeating the forms, lines, colors, and textures found within the existing landscape (Bureau of Land Management 2013:3–110).
- BLM lands south of SR 212, VRM Class II, are managed to retain the existing character of the landscape. According to this BLM classification, changes to the environment

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<sup>2</sup> BLM lands are assigned to VRM classes I through IV according to how each class's scenic resources will be managed.

should not stand out or attract the viewer's attention and should reflect the characteristics of the existing visual environment. Any changes should repeat the form, line, color, and texture of the predominant natural features found within the existing landscape. (Bureau of Land Management 2013:3–110).

- BLM lands in the southern portion of Zook Creek Wilderness Study Area, VRM Class I, are managed to preserve the existing visual environment and provide for natural ecological changes. According to this BLM classification, limited management changes should not be noticed by viewers. (Bureau of Land Management 2013:3–110).

The BLM Lewis and Clark Special Recreation Management Area (SRMA) includes the Lewis and Clark National Historic Trail, whose alignment follows the Yellowstone River, and dispersed use sites along the river's shoreline within VRM Class II lands in the project area (Bureau of Land Management 2013:3–131). The SRMA falls within the BLM National Conservation Lands System (NCLS), and BLM manages 330 miles along the trail and shoreline to ensure its recreational values including fishing, camping, power boating, river floating, swimming, hiking, hunting, and wildlife viewing (Bureau of Land Management 2013:3–131, Bureau of Land Management 2015a, Bureau of Land Management 2015b). The NCLS is recognized and managed to protect and conserve the exceptional values of special areas (Bureau of Land Management 2015a).

### **O.3.2 Tribal Lands**

The Northern Cheyenne Indian Reservation is west of the Tongue River. These lands are culturally significant to the Northern Cheyenne tribal members and to other tribes. Several places of tribal significance in Custer National Forest provide views from the forest toward a build alternative. See Chapter 11, *Cultural Resources*, for more detail about Native American resources.

### **O.3.3 State Lands**

Montana Fish, Wildlife & Parks (Montana FWP) owns land and provides easements to private land for wildlife habitat and game management through the Block Management Area (BMA) Program (Chapter 12, Section 12.3, *Recreation*). Private landowners are known as BMA Cooperators. The study area includes the following BMAs (Chapter 12, Section 12.3, *Recreation*).

- **Tongue River Ranch.** Tongue River Ranch is a recently purchased Montana Department of Natural Resources and Conservation (DNRC) property to which Montana FWP has some access for cooperative hunting and habitat monitoring, planning, and implementation. It is approximately 20,284 acres on the west side of Tongue River and adjoins the Les Hirsch Conservation Easement property.

- **Twelve Mile Dam State Fishing Access Site.** The Twelve Mile Dam State Fishing Access site is on the east side of Tongue River near the Muggli Fish Bypass and fish ladder.
- **Hirsch Ranch (BMAs 311 and 314).** Hirsch Ranch consists of two easement properties owned by Ted Hirsch (Shaw) and Les Hirsch. Ted Hirsch's Montana FWP Conservation Easement, Block Management Cooperator property is 6,791 acres 35 miles south of Miles City on the east and west sides of Tongue River. It adjoins the Bice and Les Hirsch Conservation Easement properties. Les Hirsch's Montana FWP Conservation Easement, Block Management Cooperator property is approximately 9,292 acres 30 miles south of Miles City on the west side of Tongue River. It adjoins the Ted Hirsch Conservation Easement property and the DNRC-owned Tongue River Ranch.
- **Bice Ranch (BMA 325).** Bice Ranch is a Montana FWP Conservation Easement and Block Management Cooperator easement of 15,934 acres 45 miles south of Miles City on the west side of the Tongue River.
- **Rocker Six Cattle Company (BMA 178).** Rocker Six Cattle Company is a Block Management Cooperator property of 31,000 acres 9 miles north of Ashland with 2.5 miles of frontage along the Tongue River.
- **Greenleaf Land and Livestock (BMA186).** Greenleaf Land and Livestock has 31,400 acres between Greenleaf Road and the Northern Cheyenne Indian Reservation. It accommodates 12 hunting parties per day.
- **Fix Ranch (BMA 305).** Fix Ranch is a Block Management Cooperator property of 9,700 acres 16 miles south of Miles City with 3.5 miles of frontage along the west side of the Tongue River.
- **Fort Keogh (BMA 306).** U.S. Department of Agriculture Fort Keogh Livestock and Range Research Laboratory (Fort Keogh) is a Block Management Cooperator property of 25,000 acres just southwest of Miles City with 20 miles of frontage along the west side of the Tongue River.

### O.3.4 Recreational Lands

The following recreational lands are in the study area (Chapter 12, Section 12.3, *Recreation*).

- Spotted Eagle Recreation Area
- Pumpkin Creek Ranch and Recreation Area
- Custer National Forest
- Zook Creek Wilderness Study Area
- Wolf Mountains Battlefield National Historic Landmark
- Tongue River Reservoir State Park

The Lewis and Clark Trail is a National Historic Trail whose alignment follows the Yellowstone River north of the study area (Montana Department of Transportation 2005). As described previously, the trail and the river's shoreline fall within the Lewis and Clark SRMA/NCLS for their recreational value (Bureau of Land Management 2013:3–131, Bureau of Land Management 2015a, Bureau of Land Management 2015b).

### **O.3.5 Private Lands**

Private lands include residential and business properties that are not tribal lands or lands owned by the federal or state government. Private lands may have easements, as detailed above. Private lands are rural or in more developed areas such as the communities of Colstrip, Ashland, Miles City, and Birney.

### **O.3.6 Section 106 Resources**

The following historical resources are listed or eligible for listing in the National Register of Historic Places (Chapter 11, *Cultural Resources*): Eastern Montana Fairgrounds, Miles City Fish Hatchery, Fort Keogh, and Hogback Pasture, Lee Community District, Tongue River Valley Rural Historic District, Birney Ranching Rural Historic District, homesteading sites, ranching sites, and transportation and water conveyance facilities. See Chapter 11, *Cultural Resources*, for more detail about these Section 106 resources.

## **O.4 Concepts of Visual Assessment**

The aesthetic value of a view is a measure of its visual character and visual quality, combined with the viewer response to the area (Federal Highway Administration 1988:26–27, 37–43, 63–72). The following concepts are described below.

### **O.4.1 Visual Character**

Visual character is influenced by geologic, hydrologic, botanical, wildlife, recreational, and urban features. The perception of visual character can vary significantly seasonally, even hourly, as weather, light, shadow, and elements that compose the viewshed change. Visual character is described in terms of the dominance of form, line, color, and texture in landscape features (U.S. Forest Service 1995:28–34, 1 2–1-15, 3-3–3-13, 4-5, Federal Highway Administration 1988:37–43).

Form, line, color, and texture are addressed descriptively. Readers are usually familiar with the landscapes in their region, and descriptions are more effective in establishing a visual image of the landscape than are recitations of the elements of form, line, color, and texture. The readers' familiarity with landscape elements (e.g., pastureland, orchards, and suburban development) allows them to understand how a landscape looks compared to independently describing form, line, color, and texture.

## O.4.2 Visual Quality

Visual quality is the overall impression that an individual viewer retains after driving through, walking through, or flying over an area or the visual appeal of a tract of land (Bureau of Land Management 1980:18, Bureau of Land Management 1986a:2). Visual quality is evaluated using the well-established approach to visual analysis adopted by the Federal Highway Administration, employing the concepts of vividness, intactness, and unity (Federal Highway Administration 1988:46–59, Jones et al. 1975:682–713).

Visual quality is evaluated based on the relative degree of vividness, intactness, and unity, as modified by its visual sensitivity. High-quality views are highly vivid, relatively intact, and exhibit a high degree of visual unity. Low-quality views lack vividness, are not visually intact, and possess a low degree of visual unity.

## O.4.3 Viewer Response

Viewer response results from exposure and sensitivity. Viewer exposure is based on the visibility of resources in the landscape, proximity of viewers to the visual resource, elevation of viewers relative to the visual resource, frequency and duration of views, number of viewers. The importance of a view is related, in part, to the position of the viewer to the resource and the visibility and visual dominance of landscape elements within the viewshed. Generally, the closer a resource is to the viewer, the more dominant it is and the greater its importance to the viewer. The maximum distance a viewer may see from any given point varies based on the viewer's position in the landscape and the presence or absence of intervening terrain and vegetation in the foreground and middleground. Also, the features of any given project become diminished, and sometimes imperceptible, in background views because detail is lost at such distances (Litton 1968:5). Exposure is temporal in that viewers may have longer-duration views, such as a resident with a fixed view, or shorter-term views, such as a commuter that briefly passes by a view. The number of viewers also relate to exposure because the presence of more viewers translates to more exposure whereas fewer viewers would translate to less exposure.

Visual sensitivity depends on the type of viewers (i.e., the characteristics of individuals and viewer groups) and their expectations and concern for a particular viewshed or element within the viewshed. Visual sensitivity is modified by viewer activity, awareness, and visual expectations in relation to the number of viewers and viewing duration. For example, visual sensitivity is generally higher for views seen by people who are engaging in recreational activities such as taking scenic drives, hiking, biking, or camping, and by homeowners. Residential viewers typically have extended viewing periods and have higher concerns about changes in the views from their homes. Sensitivity tends to be lower for people commuting to and from work or engaged in work activities (U.S. Soil Conservation Service 1978:3, 9, 12; Federal Highway Administration 1988:3, 9, 12; Forest Service 1995:3-3-3-13). Commuters and nonrecreational travelers have generally fleeting views and tend to focus on

commute traffic, and not on surrounding scenery. Note that viewer concern may be both social, in the form of expressed concern, and legal, in the form of protective regulations.

Judgments of visual quality and viewer response must be made in a regional frame of reference (U.S. Soil Conservation Service 1978:3). The same landform or visual resource appearing in different geographic areas could have a different degree of visual quality and sensitivity in each setting. For example, a small hill may be a significant visual element on a flat landscape but have very little significance in mountainous terrain.

### **O.4.3.1 Viewer Types**

The viewers in the study area are described in the following subsections.

#### **Unaffected Viewers**

Viewer groups in Miles City and Birney would not be affected by the proposed rail line because buildings, infrastructure, and vegetation prevent most views of surrounding landscapes. These viewers are not discussed further.

#### **Rural Viewers**

Most rural residences are clustered in Colstrip, the Amish community along the Tongue River, Ashland, and along SR 59. Rural views in the study area range from viewsheds that are limited to the foreground by vegetation and topography to sweeping views of the middleground and background, especially from elevated vantage points. Views from private properties can be accessed via trucks, all-terrain vehicles (ATVs), and horses.

Many residences are associated with businesses (e.g., ranches, farms, tack shops) where people make a living off the land. Many families have lived in the area for several generations and are likely to have a high sense of ownership and stewardship over the land and its inherent scenic qualities. Employees on ranches and farms are likely to have a similar appreciation for the land and its vistas. Rural viewers have extended viewing times because they both live and work on the land. Rural viewers enjoy views of the sky during sunrise and sunset as well as the nighttime sky. Rural viewers are considered to have high sensitivity to changes in the viewshed because of their exposure to such views, extended viewing times, and sense of ownership.

#### **Tribal Viewers**

The eastern edge of the Northern Cheyenne Indian Reservation abuts the Tongue River. The Northern Cheyenne tribal members view the natural environment as a whole, not the sum of its parts, and have an innate tie to and respect for the land that has been passed down through generations. Tribal viewers are considered highly sensitive to visual changes in the study area. Chapter 11, *Cultural Resources*, addresses Native American resources in the study area.

## Roadway Viewers

One interstate (I-94) and three state routes (SR 59, SR 212, and SR 314) traverse and provide access to the study area. Because travelers on the interstates and highways travel at relatively high speeds and are typically focused on the freeway, they are considered to have moderate to low visual sensitivity to changes in views.

Smaller local roadways provide access to the majority of the study area. The most widely used local roadways (Tongue River Road, Greenleaf Road, East Tongue River Road, Otter Creek Road, and 4 Mile Creek Road) are typically two-lane, dirt, and gravel roadways primarily used by residents, Northern Cheyenne tribal members, agricultural workers accessing ranches and farms, and recreational travelers going to and from businesses and recreational areas. Travelers who use these roadways are familiar with the study area landscape. Because of this, roadway travelers on these smaller roads are considered highly sensitive to changes in views.

## Recreational Viewers

Recreational viewers include those using public lands, lands with granted access, waterways, and public roadways for recreational activities such as fishing, rafting, hunting, wildlife viewing, photography, scenic drives, running, walking, camping, and bicycling (Chapter 12, Section 12.3, *Recreation*). A viewer at a publicly accessible location is characterized as sensitive when substantial changes to the visual landscape negatively affect that viewer's experience or enjoyment while at that location. These viewers are often in the study area for short durations, from a few hours to a couple of days. Recreational viewers are considered to have moderately high sensitivity to changes in views because they participate in outdoor recreational activities, are close to visual resources in the study area, and witness views for shorter durations.

## Colstrip Subdivision Viewers

Viewers near the Colstrip Subdivision include residents and roadway travelers near the existing rail line. While some viewers do not have views of the rail line, others have partial to full views. These viewers have daytime and nighttime views, but existing lighting is already present. Viewers in these areas are familiar with existing rail facilities and trains and are considered moderately sensitive to changes in views.

## 0.5 Terminology

Key terms used in the analysis of visual resources are defined below.

- **Color** is light reflecting off of an object at a particular wavelength that creates hue (e.g., green, indigo, purple, red) and value (light to dark hues) (Bureau of Land Management 1986b:Illustration 5, Page 1; Federal Highway Administration 1988:40)

- **Form** is the unified mass or shape of an object that often has an outline and can be defined by surrounding space. For example, a high-rise building would have a highly regular, rectangular form whereas a hill would have an organic, mounded form. (Bureau of Land Management 1986b:Illustration 3, Page 1; Federal Highway Administration 1988:40)
- **Line** is perceived when there is a change in form, color, or texture and where the eye generally follows this pathway because of the visual contrast. For example, a city's high-rises can be seen as a skyline against the blue sky, a river can have a curvilinear line as it passes through a landscape, or a hedgerow can create a line where it is seen rising up against a flat agricultural field. (Bureau of Land Management 1986b: Illustration 4, Page 1; Federal Highway Administration 1988:40)
- **Intactness** is 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 and in natural settings.
- **Scenic quality** is the overall impression that an individual viewer retains after driving through, walking through, or flying over an area or the visual appeal of a tract of land (Bureau of Land Management 1980:18, Bureau of Land Management 1986a:2).
- **Scenic vistas** generally encompass a wide area with long-range views to the middle- and background of surrounding elements in the landscape. Viewers may have scenic vista views from elevated vantages (e.g., hilltops and slopes), open agricultural lands, and roadways. Some vistas may encompass a 360-degree view in all directions, while others may be narrower.
- **Texture** is the perceived coarseness of a surface that is created by the light and shadow relationship over the surface of an object. For example, a rough surface texture (e.g., a rocky mountainside) would have many facets with distinct separations between areas of light and shadow. Conversely, a smooth surface texture (e.g., a beach) would have fewer facets, larger surface areas in light or shadow, and gradual gradations between light and shadow. (Bureau of Land Management 1986b:Illustration 6, Page 1; Federal Highway Administration 1988:40)
- **Unity** is the visual coherence and compositional harmony of the landscape considered as a whole; it frequently attests to the careful design of individual components in the landscape.
- **Vividness** is the visual power or memorability of landscape components as they combine in striking and distinctive visual patterns.

## O.6 Key Observation Points

Field observations were conducted and sites were photographed from April 15 to 16, 2013 (referred to as spring) and from August 12 to 14, 2013 (referred to as summer). The KOP

photographs are shown in Figures O-1 through O-18 (compiled at the end of this appendix). All of the KOPs surveyed in the spring are provided in Figure O-19 and those surveyed in the summer are provided in Figure O-20.

To identify the potential impacts of each build alternative on the visual environment, OEA selected KOPs where landscape features could be visually affected. These KOPs were determined to be most representative of the various existing visual landscapes located within and characteristic of the study area that could be affected by the build alternatives. These KOPs were selected to help readers generalize and understand the existing viewscape of the study area where the build alternatives could change views available to sensitive receptors and seen from sensitive viewing areas.

To determine KOPs, OEA identified a 2-mile radius around the build alternatives, which is the area that encompasses discernible elements that would be visible in the landscape. At distances of greater than 2 miles, the mass and visibility of the project elements would be reduced to a less substantial portion of the total landscape.

Within this 2-mile radius, OEA evaluated locations with views of the build alternatives, as determined by Google Earth overlain with the alignment for each build alternative, and Google Street View. OEA then evaluated these locations for landform, vegetation, water, and artificial features. OEA then selected representative KOPs that met the following criteria.

- At least one of a representative range of visible project features such as cut and fill, vegetation removal, bridges, roadway realignments, culverts, roadway crossings, and embankments.
- Locations where project features would be visually obtrusive, including undeveloped areas with at least moderate scenic values.
- Areas that would be particularly sensitive to changes in the visual landscape such as developed areas, publicly accessible areas where viewers spend extended periods, and areas that are at least moderately traveled by the public.

In the field, OEA visited and photographed these KOPs to document views, often in a 360° view. This scope provides an understanding of available views from the perspective of both roadway travelers and from viewers on nearby private lands.

OEA photographed images from the KOPs using a greater than 10-megapixel digital, single-lens reflex camera equipped with a 50-millimeter-equivalent focal length lens. This approximates the average view cone and magnification of the human eye.

OEA determined the camera positioning with a submeter differentially corrected global positioning system (GPS). The KOPs were brought into a geographic information system (GIS) data layer. A Google keyhole markup language file was created, and the KOPs were imported into Google Earth. Once in Google Earth, OEA used the KOPs and associated

photos, the alignment data overlay for each build alternative, and the conceptual renderings to evaluate impacts of the build alternatives.

OEA focused the survey on areas where the public could access build alternative. Public roadways and public use areas provided the greatest visual access from which most of the build alternatives would be visible. Where possible, OEA also surveyed KOPS on private lands, focusing on access from public and private paved, unpaved, and two-track roads where most public and private viewers would see the build alternatives. These roadways also provided comparative or surrogate information on similar, off-track views accessible by horse, all-terrain vehicle, or on foot. OEA also surveyed locations near and adjacent (where access was granted) to structures.

## **O.7 Rendered Key Observation Points**

### **O.7.1 Selection**

OEA selected 13 KOPs for before and after conceptual renderings. The RKOPs are representative of the visual conditions in the study area and potential impacts of the build alternatives. OEA selected KOPs to represent the affected visual landscapes in the study area. However, OEA applied more stringent criteria to RKOPs so that conceptual renderings would provide an adequate sampling of potential impacts. The RKOPs met the following criteria.

- RKOPs captured views from each build alternative, with greater representation if the build alternative would be longer or traverse unique visual conditions.
- RKOPs captured views from the Northern Cheyenne Indian Reservation, public roadways, and private locations where OEA was granted access. These RKOPs reflect a combination of the following elements.
  - Views that show the natural variation in landforms characteristic of the study area representative of the range of potential impacts. For example, locations that would show how the rail line would affect both flat lands and areas of topographical relief were more desirable than showing only flat lands. The RKOPs then illustrate impacts on both landform types and vegetation occurring on those landforms.
  - Views that are more open and show a larger portion of the build alternatives and are representative of “worst-case” scenarios that would be seen by affected viewer groups.
  - Views that show the range of visual impacts such as cut and fill, roadway realignments, rail crossings over roadways, and building removal.
- RKOPs represented both foreground and middleground views of the build alternatives. Background views were not chosen because the conceptual renderings would not show perceptible details at such distances.

- RKOPs selected without reference to land ownership data to ensure no preference toward any particular landowner.

Once OEA selected the RKOPs, the renderings were developed through an objective analytical and computer modeling process. OEA overlaid plan views of the alignment centerlines with station markings on a digital terrain model in Google Earth then added elevation markers or simple shape models to identify rail elevations. OEA then superimposed screenshots from RKOP positions in Google Earth on photographs in Photoshop to guide the positioning of project features in the conceptual renderings. OEA used design data provided by TRRC—including conceptual engineering drawings, elevations and cross sections, site and topographical contour plans, concept diagrams, and reference pictures (Wiser pers. comm.)—as a basis for preparation of conceptual renderings. Although the project elements would continue to undergo design refinement through final design stages, these refinements would not be expected to result in substantial differences in the representation of impacts presented in the renderings.

The RKOPs and rendered features illustrate a representative sample of visual changes that could occur for any build alternative and serve to help readers generalize impacts to locations that were not rendered. The key characteristics of each RKOP and justification for its inclusion are detailed in Table O-1.

**Table O-1. Rendered Key Observation Points**

<b>RKOP</b>	<b>Build Alternatives</b>	<b>Description</b>	<b>Why Was This RKOP Chosen?</b>
RKOP 1	Tongue River Tongue River East Tongue River Road Tongue River Road East	The proposed rail line would pass under I-94 near the northern terminus. Fish Hatchery Road would cross the alignment at grade. The crossing would be equipped with warning signage. The right-of-way and cut slopes at left would support scattered herbaceous vegetation.	RKOP 1 allows the viewer to infer how foreground views from I-94 would be altered.
RKOP 2	Tongue River Tongue River East Tongue River Road Tongue River Road East	The proposed rail line would be 1.2 miles distant and only the large features would be visible, including areas of fill up to 50 feet high and areas of cut.	RKOP 2 depicts a view from well-traveled Highway 59 and illustrates potential middleground views of the proposed rail line.
RKOP 3	Tongue River Tongue River East	The proposed rail line would be viewed from Tongue River Road as it runs along low fill at the lower slopes. The road would be relocated to the right and the former road would be restored to grassland vegetation. The fill slopes along the alignment and realigned road would support scattered herbaceous vegetation. A cut through a distant ridge would be visible on the horizon.	RKOP 3 shows the proposed rail line crossing flatter land and the bases of the hills, and the areas of cut and fill that would occur.
RKOP 4	Tongue River Tongue River Road Colstrip Moon Creek	The proposed rail line would cross the valley on fill up to 50 feet deep. The existing cut above the river bend would be enlarged and the alignment would continue on new fill up to 40 feet high. This rendering assumes East Tongue River Road would be realigned to the east. The road crossing in the foreground would have a signal with gates. Portions of the existing road in the center of this view would remain. The stream in the valley at right would pass under the fill and the existing road through a culvert, not visible in this view.	RKOP 4 depicts a view that would require a roadway realignment, a road crossing, building removal, and areas of cut and fill required to accommodate the proposed rail line on the hillside.
RKOP 5	Tongue River Colstrip Tongue River Road Moon Creek	The proposed rail line would cross the far side of the valley on low fill 10 to 20 feet high, near the base of the distant hills. The alignment would cross several unnamed ranch roads that could be relocated. This rendering assumes that some roads would be realigned onto the lower slopes behind the alignment and would be somewhat visible from this location. A large area of cut would be visible on the hillside.	RKOP 5 depicts a view from a public road on the Northern Cheyenne Indian Reservation, where it the view would be accessible to a large number of viewers.

<b>RKOP</b>	<b>Build Alternatives</b>	<b>Description</b>	<b>Why Was This RKOP Chosen?</b>
RKOP 6	Tongue River East Colstrip East Tongue River Road East Moon Creek East Revised Decker East	The proposed rail line would cross this valley on fill 60 to 70 feet high, near the upper visible edges of hills on both sides of the valley (approximately 3,173 feet on right side of this view and approximately 3,164 feet on left side of this view). The creek would pass through a culvert under the fill. The road up-valley would be realigned, but the realignment would not be visible in this view. The fill slopes would support scattered vegetation, not the dense meadow vegetation of the valley floor.	RKOP 6 depicts a view looking up one of the many small valleys or drainages in the study area. Although these valleys or drainages range in width, this view is wide enough to illustrate impacts of large-scale fill. This view is from a private property.
RKOP 7	Tongue River Tongue River East Colstrip Colstrip East Tongue River Road Tongue River East Moon Creek East Decker Decker East	The proposed rail line would cross the valley near the existing grade, with areas of relatively shallow cut and fill. In the middleground, the alignment would cross the valley and creek in on fill up to 40 to 50 feet high, with a culvert (not visible in this view) for the creek. Those fill slopes would support scattered vegetation. The unmaintained ranch road from which this photograph was taken would cross the alignment at grade with warning signs but no lights or gates.	RKOP 7 depicts a wide-open view from an elevated vantage point typical of the study area. Otter Creek Road is in the middleground and Custer National Forest is in the background of this view, showing the level of detail available in middleground and background views. This view is from a private property,
RKOP 8	Colstrip Colstrip East	The proposed rail line would cross this valley on fill up to about 52 feet high and on a bridge over Ley Creek near the existing road crossing. The alignment would continue down the right (south) side of this valley on relatively high fill, mostly 30 to 40 feet high. The fill would support sparse, grassy cover, not the dense meadow vegetation of the valley bottom. Greenleaf Road would be realigned to the left (northeast) of its current location and would cross the creek on a low bridge. This rendering assumes that the existing road would be restored to grassland vegetation and that the bridge would span from approximately 828+00 to 837+00.	RKOP 8 depicts a view from Greenleaf Road where the proposed rail line would require roadway realignment and would cross the Tongue River on a trestle bridge.
RKOP 9	Tongue River Road Tongue River Road East	The proposed rail line would cross the valley to the left (southeast) of the existing paved road on fill up to about 46 feet high. The creek would pass through a culvert under the fill. The road providing access to properties across the alignment would cross the tracks at grade in approximately its current location. The fill slopes would support scattered	RKOP 9 depicts a view from Tongue River Road where the proposed rail line would parallel the road for quite a distance, typical of other locations the study area. This view also shows areas of steep cut and fill.

RKOP	Build Alternatives	Description	Why Was This RKOP Chosen?
RKOP 10	Tongue River Road Tongue River Road East	<p>grass and scrub vegetation. The alignment would continue through a minor cut in the middle distance to a major cut (up to about 120 feet deep) through a hill on the horizon. The existing paved Tongue River Road would be realigned to the right side of this view. This rendering assumes that the existing road would be restored to grassland vegetation.</p> <p>The proposed rail line would cross the valley at right on fill with a bridge about 80 feet above Lay Creek. This rendering assumes that the bridge would span from approximately 2068+00 to 2077+00. The fill slopes would support scattered grass and scrub vegetation. The alignment would cut through hills in the middle distance up to about 50 feet deep.</p>	<p>RKOP 10 depicts a view from Tongue River Road where the proposed rail line would parallel the road and cross a drainage, typical of other locations the study area. This view also shows areas of cut and fill and an area of terrain east of the Tongue River that appears slightly rougher and more irregular than the smoother and undulating terrain elsewhere.</p>
RKOP 11	Moon Creek Moon Creek East	<p>The proposed rail line would cross under I-94 about 500 feet beyond the left side of this view. The tracks would emerge from a long, shallow cut through the terrain at left and would approach existing grade in the middle distance.</p>	<p>RKOP 11 depicts a view typical of other foreground views from I-94. This view, taken from private land, shows how the proposed rail line would likely appear traversing a relatively flat area of land.</p>
RKOP 12	Decker Decker East	<p>The proposed rail line would emerge from a shallow cut at left, crossing shallow fill to cross the road at existing grade, and continuing into the distance on fill mostly 15 to 30 feet high. The road crossing would be equipped with warning signage.</p>	<p>RKOP 12 depicts a view from Tongue River Road that would include a roadway realignment and a road crossing. It shows some fill and how the proposed rail line would curve off into the distance on gently sloping land. Various elements of this condition occur elsewhere in the study area.</p>
RKOP 13	Decker Decker East	<p>The proposed rail line would cross through cuts and fills in the distance. The cut and fill slopes would support scattered vegetation.</p>	<p>RKOP 13 depicts a view from 4 Mile Creek Road near Tongue River Road that is typical of the portion of the study area with the most topographical relief. The view shows the cut and fill required for an alignment crossing such varied terrain.</p>

## O.7.2 Scenic Quality Ratings

OEA prepared a scenic quality rating evaluation using an adaptation of the BLM's VRM system. VRM objectively quantifies and rates the various landscape elements that make up scenic quality. VRM assigns an A, B, or C rating of scenic quality, determined by seven landscape features: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications. The numeric equivalent of the VRM rating system is as follows: A = 19-32, B = 12-18, and C = 0-11. The VRM *Scenic Quality Inventory and Evaluation Chart Rating Criteria and Score* provides the basis for the numeric ratings for each category. These landscape features were evaluated by an interdisciplinary team of three reviewers and rated numerically compared with similar features in the viewshed. The three reviewers' scores were averaged to determine the score used in the analysis. A reduction in the existing conditions to a lower scenic quality rating for rendered conditions constitutes a visual impact.

BLM's VRM rating scale is broad, allowing for only three scenic quality ratings, which make it harder to assess when a view is affected and to what degree. For example, while a proposed action may result in an impact, the numeric change may not be enough to reduce the score from a B to a C. Even if a score is reduced from a B to a C, this broad scoring range does not help to illustrate how one project element or feature may result in greater impact over another or how the same project element or feature may have more or less of an impact within a different visual landscape. Therefore, BLM's VRM rating scale was revised to provide a more concise rating scheme, while also allowing for a possible total of 32 points. This revised scoring system allows for a finer-detailed, more accurate assessment of scenic quality for both existing and rendered views and, in turn, provides for a more concise determination of the degree to which an existing view may be affected by a proposed action. For example, a score reduction from a B to a D would infer a higher degree of impact compared to a score reduction from a B to a C. View scores are as follows. Scores with numbers in between ratings are rounded up to the rating of the next whole number.

- 29 to 32 points: **A** rating indicates a very high visual quality.
- 24 to 28 points: **B** rating indicates a high visual quality.
- 19 to 23 points: **C** rating indicates a moderately high visual quality.
- 14 to 18 points: **D** rating indicates a moderate visual quality.
- 9 to 13 points: **E** rating indicates a moderately low visual quality.
- 4 to 8 points: **F** rating indicates a low visual quality.
- 0 to 3 points: **G** rating indicates a very low visual quality.

The landscape was evaluated for its existing and rendered conditions. The criteria for qualitatively determining visual quality are described in Table O-2. Table O-3 summarizes the rating for each RKOP.

**Table O-2. Rating Criteria for Viewshed Elements**

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<b>Landform</b>
Topography becomes more interesting as it gets steeper or more massive, or more severely or universally sculptured. Outstanding landforms may be monumental, as the Grand Canyon, the Sawtooth Mountain Range in Idaho, the Wrangell Mountain Range in Alaska, or they may be exceedingly artistic and subtle as certain badlands, pinnacles, arches, and other extraordinary formations.
<b>Vegetation</b>
Give primary consideration to the variety of patterns, forms, and textures created by plant life. Consider short-lived displays when they are known to be recurring or spectacular. Consider also smaller scale vegetation features that add striking and intriguing detail elements to the landscape (e.g., gnarled or wind-beaten trees and Joshua trees).
<b>Water</b>
That ingredient which adds movement or serenity to a scene. The degree to which water dominates the scene is the primary consideration in selecting the rating score.
<b>Color</b>
Consider the overall color(s) of the basic components of the landscape (e.g., soil, rock, vegetation, etc.) as they appear during seasons or periods of high use. Key factors to use when rating "color" are variety, contrast, and harmony.
<b>Adjacent Scenery</b>
Degree to which scenery outside the scenery unit being rated enhances the overall impression of the scenery within the rating unit. The distance from which adjacent scenery will influence scenery within the rating unit will normally range from 0 to 5 miles, depending upon the characteristics of the topography, the vegetative cover, and other such factors. This factor is generally applied to units that would normally rate very low in score, but the influence of the adjacent unit would enhance the visual quality and raise the score.
<b>Scarcity</b>
This factor provides an opportunity to give added importance to one or all of the scenic features that appear to be relatively unique or rare within one physiographic region. There may also be cases where a separate evaluation of each of the key factors does not give a true picture of the overall scenic quality of an area. Often it is a number of not so spectacular elements in the proper combination that produces the most pleasing and memorable scenery - the scarcity factor can be used to recognize this type of area and give it the added emphasis it needs.
<b>Cultural Modifications</b>
Cultural modifications in the landform, water, vegetation, and addition of structures should be considered and may detract from the scenery in the form of a negative intrusion or complement or improve the scenic quality of a unit. Rate accordingly.

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**Table O-3. Scenic Quality Rating Summary**

<b>RKOP</b>	<b>View</b>	<b>OEA Visual Analyst 1</b>	<b>OEA Visual Analyst 2</b>	<b>OEA Visual Analyst 3</b>	<b>OEA Visual Analyst 4</b>	<b>Averaged Total</b>	<b>Final Rating</b>
RKOP 1	Existing	13	-	14	12	13	E
	Rendered	12.5	-	14	12	12.83	E
RKOP 2	Existing	19	-	21	17.5	19.17	C
	Rendered	18	-	19.5	17	18.17	D
RKOP 3	Existing	24	-	24.5	25	24.5	B
	Rendered	21.5	-	22.5	23	22.33	C
RKOP 4	Existing	20.5	-	21.5	18	20	C
	Rendered	18	-	16	14.5	16.17	D
RKOP 5	Existing	20.5	-	22.5	20.5	21.17	C
	Rendered	20.5	-	19	20	19.83	C
RKOP 6	Existing	20	-	21.5	21.5	21	C
	Rendered	10.5	-	11	9	10.17	E
RKOP 7	Existing	19	21	-	21	20.33	C
	Rendered	18.5	20.5	-	19.5	19.5	C
RKOP 8	Existing	24.5	27	-	21.5	24.33	B
	Rendered	16	15.5	-	13	14.83	D
RKOP 9	Existing	-	18.5	20	14.5	17.67	D
	Rendered	-	12	13.5	13	12.83	E
RKOP 10	Existing	-	21.5	23.5	21.5	22.17	C
	Rendered	-	12.5	13.5	14.5	13.5	D
RKOP 11	Existing	-	13.5	16.5	11	13.67	D
	Rendered	-	12	13	10	11.67	E
RKOP 12	Existing	-	20	20.5	19.5	20	C
	Rendered	-	18	19	18	18.33	D
RKOP 13	Existing	-	21.5	23	21	21.83	C
	Rendered	-	15.5	16	19	16.83	D

Scenic Quality Ratings:  
A = 29–32    B = 24–28    C = 19–23    D = 14–18    E = 9–13    F = 4–8    G = 0–3

## O.8 Rendered Key Observation Point Evaluations

The rating criteria and score for the key features of a visual resource are summarized in the chart that follows. This, in turn, is followed by the scenic quality summary and three independent viewer evaluations for each RKOP, before and after the rendering.

Key factors	Scenic Quality Inventory and Evaluation Chart Rating Criteria and Score		
<b>Landform</b>	High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops, or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers.  5	Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features that are interesting though not dominant or exceptional.  3	Low rolling hills, foothills, or flat valley bottoms; or few or no interesting landscape features.  1
<b>Vegetation</b>	A variety of vegetative types as expressed in interesting forms, textures, and patterns.  5	Some variety of vegetation, but only one or two major types.  3	Little or no variety or contrast in vegetation.  1
<b>Water</b>	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.  5	Flowing, or still, but not dominant in the landscape.  3	Absent, or present, but not noticeable.  0
<b>Color</b>	Rich color combinations, variety, or vivid color; or pleasing contrasts in the soil, rock, vegetation, water, or snowfields.  5	Some intensity or variety in colors and contrast of the soil, rock and vegetation, but not a dominant scenic element.  3	Subtle color variations, contrast, or interest; generally mute tones.  1
<b>Influence of Adjacent Scenery</b>	Adjacent scenery greatly enhances visual quality.  5	Adjacent scenery moderately enhances overall visual quality.  3	Adjacent scenery has little or no influence on overall visual quality.  0
<b>Scarcity</b>	One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc.  * 5+	Distinctive, though somewhat similar to others within the region.  3	Interesting within its setting, but fairly common within the region.  1
<b>Cultural Modifications</b>	Modifications add favorably to visual variety while promoting visual harmony.  2	Modifications add little or no visual variety to the area, and introduce no discordant elements.  0	Modifications add variety but are very discordant and promote strong disharmony.  -4

**THESE INSTRUCTIONS APPLY TO ALL RATING FORMS** \* A rating of greater than 5 can be given but must be supported by written justification. This applies to all rating forms.

**Purpose:** To rate the visual quality of the scenic resource on all BLM managed lands.

**How to Identify Scenic Value:** All Bureau lands have scenic value.

**How to Determine Minimum Suitability:** All BLM lands are rated for scenic values. Also rate adjacent or intermingling non-BLM lands within the planning unit.

**When to Evaluate Scenic Quality:** Rate for scenery under the most critical conditions (i.e., highest user period or season of use, sidelight, proper atmospheric conditions, etc.).

**How to Delineate Rating Areas:** Consider the following factors when delineating rating areas.

- Like physiographic characteristics (i.e., land form, vegetation, etc.).
- Similar visual patterns, texture, color, variety, etc.
- Areas that have a similar impact from cultural modifications (i.e., roads, historical and other structures, mining operations, or other surface disturbances).

NOTE: Values for each rating criteria are maximum and minimum scores only. It is also possible to assign scores within these ranges.

## 0.8.1 KOP 1 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

### SCENIC QUALITY RATING SUMMARY

KOP 1: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2.5	Gently rolling terrain with the freeway slightly raised. Hills/mountains are visible in the background.						
(2) Vegetation	3.5	Grass covers most of the terrain with a thick band of riparian vegetation occurring across the freeway.						
(3) Water	0	Water is not visible.						
(4) Color	3	Green and brown grass contrasts against the dark green riparian vegetation. Brown and gray soil is exposed with the road and on the surrounding terrain. The blue of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	3	Surrounding scenery adds to the view, but does not substantially enhance it.						
(6) Scarcity	2	This is a fairly common view of the freeway occurring in an area that is closer to development.						
(7) Cultural Modification	0	Barbed-wire fencing and the dirt road make up the cultural modifications in the foreground. The freeway, associated signage, and concrete underpass for the dirt road are the other cultural elements. These do not greatly detract from the landscape.						
(8) Total Score	14							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: 11/26/13

Landscape Character Unit: N/A

KOP 1: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2.5	The landscape is relatively flat but contains some low rolling hills. The freeway and a concrete underpass are visible in the middleground. A mountain or bluff range is visible in the distance.						
(2) Vegetation	3.5	Vegetation is grassy with low shrubs. Groupings of trees are visible in the background.						
(3) Water	0	Absent.						
(4) Color	3	The green and brown grasslands and green shrubs contrast with brown, rocky soil of the road and other exposed earth. The horizon and blue sky stands out due to the relatively flat landscape, with dense green trees lining the horizon. Vegetation would be mostly brown in the wintertime.						
(5) Adjacent Scenery	3	Views of scattered rural residences, farmland, gently rolling hills and distant bluffs are positive visual elements in the adjacent scenery.						
(6) Scarcity	2	The view is somewhat distinctive, but common within the regional setting.						
(7) Cultural Modification	0	The cultural features in the foreground include barbed-wire fencing with wooden posts and a dirt/gravel road, which are not visually intrusive. The freeway and overpass are in the middleground and do not overly detract from the scenery.						
(8) Total Score	14							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 25, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 1: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA							
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>							
Key Factors	Scenic Quality Rating	Explanation					
(1) Landform	2	The landscape is generally flat. A low mountain or bluff range is visible in the distance and provides the focal point. The terrain in the middle ground is highly manipulated and engineered for an interstate highway corridor. Soils in the foreground appear somewhat disturbed.					
(2) Vegetation	2	The foreground and middle ground are dominated by grassland and ruderal vegetation. Spotty trees in the distance block the view of the horizon. The trees appear to become increasingly dense with distance.					
(3) Water	0	Absent					
(4) Color	3.5	A variety of greens and browns dominate the view. Whites and light sand tones highlight the grasses, road rock, and exposed earth. The greatest contrast is provided by the ribbon of dark green trees in the background separating the earth and sky at the horizon. Passing cars and trucks provide momentary flashes of discordant color. In the winter the greens would be nearly mute or completely absent and replaced by more browns or white.					
(5) Adjacent Scenery	3	The distant views of the rural community and more distant bluffs are positive visual elements in the adjacent scenery.					
(6) Scarcity	2	The view is somewhat unique, but rather common within the regional setting.					
(7) Cultural Modification	-0.5	The gravel road and interstate highway are the two greatest cultural modifications in the view. Both detract from the scenery. The barbed-wire fencing, bridge underpass, and freeway signage are also visible and are not visually intrusive.					
(8) Total Score	12						
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8 G = 0-3

## 0.8.2 KOP 1 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/7/2014

Landscape Character Unit: N/A

KOP 1: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2.5	Gently rolling terrain with the freeway slightly raised. Hills/mountains would be visible in the background. The proposed rail line would slightly alter landform by lowering grade to cross under freeway but then gently slope up to meet existing grade.						
(2) Vegetation	3.5	Grass would cover most of the terrain with a thick band of riparian vegetation occurring across the freeway. The proposed rail line would remove only small portions of grass.						
(3) Water	0	Water would not be visible.						
(4) Color	3	Green and brown grass would contrast against the dark green riparian vegetation. Brown and gray soil would be exposed with the road and on the surrounding terrain. The blue sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	3	Surrounding scenery would add to the view, but does not substantially enhance it.						
(6) Scarcity	2	This would be a fairly common view of the freeway occurring in an area that is closer to development.						
(7) Cultural Modification	0	The proposed rail line would add only slightly to the amount of cultural modifications. The new concrete underpass for the proposed rail line would be visually similar to the concrete underpass for the dirt road, only slightly more pronounced. The track would slope up gently from under the freeway to meet grade, but would not stand out. Signage would be present with the freeway so safety signage would not substantially detract from views. Barbed-wire fencing and the dirt road would make up the cultural modifications in the foreground.						
(8) Total Score	14							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/7/14

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 1: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen							
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>							
Key Factors	Scenic Quality Rating	Explanation					
(1) Landform	2	The landscape would be relatively flat but would contain some low rolling hills. The freeway and an overpass are visible in the middleground and a mountain or bluff range is visible in the distance. The proposed rail line would tunnel through the hill in the foreground and go under the freeway, which is a focal point of this view.					
(2) Vegetation	3	Vegetation would be grassy with low shrubs. Groupings of trees would be visible in the background. The proposed rail line would remove some areas of grass.					
(3) Water	0	Absent.					
(4) Color	3	The green and brown grasslands and green shrubs would contrast with brown, rocky soil of the road and other exposed earth. The horizon and blue sky would stand out due to the relatively flat landscape, with dense green trees lining the horizon. Vegetation would be mostly brown in the wintertime.					
(5) Adjacent Scenery	3	Views of scattered rural residences, farmland, gently rolling hills and distant bluffs would be positive visual elements in the adjacent scenery.					
(6) Scarcity	2	The view would be somewhat distinctive, but common within the regional setting.					
(7) Cultural Modification	-0.5	The proposed rail line, the highway, and the concrete overpasses would be the main cultural modifications in this view that all detract from the scenery. The two concrete underpasses would be the most visually obtrusive. The signage for the rail would detract slightly from the scenery. Other cultural features would include barbed-wire fencing with wooden posts and a dirt/gravel road, which are not visually intrusive.					
(8) Total Score	12.5						
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8 G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: February 5, 2014

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 1: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2	The landscape would be generally flat. A low mountain or bluff range would be visible in the distance and would provide the focal point. The terrain in the middle ground would be highly manipulated and engineered for an interstate highway corridor. Soils in the foreground and middle ground would appear somewhat disturbed.						
(2) Vegetation	2	The foreground and middle ground would be dominated by grassland and ruderal vegetation. Spotty trees in the distance would block the view of the horizon. The trees would appear increasingly dense with distance.						
(3) Water	0	Absent						
(4) Color	3.5	A variety of greens and browns would dominate the view. Whites and light sand tones would highlight the grasses, road rock, and exposed earth. The greatest contrast would be provided by the ribbon of dark green trees in the background separating the earth and sky at the horizon. Passing trains, cars, and trucks would provide momentary flashes of discordant color. In the winter the greens would be nearly mute or completely absent and replaced by more browns or white.						
(5) Adjacent Scenery	3	The distant views of the rural community and more distant bluffs would be positive visual elements in the adjacent scenery.						
(6) Scarcity	2	The view would be somewhat unique, but rather common within the regional setting.						
(7) Cultural Modification	-0.5	The gravel road, railroad, and interstate highway would be the greatest cultural modifications in the view. Both would detract from the scenery. Two bridge underpasses, railroad signage, and freeway signage would also be visible and not visually intrusive.						
(8) Total Score	12							
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

### O.8.3 KOP 2 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

#### SCENIC QUALITY RATING SUMMARY

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 2: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	Variable landscape includes undulating terrain with landforms that reach higher up and provide visual interest. Also includes steeper cliff faces and the river valley. Terrain contributes to scenic quality of view and provides visual interest.						
(2) Vegetation	3	The terrain is predominantly covered by mix of grasses and sages. Riparian trees are visible and identify the river corridor.						
(3) Water	0.5	The river corridor is within view but water is not readily present. Water may be present during high flows.						
(4) Color	4	The grasses provide a picturesque wash of medium to light greens, tan and brown over reddish-brown soils that are also dotted with grayish-green sages. Riparian vegetation provides a contrasting band of dark green. The blue and white of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses)						
(5) Adjacent Scenery	4	The adjacent scenery is also unique and variable, which further contributes to the picturesque quality of this scene. It also lacks cultural modification and holds the same vegetative cover and color values.						
(6) Scarcity	4	The terrain is highly variable in the study area and this scene has similar landforms and land cover, but is visually unique in and of itself.						
(7) Cultural Modification	2	Primary cultural feature is split rail/metal post and barbed-wire fencing that is not visually prominent, does not detract from the quality of scenic views, and is harmonious with and in keeping with the rural visual character.						
(8) Total Score	21							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/26/13

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 2: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	The landscape contains grasslands in the foreground, gently rolling hills in the middle ground, and hills and a mesa in the background.						
(2) Vegetation	3	Vegetation includes lush grasslands in the foreground and middle ground. There is a riparian area with dense trees in the middle ground, and low shrubs throughout the landscape. No other trees are present in the landscape.						
(3) Water	0	No water is visible in the landscape. However there appears to be riparian vegetation in the middle ground that alludes to a water source.						
(4) Color	3.5	The grasslands are light to medium green with some patches of dry, brownish grass. There shrubs throughout the landscape are dark green, and there is one area of dark green riparian vegetation/trees. The green vegetation contrasts with some areas of brown exposed earth. The hills and mesa at the horizon provide a distinct visual separation from the blue sky to the green landscape.						
(5) Adjacent Scenery	3	The adjacent scenery further contributes to the visual quality of this scene. There are few cultural modifications, vegetation and colors are similar.						
(6) Scarcity	4	The view is distinctive in that there are almost no cultural modifications. The landscape appears to be relatively untouched.						
(7) Cultural Modification	2	There is a barbed-wire fence with wooden posts in the foreground, which only slightly takes away from the scenery.						
(8) Total Score	19							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.4 KOP 2 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 2: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	Variable landscape would include undulating terrain with landforms that reach higher up and provide visual interest. Also would include steeper cliff faces and the river valley. Terrain would contribute to scenic quality of view and provide visual interest. Proposed rail line would add fill and a linear, more geometric landform into the viewshed that would be largely natural and irregular. However, it would be visually prominent due to distance from RKOP.						
(2) Vegetation	3	The terrain would be covered predominantly by mix of grasses and sages. Riparian trees would be visible and would identify the river corridor. Some vegetation removal would occur to accommodate the proposed rail line. However, it would not be visually prominent due to distance from RKOP.						
(3) Water	0.5	River corridor would be within view but water would not be readily present. Water may be present during high flows.						
(4) Color	4	The grasses would provide a picturesque wash of medium to light greens, tan and brown over reddish-brown soils that are also dotted with grayish-green sages. Riparian vegetation would provide a contrasting band of dark green. The blue and white of the sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses)						
(5) Adjacent Scenery	4	Adjacent scenery would also be unique and variable, which would contribute further to the picturesque quality of this scene. It would also lack cultural modification and hold the same vegetative cover/color values.						
(6) Scarcity	4	The terrain would be highly variable and this scene would have similar landforms and land cover, but is visually unique in and of itself.						
(7) Cultural Modification	1	Fencing would not be visually prominent, would not detract from the quality of scenic views, and would be harmonious with and in keeping with the rural visual character. The proposed rail line would add fill and a linear, more geometric visual feature into the viewshed that would be largely natural and irregular.						
(8) Total Score	19.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/26/13

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 2: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives and Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>RENDERED</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	The landscape would contain grasslands in the foreground, gently rolling hills in the middleground, and hills and a mesa in the background. The proposed rail line would add fill and a linear landform into the viewshed. However, it would be subtle and not visually prominent due to the hills and the distance from RKOP.						
(2) Vegetation	3	Vegetation would include lush grasslands in the foreground and middleground. There would be a riparian area with dense trees in the middleground, and low shrubs throughout the landscape. The proposed rail line would add fill, which would remove a linear area of vegetation.						
(3) Water	0	No water would be visible in the landscape. However there would appear to be riparian vegetation in the middleground that alludes to a water source.						
(4) Color	3.5	The grasslands would be light to medium green with some patches of dry, brownish grass. The shrubs throughout the landscape would be dark green, and there would be one area of dark green riparian vegetation/trees. The green vegetation would contrast with some areas of brown exposed earth. The hills and mesa at the horizon would provide a distinct visual separation from the blue sky to the green landscape. The proposed rail line would remove some vegetation, which would leave a slightly noticeable linear area of brownish fill in the middleground.						
(5) Adjacent Scenery	3	The adjacent scenery would contribute further to the visual quality of this scene. There would be few cultural modifications, vegetation, and colors would be similar.						
(6) Scarcity	4	The view would be distinctive in that there would be almost no cultural modifications. The landscape would appear to be relatively untouched.						
(7) Cultural Modification	1	There would be a barbed-wire fence with wooden posts in the foreground, which would only slightly take away from the scenery. The proposed rail line would add a linear feature to the middleground and remove some vegetation. It would be noticeable, but not overly so.						
(8) Total Score	18							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.5 KOP 3 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

### SCENIC QUALITY RATING SUMMARY

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 3: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives)

Evaluators ( <i>names</i> ): Jennifer Stock, PLA		
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	4	Variable landscape includes irregular mounding hills that run roughly perpendicular to the river. They have moderately steep sides that have a somewhat irregular repeating, conical forms created by erosion. Visible striations are prominent in one cliff and more subtle in the others. The bases of the hills give way to a gently undulating landform that gradually slopes to the river valley. Terrain contributes to scenic quality of view and provides visual interest.
(2) Vegetation	3	The terrain is predominantly covered by mix of grasses that create a smooth landscape cover. Trees killed by the fire are visible on the hills.
(3) Water	3	The river corridor is within view and provides visual interest, but it is not visually prominent.
(4) Color	4	The grasses provide a picturesque wash of medium to light greens and tans over pinkish soils. Dead trees are brown. The striated hills are pink, gray, and white. The pinkish roadway complements the green grasses and colors of the hillsides. The blue of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses). Water reflects blue of sky, also providing visual interest.
(5) Adjacent Scenery	4.5	The adjacent scenery is also unique and variable, which further contributes to the picturesque quality of this scene. It also lacks cultural modifications, besides the roadway, and holds the same vegetative cover and color values. In addition, stark white and black dead cottonwoods provide striking visual interest. River is more prominent in adjacent scenery. Riparian veg is present. More hilly across river with fire-damaged and live trees.
(6) Scarcity	4	The terrain is highly variable in the study area. This scene has unique landforms and interesting color yet relatively common land cover. It is visually unique, similar to other views in the study area.
(7) Cultural Modification	2	Only cultural feature is the dirt and gravel roadway does not detract from the quality of scenic views, which is pinkish and complements the surrounding terrain and land cover, and is harmonious with and in keeping with the rural visual character.

(8) Total Score	24.5							
(9) Scenic Quality Rating	B	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/26/2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 3: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The landscape includes prominent, rounded hills that run perpendicular to a dirt road and a river bend. Erosion has exposed rock layers/striations on the sides of the hills. From the road, the land slopes gently downward toward the river corridor.						
(2) Vegetation	3.5	The landscape is dominated by grassland. Low shrubs and small trees are scattered throughout the landscape.						
(3) Water	3.5	A river bend is within view and provides visual interest.						
(4) Color	4	The grasses are light to medium green, with slightly denser and darker areas of riparian vegetation. There are scattered brown trees throughout the landscape. The dirt road is brownish-gray. The hills are striated with reddish-pink, gray, and white rock. The blue distinctly contrasts with the land cover. The river reflects blue of sky, providing vivid contrast with the dominant green and brown landscape.						
(5) Adjacent Scenery	4	The adjacent scenery is similar. The road is the main cultural modifications, and vegetation and colors are similar. Some adjacent areas have more prominent riparian vegetation and river views, and more trees.						
(6) Scarcity	3.5	The view is somewhat unique with the striated hills and river view, but is relatively common within the regional setting.						
(7) Cultural Modification	1.5	The only cultural feature is the dirt and gravel roadway. It is consistent with the surrounding rural terrain and does not detract from the quality of scenic views.						
(8) Total Score	24							
(9) Scenic Quality Rating	B	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 3: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4.5	Hills or low mountains rise dramatically from the valley bottom and provide focal points to the view. The terrace between the hills and river bottom draws the eye around the bend. Dynamic geologic and landform shaping processes are evident in the view including strata visible on the hillsides and bank cuts along the river.						
(2) Vegetation	3.5	Visible vegetation includes grassland, sparse coniferous woodland, with coniferous forest visible on the hill tops. Some of the woody vegetation appears burned, or in a temporary state of decline. The way the trees dot the draws between the hills and dominate the higher elevation is visually interesting.						
(3) Water	4	The view of the river although small, is significant. The river mimics the shapes of the landform and contributes a sense of life and vitality to this landscape.						
(4) Color	5	Golds and whites highlight the view. Grays, pinks, and reds are eye-catching on the nearby hills and provide a year-round source of color. The blue sky is reflected on the water of the river. The dominant colors are grass green and spring green, with olive, sand, buff, and dark brown forming the color foundation. The view during winter would feature brown grasslands or white snow. Conifers would provide an even more high contrast of dark green against these colors.						
(5) Adjacent Scenery	4	The buttes, bluffs, nearby low mountains and river contribute greatly to the view. The surrounding landscape is dynamic, complex, and layered.						
(6) Scarcity	4	The view is unique with the added river and valley views, but common within the regional setting.						
(7) Cultural Modification	0	The gravel road does not detract nor does it add anything noteworthy to the view.						
(8) Total Score	25							
(9) Scenic Quality Rating	B	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.6 KOP 3 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 3: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	Variable landscape would include irregular mounding hills that would run roughly perpendicular to the river. They would have moderately steep sides with somewhat irregular repeating, conical forms created by erosion. Visible striations would be prominent in one cliff and more subtle in others. Proposed rail line would disrupt gently sloping terrain at base of hills and create a notch in the hillside in distance.						
(2) Vegetation	3	Vegetation would remain largely the same. The terrain is predominantly covered by mix of grasses that create a smooth landscape cover. Trees killed by the fire are visible on the hills.						
(3) Water	3	River corridor would be w/in view and provide visual interest, but would not be visually prominent from this vantage.						
(4) Color	4	Color would remain largely the same. The grasses would provide a picturesque wash of medium to light greens and tans over pinkish soils. Dead trees would be brown. The striated hills would be pink, gray, and white. The pinkish roadway would complement the green grasses and colors of the hillsides. The blue sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses). Water would reflect the blue of sky, also providing visual interest.						
(5) Adjacent Scenery	4.5	The adjacent scenery would also be unique and variable, which would contribute further to the picturesque quality of this scene. It would also lack cultural modifications, besides the roadway, and hold the same vegetative cover and color values. In addition, stark white and black dead cottonwoods would provide striking visual interest. The river would be more prominent in adjacent scenery. Riparian vegetation would be present. It would be hillier across river with fire-damaged and live trees.						
(6) Scarcity	4	Terrain would be highly variable. This scene would have unique landforms and interesting color yet relatively common land cover. It would be visually unique, in and of itself, similar to other views in area.						
(7) Cultural Modification	0.5	The proposed rail line would disrupt the gently sloping terrain at the base of the hills and the train, would introduce an industrial-looking visual feature in a rural landscape. The relocated roadway would complement the surrounding terrain and land cover but would tend to cramp the edge of the river.						
(8) Total Score	22.5							
(9) Scenic Quality Rtng	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/26/13

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 3: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	The landscape would include prominent, rounded hills that run perpendicular to a dirt road and a river corridor. Erosion has exposed rock layers/striations on the sides of the hills. From the road, the land would slope gently downward toward the river. The proposed rail line would cut through the sloping terrain at the base of the hills, and the engineered slope would detract from the natural landscape.						
(2) Vegetation	3.5	The landscape would be dominated by grassland. Low shrubs and small trees would be scattered throughout the landscape.						
(3) Water	3.5	A river bend would be within view and would provide visual interest.						
(4) Color	4	The grasses would be light to medium green, with slightly denser areas of dark green riparian vegetation. There would be scattered brown trees throughout the landscape. The dirt road would be brownish-gray. The hills would be striated with reddish-pink, gray, and white rock. The blue sky would contrast distinctly with the land cover. The river would reflect the blue sky, providing vivid contrast with the dominant green and brown landscape.						
(5) Adjacent Scenery	4	The adjacent scenery would be similar. The road would be the main cultural modification, and vegetation and colors would be similar. Some adjacent areas would have more prominent riparian vegetation and river views, and more trees.						
(6) Scarcity	3.5	The view would be somewhat unique with the striated hills and river view, but would be relatively common within the regional setting.						
(7) Cultural Modification	-0.5	The proposed rail line would disrupt the terrain at the base of the hills, and the engineered slope would introduce an additional cultural modification into the landscape. The relocated roadway would not further detract from the landscape.						
(8) Total Score	21.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

**SCENIC QUALITY RATING SUMMARY**

KOP 3: Tongue River Alternative (Affected Alternatives: Tongue River Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	Hills or low mountains would rise dramatically from the valley bottom and provide focal points to the view. The terrace between the hills and river bottom would draw the eye around the bend. Dynamic geologic and landform-shaping processes would be evident in the view including strata visible on the hillsides and bank cuts along the river. An engineered slope at the bottom of the hills for the proposed rail line would detract from the natural landform.						
(2) Vegetation	3.5	Visible vegetation would include grassland, sparse coniferous woodland, with coniferous forest visible on the hill tops. Some of the woody vegetation would appear burned, or in a temporary state of decline. The way the trees dot the draws between the hills and dominate the higher elevation would be visually interesting.						
(3) Water	4	The view of the river although small, would be significant. The river would mimic the shapes of the landform and contribute a sense of life and vitality to this landscape.						
(4) Color	4.5	Golds and whites would highlight the view. Grays, pinks, and reds would be eye-catching on the nearby hills and provide a year-round source of color. The blue sky would be reflected on the water of the river. Dominant colors would be grass green and spring green, with olive, sand, buff, and dark brown forming the color foundation. The view during winter would feature brown grasslands or white snow. Conifers would provide an even more high contrast of dark green against these colors. Railcars passing through could provide a temporary kaleidoscope of unharmonious colors to the landscape.						
(5) Adjacent Scenery	4	The buttes, bluffs, nearby low mountains and river would contribute greatly to the view. The surrounding landscape would be dynamic, complex, and layered.						
(6) Scarcity	4	The view would be unique with the added river and valley views, but common within the regional setting.						
(7) Cultural Modification	-1	The proposed rail line and gravel road would not greatly detract nor add anything noteworthy to the view. The space between the two transportation corridors would seem visually lost.						
(8) Total Score	23							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## 0.8.7 KOP 4 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 4: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, and Moon Creek)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	Variable landscape includes irregular mounding hills and concave valley. They have moderately steep sides that drop off near the river and include a small cut for the roadway. The flat river valley contrasts to the adjacent hills, back-dropped by hills that can be seen in the distance. Terrain contributes to scenic quality of view and provides visual interest.						
(2) Vegetation	4	Terrain is covered by mix of grasses that create a smooth landscape cover. Riparian vegetation is prominent in this view and provides visual interest. Trees killed by fire are visible on hills.						
(3) Water	2	The river corridor is within view and provides visual interest, but it is not visually prominent in this vantage. It is likely more prominent in high flows.						
(4) Color	4.5	The grasses provide a picturesque wash of medium to light greens and tans over tannish-gray and pinkish soils. Dead trees are brown. Dark green riparian vegetation and agricultural field contrast against the lighter colors. The pinkish roadway complements the green grasses and colors of the hillsides. The blue sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans w/ grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	3	The adjacent scenery is also unique and variable, which further contributes to the picturesque quality of this scene. It also lacks cultural modifications, besides the roadway, and holds the same vegetative cover and color values. In addition, stark white and black dead cottonwoods provide striking visual interest. River is more prominent in adjacent scenery. Riparian veg is present. More hilly across river with fire-damaged and live trees.						
(6) Scarcity	4	The terrain is highly variable. This scene has unique landforms and interesting color yet relatively common land cover. It is visually unique, in and of itself, similar to other views in area.						
(7) Cultural Modification	0	Cultural features include the dirt and gravel roadway that not detract from the quality of scenic views. Rural residences and associated structures, fencing and transmission lines are also present but do not add to or detract from the landscape.						
(8) Total Score	21.5							
(9) Scenic Quality Rtnq	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/26/13

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 4: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, and Moon Creek)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The landscape contains gently rolling hills that slope down to a flat valley and river corridor. The middleground contains more prominent, rounded hills that provide a focal point. The background contains bluffs and buttes to the horizon. The topography is visually stimulating and interesting.						
(2) Vegetation	3.5	The terrain is grassy with low shrubs. Riparian vegetation is dense near the river corridor. The hilltops are covered with trees.						
(3) Water	2	The river is visible but is not visually prominent.						
(4) Color	4	The grasses range from tan to medium green. Scattered dark green shrubs and trees dot the landscape and provide visually interesting contrast with the tan and light green grasses. Brown and pinkish soils are visible in the dirt road and on the hills. Dark green riparian vegetation lines the river corridor and the blue sky contrasts with the green and brown landscape.						
(5) Adjacent Scenery	3	The adjacent scenery is similar and contains scattered residences and views of the dirt roadway. Vegetation and colors are similar. The river is more visible in adjacent scenery and more dark green riparian vegetation is present.						
(6) Scarcity	3	This scene has a unique variety of landforms but is similar to other views in the study area.						
(7) Cultural Modification	1	Cultural modifications include the dirt and gravel roadway in the foreground, and scattered rural residences and other structures. The residences, as well as wood-post fencing and hay bales add to the agricultural setting. There are several vehicles and a transmission line present but these features do not overly detract from the landscape.						
(8) Total Score	20.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 25, 2013

Landscape Character Unit: N/A

KOP 4: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, and Moon Creek)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4.5	Hills or low mountains rise dramatically from the valley bottom and provide a focal point. The vista reveals the continuation of hills, bluffs, and buttes to the horizon. A river valley with flat topography in the center of the view contrasts with and provides a visual resting point. The topography is visually stimulating and interesting.						
(2) Vegetation	4	The view contains coniferous forest, grassland, and riparian forest. The variety of textures and colors provided by the vegetation contributes greatly to the visual quality. The contrast of the dry vegetation (sage) and moist vegetation (cottonwood) is also interesting.						
(3) Water	0.5	Not visible, but suggested by vegetation and topography.						
(4) Color	4.5	The color foundation is provided by a variety of greens ranging dark to light overlain by sands, buff, and ochers which highlight and provide contrast. Hilltops appear more brown, but the dark green of the conifers provides drama to the color there. The distant vista fades to blues, indigo, and violet. The salmon brown roadway dominating the foreground would continue to do so in the winter. Winter views would have browns dominating in lieu of greens with potential for white snow to dominate visible color.						
(5) Adjacent Scenery	2	The spotty cover of adjacent conifers and wildflowers adds richness to the immediate setting, but the large amount of stored vehicles, tanks, trailers, and other equipment in plain view detracts from the beauty of this space.						
(6) Scarcity	3.5	The view is unique and provides an excellent vista/vantage point, but the view is common within the regional setting.						
(7) Cultural Modification	-1	The gravel road dominates the foreground of the view and detracts from the immediate view. The road continues onward into the valley and draws the eye down into the space. The ranch house, bales of hay, and fence contribute agrarian qualities to the space. The power lines and stored vehicles in view detract and are a negative intrusion in the view.						
(8) Total Score	18							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## 0.8.8 KOP 4 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/7/2014

Landscape Character Unit: N/A

KOP 4: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, and Moon Creek)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	Variable landscape would include irregular mounding hills and concave valley. They would have moderately steep sides that drop off near the river and include a small cut for the roadway. The flat river valley would contrast with the adjacent hills, back-dropped by hills seen in the distance. Cut slopes above and below tracks would be prominent in the foreground and fill would alter areas of lower elevation where there are structures and mature trees.						
(2) Vegetation	3.0	The terrain would be covered by mix of grasses that create a smooth landscape cover. Riparian vegetation would be prominent in this view and provide visual interest. Trees killed by the fire would be visible on the hills. Cut slope and fill would remove vegetation and decrease variety.						
(3) Water	2	The river corridor would be within view and would provide visual interest, but it would not be visually prominent from this vantage. It would likely be more prominent in high flows.						
(4) Color	3.5	The grasses would provide a picturesque wash of medium to light greens and tans over tannish-gray and pinkish soils. Dead trees would be brown. Dark green riparian vegetation and agricultural field would contrast against the lighter colors. The pinkish roadway would complement the green grasses and colors of the hillsides. The blue sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses). Water would reflect blue of sky, also providing visual interest. Cut slopes color would draw the eye and detract from view. Tree removal would decrease dark greens and increase lighter greens and tans.						
(5) Adjacent Scenery	3	Adjacent scenery would also be unique and variable, further contributing to picturesque quality of scene. It would also lack cultural modifications, besides the roadway, and hold the same vegetative cover and color values. Stark white and black dead cottonwoods would provide striking visual interest. River would be more prominent in adjacent scenery. Riparian veg would be present. More hilly across river with fire-damaged, live trees.						
(6) Scarcity	3.5	The terrain would be highly variable. This scene would have unique landforms and interesting color yet relatively common land cover. It would be visually unique, similar to other views in study area. Cut slope and fill would reduce appeal of view.						
(7) Cultural Modification	-2	Cultural features would include the dirt and gravel roadway that would not detract from the quality of scenic views. Rural residences and associated structures, fencing and transmission lines would also be present but would not add to or detract from the landscape. Residences and buildings would be removed. The proposed rail line and associated visual elements would add industrial-looking features that would detract from the view. Large cut slopes and fill would create more regular landforms, remove vegetation, and decrease visual quality.						
(8) Total Score	16							
(9) Scenic Quality Rtg	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/7/14

Landscape Character Unit: N/A

KOP 4: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, and Moon Creek)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The landscape contains gently rolling hills that slope down to a flat valley and river corridor. The middleground contains more prominent, rounded hills that provide a focal point. The new rail would cut through a slope in the nearest hill, which detracts from the view. The engineered slope in the foreground also detracts from the view.						
(2) Vegetation	3.5	The terrain is grassy with low shrubs. Riparian vegetation is dense near the river corridor. The hilltops are covered with trees. The cut slope removes a noticeable portion of grassland and vegetation from the hillside. There is also less vegetation on the engineered berm. The additional dirt road replaces grassy vegetation in the foreground.						
(3) Water	2	The river is visible but is not visually prominent.						
(4) Color	4	The grasses range from tan to medium green. Scattered dark green shrubs and trees dot the landscape and provide visually interesting contrast with the tan and light green grasses. Brown and pinkish soils are visible in the dirt road and on the hills. Dark green riparian vegetation lines the river corridor and the blue sky contrasts with the green and brown landscape. The cut slope introduces more tan/brown color into the scenery, as does the new dirt road.						
(5) Adjacent Scenery	3	The adjacent scenery is similar and contains scattered residences and views of the dirt roadway. Vegetation and colors are similar. The river is more visible in adjacent scenery and more dark green riparian vegetation is present.						
(6) Scarcity	3	This scene has a unique variety of landforms but is similar to other views in the study area.						
(7) Cultural Modification	-1.5	The most prominent cultural modifications are the engineered berm and the naked hillside, both which are devoid of vegetation that is present on the other landforms. Other cultural modifications include two dirt and gravel roadways in the foreground, which somewhat detract from the rural view. There are also scattered rural residence, other structures, several vehicles, and a transmission line present but these features do not overly detract from the landscape.						
(8) Total Score	18							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 25, 2013

Landscape Character Unit: N/A

KOP 4: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, and Moon Creek)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	Hills or low mountains rise dramatically from the valley bottom and provide a focal point. The vista reveals the continuation of hills, bluffs, and buttes to the horizon. A river valley with flat topography in the center of the view contrasts with and provides a visual resting point. The topography is visually stimulating and interesting. An engineered slope in the foreground and battered cut slope on hillside detract from view.						
(2) Vegetation	3.5	The view contains coniferous forest, grassland, and riparian forest. The variety of textures and colors provided by the vegetation contributes greatly to the visual quality. The contrast of the dry vegetation (sage) and moist vegetation (cottonwood) is also interesting. Much of foreground vegetation appears to be ruderal grassland.						
(3) Water	0.5	Not visible, but suggested by vegetation and topography.						
(4) Color	4.0	The color foundation is provided by a variety of greens ranging dark to light overlain by sands, buff, and ochers which highlight and provide contrast. Hilltops appear more brown, but the dark green of the conifers provides drama to the color there. The distant vista fades to blues, indigo, and violet. The salmon brown roadway dominating the foreground would continue to do so in the winter. Winter views would have browns dominating in lieu of greens with potential for white snow to dominate visible color. Passing trains could introduce discordant colors to view.						
(5) Adjacent Scenery	2	The spotty cover of adjacent conifers and wildflowers adds richness to the immediate setting, but the large amount of stored vehicles, tanks, and trailers in plain view detracts from the beauty of this space.						
(6) Scarcity	3.5	The view is unique and provides an excellent vista/vantage point, but the view is common within the regional setting.						
(7) Cultural Modification	-1.5	The gravel road dominates the foreground of the view and detracts from the immediate view. The road continues onward into the valley and draws the eye down into the space. The ranch house, bales of hay, and fence contribute agrarian qualities to the space. The power lines and road intersection in view are a negative intrusion in the view.						
(8) Total Score	15.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## 0.8.9 KOP 5 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

Landscape Character Unit: N/A

KOP 5: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, Tongue River Road, and Moon Creek)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	Variable landscape includes irregular mounding hills, flatter river valley, and rolling terrain in foreground. They have moderately steep sides with visible striations on the hillsides. Contrasting terrain contributes to scenic quality of view and provides visual interest.						
(2) Vegetation	4	The terrain is predominantly covered by mix of grasses that create a smooth landscape cover. Some wildflowers. The tops of riparian vegetation can be seen peeking up. Smooth agriculture fields seen at base of hills. Evergreen trees on hillsides. Trees killed by the fire are visible on the hills.						
(3) Water	0.5	The river corridor is indicated by riparian vegetation, but is not visible. May be visible seasonally.						
(4) Color	4	The grasses provide a picturesque wash of medium to light greens and tans. Riparian trees, evergreen trees, and ag field provide dark greens. Dead trees are brown. The striated hills are pink, gray, and white. The pinkish roadway complements the green grasses and colors of the hillsides. The blue of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	4	The adjacent scenery is also unique and variable, which further contributes to the picturesque quality of this scene. View down the valley with hills/mountain in the background is visually appealing panoramic view. Homes are located alongside the roadway and fire damage is more prevalent because it's close up. Less hilly than across river.						
(6) Scarcity	4	The terrain is highly variable in the study area. This scene has unique landforms and interesting color with a variety of land cover. It is visually unique, in and of itself, similar to other views in the study area.						
(7) Cultural Modification	2	Only cultural feature is the dirt and gravel roadway with barbed-wire fencing does not detract from the quality of scenic views, which is pinkish and complements the surrounding terrain and land cover, and is harmonious with and in keeping with the rural visual character.						
(8) Total Score	22.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/26/13

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 5: Tongue River Alternative (Affected Alternatives: Tongue River Alternative, Colstrip Alternative, Tongue River Road Alternative, and Moon Creek Alternative)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The focal point of the landscape is domed in the middleground and background. The hills are distinctly striated and somewhat steep. The hills slope down to a concave valley. The foreground contains rolling grassland and a dirt road.						
(2) Vegetation	3.5	The vegetation mainly consists of grasses. Some wildflowers are visible in the foreground. There are clumps of trees and more dense vegetation near a riparian corridor. Agricultural fields are visible at the base of the hills. Trees line the hills in the distance.						
(3) Water	0	No water is present but riparian vegetation indicates a water source.						
(4) Color	4	Grasses in the foreground are mainly tan to light green. These grasses contrast with the dark green agricultural fields and dark green vegetation near the riparian corridor. The hills are striated with pink, gray, and white rock layers, and are dotted with dark green and brown trees. The soil of the dirt road is a bright pinkish-orange and contrasts with the surrounding grassland. The blue sky contrasts with the reddish hills.						
(5) Adjacent Scenery	4	The adjacent scenery compliments the visual quality of this scene. There are more views of mountains in the distance and some scattered rural residences that contribute to the agricultural setting.						
(6) Scarcity	4	This scene has unique landforms and bright colors that provide an interesting visual setting. There are very few cultural modifications in this view.						
(7) Cultural Modification	1	The only cultural modifications in this scene are the dirt road and the barbed-wire fencing. These features do not detract from the surrounding scenery.						
(8) Total Score	20.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

Landscape Character Unit: N/A

KOP 5: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, Tongue River Road, and Moon Creek)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	A slightly undulating plain gives way to a river bottom in the distance and then the topography dramatically shifts upwards to low mountains with numerous folds and crevices. Higher country is visible beyond. The strata of different geologic layers are clearly visible on the mountain slopes as bands of different color signaling different rock and soil types.						
(2) Vegetation	3.5	Vegetation is primarily grassland in the foreground into the middle ground with nearly uniform texture throughout. In the distance, where the elevation is lower, darker green understory plants suggest crop lands or hay fields. A narrow ribbon of riparian vegetation, likely cottonwoods indicates presence of water. Conifers dot the low mountains beyond and to the horizon.						
(3) Water	0	Absent, in the distance a narrow band of riparian vegetation suggests water.						
(4) Color	4	The foundation color of the foreground is a spring to moss green over the grassland area. Tones of olive and emerald green are highlighted by tans, sands, and some yellow. The roadway in the foreground is a rose to pale pink with part of the road a yet darker shade of pink tending toward red. The distant riparian area and valley bottom are dark emerald and grass greens. The dark green of the riparian trees contrasts greatly with the foreground and background. The low mountains in the background have pale beige and red to rose rock strata. Dark evergreen trees dot the tops and shaded slope highlighting the form of the hillsides. The green and red colors on the hills complement each other. In winter the grassland and riparian area would be shades of brown or covered in white snow.						
(5) Adjacent Scenery	4	The surrounding views of mountains, wildflowers, river valley, and conifers contribute to the beauty of this place.						
(6) Scarcity	4	This scene is unique and memorable.						
(7) Cultural Modification	1	The gravel road, cattle guard, and barbed-wire fence all contribute to the picturesque qualities of the scene.						
(8) Total Score	20.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## 0.8.10 KOP 5 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/7/2014

Landscape Character Unit: N/A

KOP 5: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, Tongue River Road, and Moon Creek)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA		
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	3	Very minor landform alterations seen with addition of railbed. Variable landscape includes irregular mounding hills, flatter river valley, and rolling terrain in foreground. They have moderately steep sides with visible striations on the hillsides. Contrasting terrain contributes to scenic quality of view and provides visual interest. Large cut slope at far right creates a more regular, large-scale landscape scar.
(2) Vegetation	3	Vegetation alterations mostly visible where removed for large cut slope. The terrain is predominantly covered by mix of grasses that create a smooth landscape cover. Some wildflowers. The tops of riparian vegetation can be seen peeking up. Smooth agriculture fields seen at base of hills. Evergreen trees on hillsides. Trees killed by the fire are visible on the hills.
(3) Water	0.5	The river corridor is indicated by riparian vegetation, but is not visible. May be visible seasonally.
(4) Color	4	Color alterations are slight. The grasses provide a picturesque wash of medium to light greens and tans. Riparian trees, evergreen trees, and ag field provide dark greens. Dead trees are brown. The striated hills are pink, gray, and white become more evident with large cut slope. The pinkish roadway complements the green grasses and colors of the hillsides. The blue sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans w/ grasses dying, wildflowers), and fall (mostly dead grasses).
(5) Adjacent Scenery	4	Adjacent scenery is unique and variable, further contributing to picturesque quality of this scene. View down the valley with hills/mountain in background is a visually appealing panoramic view. Homes are alongside the roadway and fire damage is more prevalent because it's close up. Less hilly than across river.
(6) Scarcity	3.5	Moderate visual changes from large cut slope. The terrain is highly variable in the study area. This scene has unique landforms and interesting color with a variety of land cover. It is visually unique, in and of itself, similar to other views in the area.
(7) Cultural Modification	1.0	Minor landform alterations seen with addition of railbed. Train would add to visibility. Large cut slope creates large landscape scar, but it blends somewhat with surroundings. Only cultural feature is the dirt and gravel roadway with barbed-wire fencing does not detract from the quality of scenic views, which is pinkish and complements the surrounding terrain and land cover, and is harmonious with and in keeping with the rural visual character.
(8) Total Score	19	

(9) Scenic Quality Rtnng	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3
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UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/7/14

Landscape Character Unit: N/A

KOP 5: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, Tongue River Road, and Moon Creek)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The focal point of the landscape is domed hills in the middleground and background. The hills are distinctly striated and somewhat steep and they slope down to a concave valley. The foreground contains rolling grassland and a dirt road. The fill from the proposed rail line at the base of the hills is barely noticeable and does not visibly alter the landforms in this scene. The hill on the far right is cut to make way for the proposed rail line. Geologic layers are still visible in the side of this hill but the vegetation and patterns from erosion are no longer present.						
(2) Vegetation	3.5	The vegetation mainly consists of grasses. Some wildflowers are visible in the foreground. There are clumps of trees and more dense vegetation near a riparian corridor. Agricultural fields are visible at base of the hills. Trees line the hills in the distance. Vegetation noticeably absent from the hill on the far right.						
(3) Water	0	No water is present but riparian vegetation indicates a water source.						
(4) Color	4	Grasses in the foreground are mainly tan to light green. These grasses contrast with the dark green agricultural fields and dark green vegetation near the riparian corridor. The hills are striated with pink, gray, and white rock layers, and are dotted with dark green and brown trees. The newly cut hill is striated with pinkish and grayish soils. The soil of the dirt road is a bright pinkish-orange and contrasts with the surrounding grassland. The blue sky contrasts with the reddish hills. There is tan fill at the base of the hills, which is slightly perceptible in this scene.						
(5) Adjacent Scenery	4	The adjacent scenery compliments the visual quality of this scene. There are more views of mountains in the distance and some scattered rural residences that contribute to the agricultural setting.						
(6) Scarcity	4	This scene has unique landforms and bright colors that provide an interesting visual setting. There are very few cultural modifications in this view.						
(7) Cultural Modification	1	The hill on the far right has been cut and the lack of vegetation is noticeable. The only other cultural modifications in this scene are the dirt road and the barbed-wire fencing. These features do not detract from the surrounding scenery. The fill from the new rail line is visible in the distance at the base of the hills, but is not overly obtrusive.						
(8) Total Score	20.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: February 5, 2014

Landscape Character Unit: N/A

KOP 5: Tongue River Alternative (Affected Alternatives: Tongue River, Colstrip, Tongue River Road, and Moon Creek)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	A slightly undulating plain would give way to a river bottom in the distance and then the topography dramatically would shift upward to low mountains with numerous folds and crevices. Higher country would be visible beyond. The strata of different geologic layers would be clearly visible on the mountain slopes as bands of different color signaling different rock and soil types. At the base of the mountains an engineered slope would be barely visible from this view.						
(2) Vegetation	3.5	Vegetation would be primarily grassland in the foreground into the middle ground with nearly uniform texture throughout. In the distance, where the elevation would be lower, darker green understory plants would suggest crop lands or hay fields. A narrow ribbon of riparian vegetation, likely cottonwoods would indicate presence of water. Conifers would dot the low mountains beyond and to the horizon.						
(3) Water	0	Absent, in the distance a narrow band of riparian vegetation suggests water.						
(4) Color	4	The foundation color of the foreground would be a spring to moss green over the grassland area. Tones of olive and emerald green would be highlighted by tans, sands, and some yellow. The roadway in the foreground would be a rose to pale pink with part of the road a yet darker shade of pink tending toward red. The distant riparian area and valley bottom are dark emerald and grass greens. The dark green of the riparian trees would contrast greatly with the foreground and background. The low mountains in the background would have pale beige and red to rose rock strata. Dark evergreen trees would dot the tops and shaded slope highlighting the form of the hillsides. The green and red colors on the hills would complement each other. In winter the grassland and riparian area would be shades of brown or covered in white snow.						
(5) Adjacent Scenery	4	Surrounding views of mountains, wildflowers, river valley, and conifers would contribute to beauty of the area.						
(6) Scarcity	4	This scene would be unique and memorable.						
(7) Cultural Modification	1	The gravel road, cattle guard, and barbed-wire fence would all contribute to the picturesque qualities of the scene. An engineered slope at the base of the low mountains in the distance would not be noticeable or visually obtrusive.						
(8) Total Score	20							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.11 KOP 6 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 6: Terminus 1 Variation (Affected Alternatives: Tongue River East, Colstrip East, Tongue River Road East, Moon Creek East, and Decker East)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA		
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	3	Landscape includes undulating hillsides with a peak in the background and a gently concave valley.
(2) Vegetation	4	The valley is predominantly covered by mix of grasses and sages. Riparian trees are visible and identify the drainage way. Evergreen trees cover the hillsides.
(3) Water	0.5	The drainage corridor is within view but water is not readily present. Water may, however, be present during high flows.
(4) Color	4	The grasses provide a picturesque wash of medium to light greens, tan and brown over reddish-pink soils that are also dotted with grayish-green sages. Riparian vegetation provides a contrasting dotting of bright green. Dark green evergreen trees enclose the lighter colored grasses and separate them from the sky. The blue and white of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses)
(5) Adjacent Scenery	4	The adjacent scenery complements and frames the valley. The curving form of the vegetated hillsides and the lighter colored hills that backdrop the viewshed, looking back, enhance and further contributes to the picturesque quality of this scene. It also lacks cultural modification and holds the same vegetative cover and color values. The exposed red earth of hillsides adds visual interest.
(6) Scarcity	4	The landform and vegetation of the valley, back-dropped by nearby hills, create a unique scene.
(7) Cultural Modification	2	Primary cultural feature is two-track road that is not visually prominent, does not detract from the quality of scenic views, and is harmonious with and in keeping with the rural visual character.
(8) Total Score	21.5	
(9) Scenic Quality Rating	C	A = 29-32    B = 24-28    C = 19-23    D = 14-18    E = 9-13    F = 4-8    G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: 11/26/13

Landscape Character Unit: N/A

KOP 6: Terminus 1 Variation (Affected Alternatives: Tongue River East, Colstrip East, Tongue River Road East, Moon Creek East, and Decker East)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2.5	The landscape contains a grassy valley with a basic dirt road in the foreground. The valley is surrounded by gently rolling hills covered in conifer trees. Larger buttes/mountains are visible in the background.						
(2) Vegetation	3.5	The vegetation is mostly grassy. There are dense conifer trees lining the surrounding hills, and riparian vegetation that indicates a drainage area.						
(3) Water	0	Riparian vegetation indicates a drainage area but no water is present.						
(4) Color	4	The grasses range from light to medium green. There are dark green conifers lining the hills in the distance, which provide a visual contrast to the grasses. The soils are reddish brown on the hills and the dirt road is a lighter brown. The blue sky also provides a pleasing visual contrast.						
(5) Adjacent Scenery	4	The adjacent scenery is complementary. Adjacent areas contain vegetated hillsides and also lack cultural modification.						
(6) Scarcity	4	This view is relatively unique as it contains very few cultural modifications.						
(7) Cultural Modification	2	The only cultural modification is the dirt road in the foreground. It is linear and draws the eye to the distant trees and greenery. It does not detract from the view.						
(8) Total Score	20							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 26, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 6: Terminus 1 Variation (Affected Alternatives: Tongue River East, Colstrip East, Tongue River Road East, Moon Creek East, and Decker East)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The view is within a flat narrow valley transitioning quickly to the rocky slopes of short bluffs visible to the right and left converging toward the central viewshed. Beyond the bluff crests mountains are visible punctuating the skyline. Colorful jagged rocks are visible jutting from the bluff slopes giving the surface a rugged texture which contrasts with the smoothness of the valley floor.						
(2) Vegetation	4	The skyline and horizon is defined by the conical tips of coniferous forest which is relegated to the bluff tops and slopes. A few brighter green riparian trees dot the valley floor. Sagebrush and xeric grassland carpet the floor of the valley.						
(3) Water	0	Absent, but a stream is suggested by some riparian vegetation in the valley.						
(4) Color	4	The dark green of the conifers divides the blue sky from the sage green and amber grassland in the valley. The red and warm ocher colors of the rocks on the bluff slopes contrasts with the sagebrush blue. The riparian trees have an emerald green hue. The valley is light mossy green with olive tones and sand colored highlights. The valley color transitions to a sagebrush blue toward the distance. The worn dirt road indicates the underlying soil is a pale salmon pink color. The vegetation between the worn tire marks is a darker olive green than other nearby vegetation.						
(5) Adjacent Scenery	4	Forested bluffs and hilltops, mountains, and converging slopes give the valley a unique sense of place and visual connection to places far beyond. Dappled blue sagebrush in front of warm reddish orange bluff slopes provides a riot of color.						
(6) Scarcity	4	The scene is unique and less common for the region.						
(7) Cultural Modification	1.5	The worn dirt road provides a rugged and harmonious cultural element to the landscape.						
(8) Total Score	21.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.12 KOP 6 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 6: Terminus 1 Variation (Affected Alternatives: Tongue River East, Colstrip East, Tongue River Road East, Moon Creek East, and Decker East)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	1.5	Landscape would include brief view of hillsides on edges and a gently concave valley. The peak in the background would be barely visible. Large earthen berm would prevent views of hills beyond.						
(2) Vegetation	3	The valley would be predominantly covered by mix of grasses and sages. Riparian trees would be visible and identify the drainage way. Evergreen trees would cover the hillsides. However, much of the vegetation in the view would be either removed or obscured by the berm						
(3) Water	0.5	The drainage corridor would be within view but water would be not readily present. Water may, however, be present during high flows.						
(4) Color	3	The grasses would provide a picturesque wash of medium to light greens, tan and brown over reddish-pink soils that would be also dotted with grayish-green sages. Riparian vegetation would decrease. Dark green evergreen trees would no longer be a dominant element. The blue and white of the sky would provide a distinct visual separation to landform and land cover; however the amount of visible sky would be reduced. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses)						
(5) Adjacent Scenery	4	The adjacent scenery would complement and frames the valley. The curving form of the vegetated hillsides and the lighter colored hills that backdrop the viewshed, looking back, would enhance and further contribute to the picturesque quality of this scene. It would also lack cultural modification and hold the same vegetative cover and color values. The exposed red earth of hillsides would add visual interest.						
(6) Scarcity	2	The berm would greatly disrupt the view and would be a focal point. It would be similar to other areas where rail line berms obscure views.						
(7) Cultural Modification	-3	The berm would greatly disrupt view and would be a focal point. It would prevent views toward the scenic views beyond and reduce the amount of visible sky. In addition, it would introduce a visible culvert. Other cultural feature would be two-track road that would not be visually prominent, would not detract from the quality of scenic views, and would be harmonious with and in keeping with the rural visual character.						
(8) Total Score	11							
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/26/13

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 6: Terminus 1 Variation (Affected Alternatives: Tongue River East, Colstrip East, Tongue River Road East, Moon Creek East, and Decker East)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	1.5	The landscape would contain a grassy area with a basic dirt road in the foreground. Some rolling hills and trees would be visible, but most would be hidden by a large engineered berm. The mountains in the background would be barely visible.						
(2) Vegetation	3.5	The vegetation would be mostly grassy. With some conifer trees in the surrounding hills. Nearly all of the trees and riparian vegetation would be hidden by the berm.						
(3) Water	0.5	There would be a drainage tunnel but no water is present.						
(4) Color	2	The grasses would range from light to medium green. There would be some dark green conifers in the hills, but the majority of trees would be hidden from view. The soils would be reddish brown on the hills and the dirt road would be a lighter brown. The earthen berm would be light brown and dulls the landscape.						
(5) Adjacent Scenery	4	The adjacent scenery would be complementary. Adjacent areas would contain vegetated hillsides and would also lack cultural modification.						
(6) Scarcity	2	The berm would be the focal point of this view. It would be visually disruptive. It would be similar to other areas where rail line berms obscure views.						
(7) Cultural Modification	-3	The main cultural modification would be the berm, which would be the focal point of this view. It would be visually disruptive and hide the view of the trees and horizon. The other cultural modification would be the dirt road in the foreground. It would not detract from the view.						
(8) Total Score	10.5							
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 26, 2013

Landscape Character Unit: N/A

**SCENIC QUALITY RATING SUMMARY**

KOP 6: Terminus 1 Variation (Affected Alternatives: Tongue River East, Colstrip East, Tongue River Road East, Moon Creek East, and Decker East)

Evaluators ( <i>names</i> ): Paul Weller, PLA									
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>									
Key Factors	Scenic Quality Rating	Explanation							
(1) Landform	1	The view would be of a large engineered slope. Rocky slopes of short bluffs would be visible to the right and left terminate into the engineered slope. Beyond the engineered slope the very tips of mountains would be just visible, but would not break up the skyline formed by the engineered slope. Colorful jagged rocks would be visible jutting from the bluff slopes giving the surface a rugged texture that would contrast with the smoothness of the valley floor.							
(2) Vegetation	2	The foreground would be dominated by xeric grassland carpeting the floor of the valley. The engineered berm would be covered by ruderal vegetation. The ruderal vegetation would form the majority of the skyline except for the extreme left and right sides of the view, which would be defined by the conical tips of a few coniferous trees. A few brighter green riparian trees would dot the valley floor.							
(3) Water	0	Absent, but a stream would be suggested by some riparian vegetation in the valley.							
(4) Color	2.5	The tan color of the ruderal vegetation on the engineered slope would be the focal point. Dark greens of the coniferous trees would spot the bluffs on the right and left sides of the engineered slope. The riparian trees would have an emerald green hue. The valley would be light mossy green with olive tones and sand colored highlights. The worn dirt road would indicate the underlying soil would be a pale salmon pink color. The vegetation between the worn tire marks would be a darker olive green than other nearby vegetation.							
(5) Adjacent Scenery	4	Forested bluffs and hilltops, mountains, and converging slopes would give the valley a unique sense of place and visual connection to places far beyond. Dappled blue sagebrush in front of warm reddish orange bluff slopes would provide a riot of color.							
(6) Scarcity	2	The scene would be unique and less common for the region.							
(7) Cultural Modification	-2.5	A large engineered slope would dominate the view and looms over the valley. A culvert structure would be noticeable at the base of the slope. The worn dirt road would provide a rugged and harmonious cultural element to the landscape.							
(8) Total Score	9								
(9) Scenic Quality Rating	E	<table border="1"> <tr> <td>A = 29-32</td> <td>B = 24-28</td> <td>C = 19-23</td> <td>D = 14-18</td> <td>E = 9-13</td> <td>F = 4-8</td> <td>G = 0-3</td> </tr> </table>	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3
A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3			

## O.8.13 KOP 7 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 12/2/13

Landscape Character Unit: N/A

### SCENIC QUALITY RATING SUMMARY

KOP 7: Terminus 2 (Affected Alternatives: Tongue River Alternatives, Colstrip East, Tongue River Road Alternatives, Moon Creek East, Decker Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	The foreground consists of rolling grassland, with rounded foothills in the middleground and low mountains visible on the horizon.						
(2) Vegetation	3	Vegetation is mostly grassy, with scattered conifers lining the hills and mountains. There appears to be some farmland at the base of the hills as well.						
(3) Water	0	Absent.						
(4) Color	3.5	The grasses in the foreground range from tan to light green. There are dark green trees lining the hills and mountains in the middleground and background. A bright green agricultural field is visible at the base of the hills. The soils are tan in the foreground and pinkish in the hills. The blue sky contrasts with the browns, greens, and pinks of the landscape and provides visual interest.						
(5) Adjacent Scenery	4	Closer views of hills, more interesting landforms, and more conifers are present in adjacent views. These factors all enhance to the visual quality of this scene.						
(6) Scarcity	4	This view is unique in and of itself but similar to others in the region.						
(7) Cultural Modification	1	Cultural modifications include a few scattered rural residences and buildings for agricultural use. They are fitting within this rural scene.						
(8) Total Score	19							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 7: Terminus 2 (Affected Alternatives: Tongue River Alternatives, Colstrip East, Tongue River Road Alternatives, Moon Creek East, Decker Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA		
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	4	Undulating plains with fissures created by drainages slope gradually into the distance. Miles away bluffs rise before a range of low mountains which are visible on the horizon and add a rough edge to the horizon. The sides of some of the drainages indicate changes in soil by changes in color.
(2) Vegetation	3.5	Short grasslands mixed with sage cover the foreground slope. Some trees dot a couple of the minor drainages on the plain. Conifers dot and then more densely cover the bluffs in the distance. The low mountains show a variety of color on the slopes indicating a variety of vegetation.
(3) Water	0	Absent
(4) Color	4	The grassland is mostly olive green. Taupe and darker green are in the shadows, tans and beiges form highlights. Some blue of the sage spots the foreground. Erosion on the cut banks of the drainages across the plain reveals some warm reds and vermillion. The distance valley has emerald green in the bottom and dark green conifers spotting the slopes. The slopes of the bluffs show some rose hues of the rock. The view would feature more brown in the winter. The short grass could be buried in snow leaving the foreground white.
(5) Adjacent Scenery	4	The highland adjacent scenery with more hills, distant mountains, undulating plain spotted with conifers, and sagebrush contribute positively to the view of this place.
(6) Scarcity	4.5	This is a very unique view and offers a perspective unique to the region.
(7) Cultural Modification	1	A very few rural buildings are visible in the distance, otherwise little cultural modification visible.
(8) Total Score	21	
(9) Scenic Quality Rating	C	A = 29-32    B = 24-28    C = 19-23    D = 14-18    E = 9-13    F = 4-8    G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: December 2, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 7: Terminus 2 (Affected Alternatives: Tongue River Alternatives, Colstrip East, Tongue River Road Alternatives, Moon Creek East, Decker Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The topography is characterized by slightly undulating plains that stretch to higher hills and mountains in the distance.						
(2) Vegetation	3	Vegetation consists mainly of mixed grasses, with dark trees covering the mountains and hills in the distance.						
(3) Water	0	No water is visible.						
(4) Color	4	The grassland is a mix of sage and olive green, tan, and taupe. Spots of exposed soils show splashes of light rust and orange. The hillside is a mix of light browns and pinks contrasted with dark green trees; similarly, the distant mountains also reveal a contrasted mix of light browns and dark greens (nearly appearing purple).						
(5) Adjacent Scenery	4.5	Similar to the observation point view, the adjacent scenery is characterized by rolling grasslands and distant mountains.						
(6) Scarcity	4.5	This view is unique to the area.						
(7) Cultural Modification	1	Some rural structures (likely barns) appear in the grasslands, as well as two stacks of baled hay and what appears to be a dirt road. Overall, very few cultural modifications exist.						
(8) Total Score	21							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.14 KOP 7 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

### SCENIC QUALITY RATING SUMMARY

Date: December 2, 2013

Landscape Character Unit: N/A

KOP 7: Terminus 2 (Affected Alternatives: Tongue River Alternatives, Colstrip East, Tongue River Road Alternatives, Moon Creek East, Decker Alternatives)

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	The foreground would consist of rolling grassland, with rounded foothills in the middleground and low mountains visible on the horizon. The proposed rail line would add an engineered, linear slope in the left portion of this scene.						
(2) Vegetation	3	Vegetation would be mostly grassy, with scattered conifers lining the hills and mountains. There appears to be some farmland at the base of the hills as well. There would be slightly less vegetation in this scene due to the new rail line cutting through the grassland.						
(3) Water	0	Absent.						
(4) Color	3.5	The grasses in the foreground would range from tan to light green. There would be dark green trees lining the hills and mountains in the middleground and background. A bright green agricultural field would be visible at the base of the hills. The soils would be tan in the foreground and pinkish in the hills. The blue sky would contrast with the browns, greens, and pinks of the landscape and provides visual interest. The proposed rail line would add a grayish/metallic linear feature to the left of the scene, and passing trains would introduce contrasting colors (such as black and red) into this scene.						
(5) Adjacent Scenery	4	Closer views of hills, more interesting landforms, and more conifers would be present in adjacent views. These factors would all enhance the visual quality of this scene.						
(6) Scarcity	4	This view would be unique in and of itself but similar to others in the region.						
(7) Cultural Modification	0.5	The proposed rail line would cut through the grassland in this scene, adding an engineered slope and metallic rails. While noticeable, it would not be overly obtrusive. Other cultural modifications would include a few scattered rural residences and buildings for agricultural use. They would be fitting within this rural scene.						
(8) Total Score	18.5							
(9) Scenic Quality Rtnng	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 7: Terminus 2 (Affected Alternatives: Tongue River Alternatives, Colstrip East, Tongue River Road Alternatives, Moon Creek East, Decker Alternatives)

Evaluators ( <i>names</i> ): Paul Weller								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	Undulating plains with fissures would be created by drainages slope gradually into the distance. Miles away bluffs would rise before a range of low mountains which are visible on the horizon and add a rough edge to the horizon. The sides of some of the drainages indicate changes in soil by changes in color. Some hillsides would have been graded for a rail line and appear unnatural.						
(2) Vegetation	3.5	Short grasslands mixed with sage would cover the foreground slope. Some trees would dot a couple of the minor drainages on the plain. Conifers would dot and then more densely cover the bluffs in the distance. The low mountains would show a variety of color on the slopes indicating a variety of vegetation.						
(3) Water	0	Absent						
(4) Color	4	The grassland would be mostly olive green. Taupe and darker green would be in the shadows, tans and beiges would form highlights. Some blue of the sage would spot the foreground. Erosion on the cut banks of the drainages across the plain would reveal some warm reds and vermilion. The distance valley would have emerald green in the bottom and dark green conifers spotting the slopes. The slopes of the bluffs would show some rose hues of the rock. The view would feature more brown in the winter. The short grass could be buried in snow leaving the foreground white.						
(5) Adjacent Scenery	4	The highland adjacent scenery with more hills, distant mountains, undulating plain spotted with conifers, and sagebrush would contribute positively to the view of this place.						
(6) Scarcity	4	This would be a unique view and offers a perspective unique to the region.						
(7) Cultural Modification	0.5	A very few rural buildings would be visible in the distance, and the proposed rail line would cut through the hills and trees on the bluff to the left. Cultural modifications would detract little from the scene.						
(8) Total Score	19.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: December 2, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 7: Terminus 2 (Affected Alternatives: Tongue River Alternatives, Colstrip East, Tongue River Road Alternatives, Moon Creek East, Decker Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	The topography would be characterized by slightly undulating plains that stretch to higher hills and mountains in the distance. At the left, a hillside has been graded for the rail, imparting an unnaturally sharp, straight line into the viewshed.						
(2) Vegetation	3	Vegetation would consist mainly of mixed grasses, with dark trees covering the mountains and hills in the distance.						
(3) Water	0	No water would be visible.						
(4) Color	4	The grassland would be a mix of sage and olive green, tan, and taupe. Spots of exposed soils would show splashes of light rust/orange. The hillside would be a mix of light browns and pinks contrasted with dark green trees; similarly, the distant mountains also reveal a contrasted mix of light browns and dark greens (nearly appearing purple).						
(5) Adjacent Scenery	4.5	Similar to the observation point view, the adjacent scenery would be characterized by rolling grasslands and distant mountains.						
(6) Scarcity	4.5	This view would be unique to the area.						
(7) Cultural Modification	1	Some rural structures (likely barns) would appear in the grasslands, as well as two stacks of baled hay and what appears to be a dirt road. The proposed rail line would add another cultural modification, although it would not significantly alter the scene or affect the rural character of this viewpoint. Overall, very few cultural modifications would exist.						
(8) Total Score	20.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.15 KOP 8 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 12/2/13

Landscape Character Unit: N/A

KOP 8: Colstrip Alternative (Affected Alternatives: Colstrip East)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Lindsay Christensen								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4.5	This scene contains rolling grasslands and a dirt road in the foreground. Bold domed hills rise out of the grassland in the middleground and provide a striking focal point. The hills slope down to a grassy, concave valley in the left of the scene. A creek is present in the middleground. Low hills and mesas are visible in the background.						
(2) Vegetation	4	Vegetation includes various types of grasses and sage. There is one large tree present in the middleground and dead conifers line the nearest hills. There are low shrubs, and lush riparian vegetation along the creek.						
(3) Water	3	There is a creek in the middleground. It is visible and lined with lush vegetation, but not a focal point.						
(4) Color	4.5	This scene includes a variety of colorful grasses, from tan to sage to bright green. The dirt road is made up of tan soils, and tan, gray, pink, and reddish earth is visible in the surrounding hills. The creek reflects the bright blue sky, providing a flash of contrast. The conifers on the hills in the distance are dark brown and dark green, providing additional contrast with the surrounding grassland. The blue sky also contrasts with the greens and browns of the landscape, and appears vivid due to the distinctly shaped hills.						
(5) Adjacent Scenery	4	Adjacent scenery includes grassland/grazing land, more views of hills and buttes, more visible views of the creek, and closer views of trees burned in the fire. The adjacent scenery enhances the visual quality of this scene.						
(6) Scarcity	4	This scene is unique in and of itself, and somewhat distinct in this area because you can see to the horizon.						
(7) Cultural Modification	0.5	The only cultural modifications in this scene are the dirt road, fencing, and cattle grazing in the foreground. These features do not detract from the view.						
(8) Total Score	24.5							
(9) Scenic Quality Rating	B	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: December 3, 2013

Landscape Character Unit: N/A

KOP 8: Colstrip Alternative (Affected Alternatives: Colstrip East)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	A series of low mountains with distinct peaks are the focal point of this view. A narrow linear valley is framed by the two mountain ranges and veers out of sight in the distance. Large boulders or jagged rocks are visible on the slopes of the low mountains.						
(2) Vegetation	3.5	Grassland vegetation with some sage dominates the valley floor with riparian vegetation, including a few trees, following the stream and breaking up the monotony. Conifers dot the tops and slopes of the low mountains.						
(3) Water	1.5	Water is present and visible in the stream on the valley floor, but is not prominent in the view.						
(4) Color	4	The foundation color of the grasslands is a light spring green. The grasslands are tipped by amber, sand, buff and other light highlights dotted with small patches of sage blue. Emerald green riparian vegetation has a small amount of blue from the reflected sky on the water next to it and contrasts greatly next to the lighter colors of the grassland. The roadway has a rose-taupe hue which compliments the grasslands color.						
(5) Adjacent Scenery	3.5	The nearby bluffs, colorful rock formations, and additional riparian trees, conifers, and cattle contribute to the view.						
(6) Scarcity	4	This view is unique to the region.						
(7) Cultural Modification	1	The guardrail somewhat detracts from the view, but the country road, barbed-wire fence, and cattle all contribute greatly to the rural beauty of the place.						
(8) Total Score	21.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: December 2, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 8: Colstrip Alternative (Affected Alternatives: Colstrip East)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	5	Gently undulating grasslands stretch to a prominent group of domed hills, with lower hills in the distance.						
(2) Vegetation	4.5	Mixed grasses dominate the foreground, with a few trees scattered about. The hills in the background are covered more densely with trees.						
(3) Water	3	A small stream is visible.						
(4) Color	4.5	The grasslands appear to be a mix of light and olive greens, tans, and yellows. Large brown patches of the background hills are seen among patches of emerald green trees. A small patch of the deep blue stream is visible. The dirt/gravel road appears to be a rosy brown.						
(5) Adjacent Scenery	5	Like the key viewpoint, the adjacent scenery is dominated by grassland and hills, with a mix of evergreen and deciduous trees.						
(6) Scarcity	4	This view shows a unique rural area.						
(7) Cultural Modification	1	A discreet barbed-wire fence with wooden fence posts is the only observable cultural modification in the scene; it is consistent with the rural nature of the area.						
(8) Total Score	27							
(9) Scenic Quality Rating	B	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.16 KOP 8 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 7/10/14

Landscape Character Unit: N/A

KOP 8: Colstrip Alternative (Affected Alternatives: Colstrip East)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Lindsay Christensen		
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	2.5	This scene would contain rolling grasslands that would make way to prominently rounded hills. A large engineered slope would cut through the base of the hills and continue on to a towering bridge that would serve as the focal point of this view. A creek would be present in the middleground, and a new bridge would cross the creek. Low hills and mesas would be visible in the distance.
(2) Vegetation	3.5	Vegetation would include various types of grasses and sage. Burned conifers would line the nearest hills. Some of the riparian vegetation would no longer be visible due to the new creek crossing. Most of the trees on the base of the hills would be hidden from view with the new engineered slope and bridge. Portions of the view of the grassland, hills, and trees would be visible through the piers of the bridge, but much of the slope and the peak of the hill on the far right would be hidden from view.
(3) Water	3	There would be a visible creek in the middleground. It would be lined with vegetation, but partially covered by the new crossing and is not a focal point.
(4) Color	3.5	This scene would include a variety of colorful grasses, from tan to sage to bright green. The dirt road would be made up of tan soils, and tan, gray, pink, and reddish earth would be visible in the surrounding hills. The creek would reflect the bright blue sky, providing a flash of contrast. The conifers in the hills in the distance would be dark brown and dark green, providing additional contrast with the surrounding grassland. The blue sky would also contrast with the greens and browns of the landscape, and would appear vivid due to the distinctly shaped hills. The metallic/gray piers of the bridge would be a prominent color in this scene. There would also be gray/metallic posts along the new creek crossing.
(5) Adjacent Scenery	4	Adjacent scenery would include grassland/grazing land, more views of hills and buttes, more visible views of the creek, and closer views of trees burned in the fire. Adjacent scenery would enhance visual quality of scene.
(6) Scarcity	2	This scene would be less unique because hills would be partially hidden from view w/ engineered slope and overpass.
(7) Cultural Modification	-2.5	This scene would introduce a vast bridge that would tower over the grassland and disrupt the natural/rural setting. The engineered slope would cut through the base of the hills. New creek crossing would not be overly obtrusive. Dirt road and fencing in the foreground would not be present in the scene. Cattle grazing in the distance would add to the rural setting.
(8) Total Score	16	
(9) Scenic Quality Rtg	D	A = 29-32    B = 24-28    C = 19-23    D = 14-18    E = 9-13    F = 4-8    G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: February 10, 2014

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 8: Colstrip Alternative (Affected Alternatives: Colstrip East)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2.5	A series of low mountains would be obscured by a large area of engineered fill at the base of the range. A narrow linear valley would be framed by the two mountain ranges and veers out of sight in the distance. A large bridge dominates the skyline.						
(2) Vegetation	3.5	Grassland vegetation with some sage would dominate the valley floor with riparian vegetation, including a few trees, following the stream and breaking up the monotony. Conifers would dot the tops and slopes of the low mountains.						
(3) Water	1.5	Water would be present and visible in the stream on the valley floor, but not prominent in the view.						
(4) Color	3	The foundation color of the grasslands would be a light spring green. The grasslands would be tipped by amber, sand, buff and other light highlights dotted with small patches of sage blue. Gray steel and concrete of the overhead bridge structure would be visible in the view. A small amount of emerald green riparian vegetation and adjacent blue from the reflected sky on it would contrast greatly next to the lighter colors of the grassland. The roadway would have a rose-taupe hue, which would complement the grasslands color.						
(5) Adjacent Scenery	3.5	The nearby bluffs, colorful rock formations, and additional riparian trees, conifers, and cattle would contribute to the view.						
(6) Scarcity	2	This amount of human disturbance to this view would make it less unique.						
(7) Cultural Modification	-2	The large concrete overhead bridge structure and engineered fill would mar the view. The roadway bridge guardrail would detract somewhat from the view. The country road, barbed-wire fence, and cattle all would contribute to the rural beauty of the place, but would be overpowered by the other features.						
(8) Total Score	13							
(9) Scenic Quality Rating	<b>E</b>	<b>A = 29-32</b>	<b>B = 24-28</b>	<b>C = 19-23</b>	<b>D = 14-18</b>	<b>E = 9-13</b>	<b>F = 4-8</b>	<b>G = 0-3</b>

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: February 10, 2014

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 8: Colstrip Alternative (Affected Alternatives: Colstrip East)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2	Gently undulating grasslands would stretch to a prominent group of domed hills, the view of which would be obscured by a large rail bridge and engineered grade—together these forms would be the prominent feature in the view. Another small bridge would appear over the stream, interrupting the gently rolling grasslands. What would be visible of the distant hills would appear unchanged.						
(2) Vegetation	4	Some vegetation would have been removed for construction of the engineered grade and the smaller bridge. Otherwise, the scene's vegetation would still be dominated by grasses in the foreground, with a few trees scattered about. The hills in the background would be covered more densely with trees than in the foreground.						
(3) Water	2	A small stream would be visible but partially obscured by a small bridge.						
(4) Color	3.5	The grasslands would appear to be a mix of light and olive greens, tans, and yellows. Large brown patches of the background hills would be seen among patches of emerald green trees. A small patch of the deep blue stream would be visible, although obscured by the second bridge. The solid metallic brown/gray of the rail bridge introduces an unnaturally uniform would line of color into the scene. The yellow and brown of the engineered grade would remove some color from the scene, but overall it would harmonize well with the colors of the grasslands.						
(5) Adjacent Scenery	5	Like the key viewpoint, the adjacent scenery would be dominated by grassland and hills, with a mix of evergreen and deciduous trees.						
(6) Scarcity	2	The introduction of the rail bridge and second bridge would decrease the uniqueness of this scene.						
(7) Cultural Modification	-3	The introduction of the rail bridge and second bridge would substantially alter the landscape: their straight lines and industrial feel would be inconsistent with the rural character of the scene.						
(8) Total Score	15.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.17 KOP 9 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

### SCENIC QUALITY RATING SUMMARY

KOP 9: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	Variable landscape includes undulating and slightly jagged terrain with contrasting concave valleys that provide visual interest. Terrain contributes to scenic quality of view and provides visual interest.						
(2) Vegetation	3	The terrain is predominantly covered by mix of grasses and sages. One tree and shrub are located right of the highway.						
(3) Water	0.5	The drainage way is within view but water is not readily present. Water may, however, be present during high flows.						
(4) Color	3.5	The grasses provide a picturesque wash of medium to light greens, tan and brown contrasted against grayish-green sages. The blue of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses). The gray of the roadway and roadway stripping contrasts against the green grasslands.						
(5) Adjacent Scenery	4	The adjacent scenery is unique and variable, and includes the river valley back-dropped by the hills beyond. This contributes to the picturesque quality of this scene. It also has few cultural modifications and holds the same vegetative cover and color values but also has tan exposed earth, bright green ag fields and more trees.						
(6) Scarcity	4	The terrain is highly variable in the study area and this scene has similar landforms and land cover, but is visually unique in and of itself.						
(7) Cultural Modification	1.5	Primary cultural feature is a wooden transmission line that is not visually prominent and does not detract from the quality of scenic views and the paved roadway, which conforms to the terrain and does not greatly detract from the visual landscape.						
(8) Total Score	20							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: November 26, 2013

Landscape Character Unit: N/A

KOP 9: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	Undulating hills and a convex valley comprise the view. The ridgelines seem patterned.						
(2) Vegetation	2.5	The landscape is dominated by grasslands mixed with sage. There is a dramatic absence of mid- and over-story vegetation.						
(3) Water	0	Absent						
(4) Color	3	Warm sandy tones and ochers highlight the grasses. The foundation colors are muted greens, olives. Some muted sage blues are present and dot the hillsides and valley. The highway is a ribbon of steely gray thorough the landscape with a band of white and yellow. In the winter the greens would mostly be absent with brown dominating. Snow would transform this landscape into a sea of white.						
(5) Adjacent Scenery	3	The ridgelines and tablelands extend to the horizon. The grasslands dotted with sage carpet the landscape. Some riparian vegetation is visible in the valley off in the distance. The scene is generally picturesque and tranquil.						
(6) Scarcity	3	The scene is standard for the region.						
(7) Cultural Modification	0	The two lane highway is not obtrusive or distracting, but does not contribute anything of great value to the scene either. Power poles and highway reflectors are also present.						
(8) Total Score	14.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: November 26, 2013

Landscape Character Unit: N/A

KOP 9: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	Gently rolling terrain and distant mountains provide visual interest and create a picturesque view.						
(2) Vegetation	3.5	Sage and grasslands are the dominant vegetation types in the scene. One tree is at the right of the scene, set back from the roadway.						
(3) Water	0	Water is not visible.						
(4) Color	4	The overall landscape is characterized by light browns and greens, with grayish purple mountains in the distance. The expansive blue sky provides a contrasting backdrop. The uniform gray of the road contrasts starkly against an otherwise color-varied landscape.						
(5) Adjacent Scenery	4	The adjacent scenery also contains hills and grasslands and helps characterize this area as rural and picturesque. Few cultural modifications exist aside from the road.						
(6) Scarcity	3	This scene is somewhat typical for this area.						
(7) Cultural Modification	0	The noticeable cultural modifications include the road, a structure off to the left, and a utility line. The road conforms to the undulating landscape. These cultural modifications do not add to the rural nature of the landscape, yet they do not detract from it either.						
(8) Total Score	18.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.18 KOP 9 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/07/2014

Landscape Character Unit: N/A

KOP 9: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2.5	Variable landscape would include undulating and slightly jagged terrain with contrasting concave valleys that provide visual interest. Terrain would contribute to scenic quality of view and provides visual interest. The cut and fill would alter the hills and valleys and introduce geometric, angled landforms in an area that would be naturally irregular. The road relocation would also alter the gently rolling terrain.						
(2) Vegetation	2.5	The terrain would be predominantly covered by mix of grasses and sages. One tree and shrub would be located right of the highway. The cut and fill and road relocation would alter and reduces the vegetative cover.						
(3) Water	0.5	The drainage way would be within view but water would not be readily present. Water may, however, be present during high flows.						
(4) Color	3.5	The grasses would provide a picturesque wash of medium to light greens, tan and brown contrasted against grayish-green sages. The blue of the sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses). The gray of the roadway and roadway stripping would contrast against the green grasslands. The new landform would contrast against the surrounding vegetation and draw attention toward it, and detract from the view.						
(5) Adjacent Scenery	4	The adjacent scenery would be unique and variable, and include the river valley back-dropped by the hills beyond. This would contribute to the picturesque quality of this scene. It would also have few cultural modifications and would hold the same vegetative cover and color values but would also have tan exposed earth, bright green ag fields and more trees.						
(6) Scarcity	2	The industrial-looking rail line would modify a largely intact and unified landscape and create a scene more common to the region.						
(7) Cultural Modification	-1.5	The proposed rail line would introduce an industrial-looking element that would become a focal point in a rural picturesque scene and would detract from scene with cut and fill that would alter the hills and valleys and introduce geometric, angled landforms in an area that is naturally irregular. The road relocation would also alter the gently rolling terrain. In addition, it would affect and disrupt vegetation and introduce a visible culvert.						
(8) Total Score	13.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: February 5, 2014

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 9: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	Undulating hills and a convex valley would comprise the view. The ridgelines would seem patterned. A large amount of engineered fill slopes would be visible in the landscape.						
(2) Vegetation	2	The landscape would be dominated by grasslands mixed with sage. There would be a dramatic absence of mid- and over-story vegetation. Ruderal vegetation would be monotone and uniform in texture.						
(3) Water	0	Absent						
(4) Color	3	Warm sandy tones and ochers would highlight the grasses. The foundation colors would be muted greens, olives. Some muted sage blues would be present and would dot the hillsides and valley. Transportation corridors would each provide a variety of color to the landscape including grays and browns. In the winter the greens would mostly be absent with brown dominating. Snow would transform this landscape into a sea of white.						
(5) Adjacent Scenery	3	The ridgelines and tablelands would extend to the horizon. The grasslands dotted with sage would carpet the landscape. Some riparian vegetation would be visible in the valley off in the distance. The scene would be generally picturesque and tranquil.						
(6) Scarcity	3	The scene would be standard for the region.						
(7) Cultural Modification	-1	The two-lane highway would roughly parallel the proposed rail line corridor directing the eyes toward the horizon. Power poles, guard rails, and a culvert would also be present.						
(8) Total Score	13							
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: February 6, 2014

Landscape Character Unit: N/A

KOP 9: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen		
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	2	The cut and fill would change the landscape, specifically by introducing sharply angular landforms that would degrade the picturesque view. The scene would still be characterized by gently rolling terrain and distant mountains that provide visual interest.
(2) Vegetation	2	Vegetation would be reduced as a result of the road relocation and the cut and fill. Sage and grasslands would remain the dominant vegetation types in the scene. One tree would be at the right of the scene, now adjacent to the relocated roadway.
(3) Water	0	Water would not be visible.
(4) Color	3	The overall landscape would be characterized by light browns and greens, with grayish purple mountains in the distance. The expansive blue sky would provide a contrasting backdrop. The uniform tan of the cut and fill would now contrast sharply against the otherwise color-varied landscape.
(5) Adjacent Scenery	4	The adjacent scenery would also contain hills and grasslands and helps characterize this area as rural and picturesque. Few cultural modifications would exist aside from the road.
(6) Scarcity	3	This scene would be somewhat typical for this area.
(7) Cultural Modification	-2	The noticeable cultural modifications would include the cut and fill and one relocated, paved roadway. These cultural modifications would not add to the rural nature of the landscape.
(8) Total Score	12	
(9) Scenic Quality Rating	E	A = 29-32    B = 24-28    C = 19-23    D = 14-18    E = 9-13    F = 4-8    G = 0-3

## O.8.19 KOP 10 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 10: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	Landscape includes rough textured hills and buttes that slope down toward a valley with eroded banks.						
(2) Vegetation	4.5	Variation in vegetative cover. Slopes and portions of the valley are predominantly covered by mix of grasses and sages. Fairly dense riparian trees are visible and identify the drainage way. Evergreen trees cover the hilltops in the background.						
(3) Water	1	The drainage corridor is within view but water is not readily present. Water may, however, be present during high flows.						
(4) Color	4	The grasses and riparian veg provide a picturesque color contrast of dark to light greens, tan and brown that blend with grayish-green sages, all over tannish-brown soil that is also the color of the roadway. The grayish-green and brown hillsides contrast against the lighter green grasses. Dark green evergreen trees dot the hilltops. The blue and white of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	4	The adjacent scenery complements the view. The lush green ag fields of the river valley and riparian veg are back-dropped by lighter colored hills on the opposite riverbank, which enhances and further contributes to the picturesque quality of this scene. It also lacks cultural modification. The river is intermittently visible through the trees.						
(6) Scarcity	4	The landform and vegetation of the valley create a unique scene.						
(7) Cultural Modification	2	Primary cultural feature is the road and metal post and barbed-wire fencing that are not visually prominent, does not detract from the quality of scenic views, and is harmonious with and in keeping with the rural visual character.						
(8) Total Score	23.5							
(9) Scenic Quality Rating	B	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: November 26, 2013

Landscape Character Unit: N/A

KOP 10: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	A mesa dominates the view on the horizon. A narrow valley with steep banks is in the foreground. A series of bluffs and hills are present in the distance.						
(2) Vegetation	4	There is a variety of vegetation present, but the view is dominated by the contrast between the grass and sage understory and cottonwood riparian woodland. Small dots of conifers are visible on the distant mesa and tablelands.						
(3) Water	0.5	Not in view, but strongly suggested by riparian trees in the draw.						
(4) Color	4	The grass and moss green foundation is highlighted by warm sand and tan tones on top of the grasses. The dark emerald green riparian canopy and purplish blue of the floor of the valley provide a cooler contrast. The salmon to rose tone of the gravel road harmonizes with the other landscape colors. Dark and medium browns dot the foreground and streak the mesa in the background.						
(5) Adjacent Scenery	4	Mesas and tablelands stretch to the horizon. The cottonwood forest at the bottom of the hill is a lush contrast to the drier sage and xeric grasslands on the surrounding slopes. The lower fields are verdant.						
(6) Scarcity	4	The valley with mesa backdrop makes a unique scene.						
(7) Cultural Modification	1	The rural gravel road and barbed-wire fence lend a bucolic quality to the scene.						
(8) Total Score	21.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: November 26, 2013

Landscape Character Unit: N/A

KOP 10: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The distant horizon is dominated by bluffs and hills, including one long, flat-topped hill. The foreground is characterized by gently rolling and sloping terrain.						
(2) Vegetation	4.5	The foreground is characterized by grasses and shrubs, and small leafy plants flank the road. Trees are visible in the middleground and also dot the distant hilltops.						
(3) Water	0	No water is visible.						
(4) Color	4	The scene is varied in color with both bright and dark greens and browns. The light brown gravel/dirt road complements the other colors in the landscape, although its uniform color interrupts the otherwise color-varied landscape.						
(5) Adjacent Scenery	4	The river is visible in the adjacent scenery. Wildflowers grow alongside the road. The surrounding scenery complements the view.						
(6) Scarcity	4	The rolling, verdant landscape, coupled with the flat-topped hill in the distance, create a unique view.						
(7) Cultural Modification	1	Cultural features include the gravel/dirt road and a barbed-wire fence with wooden posts. These elements do not substantially detract from the scene, but rather add to its rural feel.						
(8) Total Score	21.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.20 KOP 10 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/07/2014

Landscape Character Unit: N/A

KOP 10: Tongue River Road Alternative (Affected Alternatives:  
Tongue River Road Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA		
Scenic Quality Rating: <b>RENDERED</b> SCENIC QUALITY		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	2.5	Portions of the hills and buttes would be obscured by geometric, human-made landform that also encroaches upon the valley.
(2) Vegetation	3.5	The proposed rail line would remove grasslands and riparian vegetation. Slopes and portions of the valley would be predominantly covered by mix of grasses and sages. Fairly dense riparian trees would be visible and identify the drainage way. Evergreen trees would cover the hilltops in the background.
(3) Water	1	Drainage corridor would be w/in view but water is not readily present. Water may be present during high flows.
(4) Color	3	The new lighter landform and gray lattice steel bridge would contrast against the surrounding vegetation and draw attention toward it, and detract from the view. The grasses and riparian veg would provide a picturesque color contrast of dark to light greens, tan and brown that blend with grayish-green sages, all over tannish-brown soil that would also be the color of the roadway. The grayish-green and brown hillsides would contrast against the lighter green grasses. Dark green evergreen trees would dot the hilltops. The blue and white of the sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).
(5) Adjacent Scenery	4	The adjacent scenery would complement the view. The lush green agricultural fields of the river valley and riparian vegetation would be back-dropped by lighter colored hills on the opposite riverbank, which would enhance and further contribute to the picturesque quality of this scene. It would also lack cultural modification. The river would be intermittently visible through the trees.
(6) Scarcity	2	The industrial-looking rail line would modifies a largely intact and unified landscape and create a scene more common to the region.
(7) Cultural Modification	-2.5	The proposed rail line would introduce an industrial-looking element that would become a focal point within a rural picturesque scene and detract from that scene with cut and fill that alter the hills and valleys and introduce geometric, angled landforms in an area that would be naturally irregular. In addition, it would affect and disrupt the vegetation and introduce a large visible lattice steel bridge structure which would allow for some views to the landscape beyond.

(8) Total Score	13.5							
(9) Scenic Quality Rtg	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: February 7, 2014

Landscape Character Unit: N/A

KOP 10: Tongue River Road Alternative (Affected Alternatives:  
Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA		
Scenic Quality Rating: <b>RENDERED</b> SCENIC QUALITY		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	2.5	A mesa would dominate the view on the horizon. A narrow valley with steep banks would be in the foreground. A large engineered fill area would be wedged between these two features. A series of bluffs and hills would be barely visible over the engineered fill in the distance.
(2) Vegetation	3.5	There would be a variety of vegetation present, but the view would be dominated by the contrast between the grass and sage understory and cottonwood riparian woodland. Small dots of conifers would be visible on the distant mesa and tablelands. The engineered slope would be covered in uniform ruderal vegetation and smooth texture.
(3) Water	0.5	Not in view, but would be strongly suggested by riparian trees in the draw.
(4) Color	3.5	The grass and moss green foundation would be highlighted by warm sand and tan tones on top of the grasses. The dark emerald green riparian canopy and purplish blue of the floor of the valley would provide a cooler contrast. The salmon to rose tone of the gravel road would harmonize with the other landscape colors. Tans would dominate the engineered fill of the proposed rail line embankment. The cool gray of the concrete bridge would be discordant with the other colors. Dark and medium browns would dot the foreground and streak the mesa in the background.
(5) Adjacent Scenery	4	Mesas and tablelands would stretch to the horizon. The cottonwood forest at the bottom of the hill would be a lush contrast to the drier sage and xeric grasslands on the surrounding slopes. The lower fields would be verdant.
(6) Scarcity	3	The valley with planar railroad fill and mesa backdrop would be a more common scene in the region.
(7) Cultural Modification	-2.5	The rural gravel road and barbed-wire fence would lend a bucolic quality to the scene, but would be overwhelmed by the mass if engineered fill beyond them. A battered cut on the side of the mesa in the background would leave a visible scar on the landscape. A large railroad trestle would span between the masses of engineered fill.
(8) Total Score	14.5	

(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3
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UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: February 7, 2014

Landscape Character Unit: N/A

**SCENIC QUALITY RATING SUMMARY**

KOP 10: Tongue River Road Alternative (Affected Alternatives: Tongue River Road Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2	The distant horizon's bluffs and hills—including one long, flat-topped hill—are obscured by a large human-made landform. The foreground is characterized by gently rolling and sloping terrain.						
(2) Vegetation	3.5	The foreground is characterized by grasses and shrubs, and small leafy plants flank the road. Trees are visible in the midground and also dot the distant hilltops. The large human-made landform replaces grasslands and lacks vegetation.						
(3) Water	0	No water is visible.						
(4) Color	3	The scene is varied in color with both bright and dark greens and browns. The light brown gravel/dirt road complements the other colors in the landscape, although its uniform color interrupts the otherwise color-varied landscape. Similarly, the uniform tan color of the human-made landform contrasts with the surrounding landscape as well.						
(5) Adjacent Scenery	4	The river is visible in the adjacent scenery. Wildflowers grow alongside the road. The surrounding scenery complements the view.						
(6) Scarcity	2	The rolling, verdant landscape, coupled with the flat-topped hill in the distance, create a unique view. The large, human-made landform and bridge detract from the scene's uniqueness.						
(7) Cultural Modification	-2	Cultural features include the gravel/dirt road and a barbed-wire fence with wooden posts. These elements do not substantially detract from the scene, but rather add to its rural feel. The steel bridge and fill alter the view substantially, becoming a dominant focal point with a somewhat industrial/artificial (rather than rural) feel.						
(8) Total Score	12.5							
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.21 KOP 11 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

Landscape Character Unit: N/A

KOP 11: Moon Creek Alternative (Affected Alternatives: Moon Creek East)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	Wide flat valley encompassed by low-lying, mounding hillsides.						
(2) Vegetation	3.5	The terrain is predominantly covered by mix of grasses that create a smooth landscape cover. Some wildflowers. Riparian vegetation can be seen, in addition to trees around the homestead. Few trees dot the hillsides.						
(3) Water	0	The river corridor is indicated by riparian vegetation, but is not visible.						
(4) Color	3.5	The grasses provide a picturesque wash of medium to light greens and tans. Riparian trees provide dark greens. Some taupe on unvegetated portion of hills. Hills appear greenish-gray in the distance. The taupe roadway complements the green grasses and colors of the hillsides. The blue of the sky provides a distinct visual separation to landform and land cover. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	3	The adjacent scenery does not greatly add to the quality of this scene. Hills are similar to those in view and freeway embankment limits views beyond.						
(6) Scarcity	3	The terrain is highly variable in the study area. While somewhat scenic, this scene is not as unique as others in the area.						
(7) Cultural Modification	0.5	Cultural features include dirt and gravel roadway with barbed-wire fencing and homestead in distance that do not detract from the quality of scenic views and is harmonious with and in keeping with the rural visual character. Lattice steel transmission line detracts from landscape a bit.						
(8) Total Score	16.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

Landscape Character Unit: N/A

KOP 11: Moon Creek Alternative (Affected Alternatives: Moon Creek East)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Paul Weller, PLA		
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	3.5	A nearly level plain slowly rises to the distant hills. To the left a low range of mountains is visible and creates a rugged skyline.
(2) Vegetation	3	A variety of understory plants provide interest in the foreground. Sunflowers, sage, and a variety of other wildflowers and grasses provide a lot of color. A band of riparian trees is visible in the distance. The grassland at this location has a wide variety of textures and species.
(3) Water	0	Absent
(4) Color	4	The bright yellow of the sunflowers and cool blue of the sage provide a welcome break from the generally green grassland. The grassland has olive and moss green tones with dapples of white and tan. Emerald green is visible in the shadows. The distance riparian vegetation is in shades of medium to dark green. The gravel road is a cool gray. The winter scene would feature little to no green with more browns. The sagebrush will punctuate the snow and create texture in winter.
(5) Adjacent Scenery	1	The cottonwood groves nearby contribute positively to the overall scene, but these positive impacts are negated by the nearby engineered slopes, interstate highway, and electrical transmission lines and towers which dominate the scene.
(6) Scarcity	2	This scene is not remarkable or unique to the region.
(7) Cultural Modification	-2.5	The rural character of the view is complemented by the barbed-wire fence and gravel road, but the overpowering mass of the industrial transmission lines and towers mars the view.
(8) Total Score	11	
(9) Scenic Quality Rating	E	A = 29-32      B = 24-28      C = 19-23      D = 14-18      E = 9-13      F = 4-8      G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: December 2, 2013

Landscape Character Unit: N/A

**SCENIC QUALITY RATING SUMMARY**

KOP 11: Moon Creek Alternative (Affected Alternatives: Moon Creek East)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	A relatively flat grassland stretches out to tall mountains at the left and distant hills to the horizon.						
(2) Vegetation	3.5	Mixed grasses and a variety of trees are shown, with a mix of wildflowers lining the gravel/dirt road.						
(3) Water	0	No water is visible.						
(4) Color	4	The grasslands are a mix of light and olive green, tan, and taupe, with occasional splashes of sunny yellow flowers. The trees in the distance range from grass green to dark emerald green. The gravel/dirt road is a brownish gray. The mountains are a mix of brown and green, which contrast well against the blue sky.						
(5) Adjacent Scenery	2	The surrounding area consists mainly of similar terrain and vegetation as the primary viewpoint. However, roads, electrical lines, and other cultural modifications detract from the scene.						
(6) Scarcity	2	This scene is not unique to this region.						
(7) Cultural Modification	-2	Although the gravel road and barbed-wire fence are consistent with the area's rural character, the electrical transmission lines detract significantly from the scene.						
(8) Total Score	13.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.8.22 KOP 11 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

Landscape Character Unit: N/A

KOP 11: Moon Creek Alternative (Affected Alternatives: Moon Creek East)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	2.5	Proposed rail line would alter terrain and create a trench, of sorts. Wide flat valley would be encompassed by low-lying, mounding hillsides.						
(2) Vegetation	3	Grasses would be removed and exposed soils would be left behind. The terrain would be predominantly covered by mix of grasses that create a smooth landscape cover. Some wildflowers. Riparian vegetation would be seen, in addition to trees around the homestead. Few trees would dot the hillsides.						
(3) Water	0	The river corridor would be indicated by riparian vegetation, but would not be visible.						
(4) Color	3	More taupe from exposed soils and train colors would contrast to natural earth tones. The grasses would provide a picturesque wash of medium to light greens and tans. Riparian trees would provide dark greens. Some taupe would be on unvegetated portion of hills. Hills would appear greenish-gray in the distance. The taupe roadway would complement the green grasses and colors of the hillsides. The blue sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	3	The adjacent scenery would not greatly add to the quality of this scene. Hills would be similar to those in view and freeway embankment and would limit views beyond.						
(6) Scarcity	2.5	Proposed rail line and train would degrade view and would be more common to other areas with rail lines. The terrain would be highly variable in the study area. While somewhat scenic, this scene would not be as unique as others in the area.						
(7) Cultural Modification	-1	The proposed rail line and train would degrade view, alter terrain & colors. Train would add more industrial elements into the landscape. Cultural features would include dirt and gravel roadway with barbed-wire fencing and homestead in distance that would not detract from the quality of scenic views and would be harmonious with and in keeping with the rural visual character. Lattice steel transmission line would detract from landscape a bit.						
(8) Total Score	13							
(9) Scenic Quality Rating	E	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 27, 2013

Landscape Character Unit: N/A

**SCENIC QUALITY RATING SUMMARY**

KOP 11: Moon Creek Alternative (Affected Alternatives: Moon Creek East)

Evaluators ( <i>names</i> ): Paul Weller, PLA		
Scenic Quality Rating: <b>RENDERED</b> SCENIC QUALITY		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	3.5	A nearly level plain would slowly rise to the distant hills. To the left a low range of mountains would be visible and would create a rugged skyline.
(2) Vegetation	3	A variety of understory plants would provide interest in the foreground. Sunflowers, sage, and a variety of other wildflowers and grasses would provide a lot of color. A band of riparian trees would be visible in the distance. The grassland at this location would have a wide variety of textures and species.
(3) Water	0	Absent
(4) Color	3.5	The bright yellow of the sunflowers and cool blue of the sage would provide a welcome break from the generally green grassland. The grassland would have olive and moss green tones with dapples of white and tan. Emerald green would be visible in the shadows. The distant riparian vegetation would be in shades of medium to dark green. The gravel road and railroad ballast would be cool gray. The winter scene would feature little to no green with more browns. The sagebrush would punctuate the snow and create texture in winter.
(5) Adjacent Scenery	1	The cottonwood groves nearby would contribute positively to the overall scene, but these positive impacts would be negated by the nearby engineered slopes, interstate highway, and electrical transmission lines and towers that would dominate the scene.
(6) Scarcity	2	This scene would not be remarkable or unique to the region.
(7) Cultural Modification	-3	The rural character of the view would be complemented by the barbed-wire fence and gravel road, but the overpowering mass of the industrial transmission lines and towers would mar the view. The railroad track and proposed rail line would further divide the space.
(8) Total Score	10	
(9) Scenic Quality Rating	E	A = 29-32      B = 24-28      C = 19-23      D = 14-18      E = 9-13      F = 4-8      G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: December 2, 2013

Landscape Character Unit: N/A

**SCENIC QUALITY RATING SUMMARY**

KOP 11: Moon Creek Alternative (Affected Alternatives: Moon Creek East)

Evaluators ( <i>names</i> ): Teresa Giffen									
Scenic Quality Rating: <b>RENDERED</b> SCENIC QUALITY									
Key Factors	Scenic Quality Rating	Explanation							
(1) Landform	3.5	A relatively flat grassland would stretch out to tall mountains at the left and distant hills to the horizon. The ground would be disturbed for the proposed rail line; a low ridge of soil or gravel would run beside the road.							
(2) Vegetation	3.5	Mixed grasses and a variety of trees would show, with a mix of wildflowers lining the gravel/dirt road.							
(3) Water	0	No water would be visible.							
(4) Color	4	The grasslands would be a mix of light and olive green, tan, and taupe, with occasional splashes of sunny yellow flowers. The trees in the distance would range from grass green to dark emerald green. The gravel/dirt road would be a brownish gray. The mountains would be a mix of brown and green, which contrast well against the blue sky.							
(5) Adjacent Scenery	2	The surrounding area would consist mainly of similar terrain and vegetation as the primary viewpoint. However, roads, electrical lines, and other cultural modifications would detract from the scene.							
(6) Scarcity	2	This scene would not be unique to this region.							
(7) Cultural Modification	-3	Although the gravel road and barbed-wire fence would be consistent with the area's rural character, the electrical transmission lines would detract significantly from the scene. The low ridge that would run along the proposed rail line would detract from the view.							
(8) Total Score	12								
(9) Scenic Quality Rating		<table border="0"> <tr> <td>A = 29-32</td> <td>B = 24-28</td> <td>C = 19-23</td> <td>D = 14-18</td> <td>E = 9-13</td> <td>F = 4-8</td> <td>G = 0-3</td> </tr> </table>	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3
A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3			

## O.8.23 KOP 12 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 12: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	Landscape includes land that gently slopes down toward the river with hill in the background.						
(2) Vegetation	4	The terrain is predominantly covered by mix of grasses that create a smooth landscape cover. Dense riparian vegetation in middleground. Evergreen trees are visible on the hills in background.						
(3) Water	0	The river corridor is within view but water is not visible in this vantage.						
(4) Color	4	The grasses provide a picturesque wash of medium to light greens and tans over pinkish soils. The hills are pink, brown, and tan. The pinkish roadway complements the green grasses and colors of the hillsides. The blue of the sky provides a distinct visual separation to landform and land cover. Dark green riparian and evergreen vegetation. Seasonal variation occurs during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	4.5	The adjacent scenery is also unique and variable, which further contributes to the picturesque quality of this scene. It also includes few cultural modifications except for the roadway and transmission line, and holds the same vegetative cover and color values.						
(6) Scarcity	3.5	This scene has unique landforms and interesting color yet relatively common land cover. It is visually unique, in and of itself, similar to other views in the study area.						
(7) Cultural Modification	1.5	Only cultural feature is the dirt and gravel roadway does not detract from the quality of scenic views, which is pinkish and compliments the surrounding terrain and land cover, and is harmonious with and in keeping with the rural visual character. Wooden transmission line slightly detracts from the landscape, but not substantially.						
(8) Total Score	20.5							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 26, 2013

Landscape Character Unit: N/A

KOP 12: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Paul Weller, PLA		
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	3.5	A subtle wide valley with gentle slopes is punctuated with low table lands and hills. Beyond the valley a range of low hills and mountains forms the skyline in the distance.
(2) Vegetation	4	Xeric grassland and sagebrush form the understory. A thick and dense riparian forest is present in the valley bottom. Hills and low mountains in the background are spotted with dark vegetation most likely coniferous.
(3) Water	0	Absent, but suggested by trees in the valley.
(4) Color	3.5	The light green foundation of the foreground grassland is highlighted by warm tans, yellows, and light rosy brown. Sage blue and dark green spot the landscape. A wedge of dark to medium emerald green contrasts with the lighter foreground and background. The rose pink gravel adds to the warmth of the foreground. Indigos and violets are present on the distant hills and low mountains. The winter scene would have more browns and tans, absent green, and possible white from snows.
(5) Adjacent Scenery	4.5	Adjacent scenery of hillsides, dense riparian forest, and low mountains contributes significantly to the view and beauty of it.
(6) Scarcity	4	The scene is pastoral, picturesque, and unique to the region.
(7) Cultural Modification	0	The gravel road adds a romantic agrarian element to the scene which is countered by the overhead power lines and poles.
(8) Total Score	19.5	
(9) Scenic Quality Rating	C	A = 29-32      B = 24-28      C = 19-23      D = 14-18      E = 9-13      F = 4-8      G = 0-3

## O.8.24 KOP 12 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 12: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	Landscape would include land that gently slopes down toward the river with hill in the background. Railbed would be slightly, but not substantially, raised on fill.						
(2) Vegetation	4	Vegetation would not be greatly affected. The terrain would be covered predominantly by a mix of grasses that would create a smooth landscape cover. Dense riparian vegetation would be in middleground. Evergreen trees would be visible on the hills in background.						
(3) Water	0	The river corridor would be within view but water is not visible in this vantage.						
(4) Color	4	Color would remain largely the same. The grasses would provide a picturesque wash of medium to light greens and tans over pinkish soils. The hills would be pink, brown, and tan. The pinkish roadway would complement the green grasses and colors of the hillsides. The blue of the sky would provide a distinct visual separation to landform and land cover. Dark green riparian and evergreen vegetation. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	4.5	The adjacent scenery would also be unique and variable, which would further contribute to the picturesque quality of this scene. It would also include few cultural modifications except for the roadway and transmission line, and hold the same vegetative cover and color values.						
(6) Scarcity	3	This scene would have unique landforms and interesting color yet relatively common land cover. It would be visually unique, in and of itself, similar to other views in the study area.						
(7) Cultural Modification	0.5	The proposed rail line would disrupt the gently sloping terrain at the base of the hills and the train would introduce an industrial-looking visual feature in a rural landscape. Crossing signals would increase the presence of infrastructure. Roadway would not detract from the quality of scenic views, but wooden transmission line would detract slightly from the landscape, but not substantially.						
(8) Total Score	19							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 26, 2013

Landscape Character Unit: N/A

KOP 12: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

**SCENIC QUALITY RATING SUMMARY**

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>RENDERED</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	A subtle wide valley with gentle slopes would be punctuated with low table lands and hills. Beyond the valley would be a range of low hills and mountains forms the skyline in the distance.						
(2) Vegetation	3.5	Xeric grassland and sagebrush would form the understory. A thick and dense riparian forest would be present in the valley bottom. Hills and low mountains would be in the background, spotted with dark vegetation most likely coniferous. A narrow swath of ruderal vegetation would cut through the sagebrush.						
(3) Water	0	Absent, but suggested by trees in the valley.						
(4) Color	3.5	The light green foundation of the foreground grassland would be highlighted by warm tans, yellows, and light rosy brown. Sage blue and dark green would spot the landscape. A wedge of dark to medium emerald green would contrast with the lighter foreground and background. A band of tan foliage would parallel the wedge of riparian vegetation. The rose pink gravel would add to the warmth of the foreground. Indigos and violets would be present on the distant hills and low mountains. The winter scene would have more browns and tans, absent green, and possible white from snows.						
(5) Adjacent Scenery	4.5	Adjacent scenery of hillsides, dense riparian forest, and low mountains would contribute significantly to the view and beauty of it.						
(6) Scarcity	4	The scene would be pastoral, picturesque, and unique to the region.						
(7) Cultural Modification	-1	The gravel road would add a romantic agrarian element to the scene, which would be countered by the railroad signage, overhead power lines, and poles.						
(8) Total Score	18							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 26, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 12: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3.5	Broad grasslands would stretch to the tree-lined river corridor. In the distance would be hills/mountains that define the skyline.						
(2) Vegetation	3.5	Mixed grasses would flank the road, and the middleground would be characterized by a thick, dark riparian forest. The hills/mountains in the background would appear to be dotted with dark vegetation. A long swath of disturbed land, absent of vegetation, would cross the landscape.						
(3) Water	0	The riparian forest would hide any view of water at this observation point.						
(4) Color	3.5	The grasslands would be characterized by light green, yellow, and brown hues. These colors would be gently contrasted with the rosy gravel road, although the road's uniform color interrupts the pleasing color variations in the landscape. The swath of dark green trees along the river would contrast strongly with the lighter grasslands. In the distance, there would be brown and purple hills that would contrast well against the riparian corridor and the expansive sky. While the color of the disturbed land associated with the proposed rail line would complement those in the scene, its uniformity would contrast starkly against the landscape's color variations, much in the same manner as the gravel road. The stark white/red rail crossing signage would introduce new and discordant colors into the scene.						
(5) Adjacent Scenery	4.5	The adjacent scenery would be characterized by hillsides and would generally possess the same vegetation and color variation found in the observation viewpoint.						
(6) Scarcity	4	The overall scene would be pastoral and picturesque.						
(7) Cultural Modification	-1	The wide gravel road and tall utility poles would not substantially detract from the rural character of the scene. The presence of the train and rail crossings would add an industrial element to the otherwise rural feel of the area.						
(8) Total Score	18							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## 0.8.25 KOP 13 Existing

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 11/25/2013

Landscape Character Unit: N/A

KOP 13: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	Variable landscape includes irregular mounding hills with moderately steep sides that have a somewhat irregular repeating, conical forms created by erosion. Deep valleys are also present. Visible striations are very noticeable. The bases of the hills give way to a fairly level river valley. Terrain contributes to scenic quality of view and provides visual interest.						
(2) Vegetation	4.5	The terrain is predominantly covered by mix of grasses and hay fields that create a smooth landscape cover. Evergreen trees are prominent.						
(3) Water	0	The river corridor is nearby, but it is not visible in this vantage.						
(4) Color	4	The bright green hay fields provide a picturesque contrast to the tan and pinkish soils, the light green and tan grasses and the evergreen trees. The striated hills are pink, gray, and tan. The pinkish-gray roadway complements the green grasses and colors of the hillsides. The blue sky provides a distinct visual separation to landform and land cover. Seasonal variation occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	4.5	The adjacent scenery is also unique and variable, which contributes further to the picturesque quality of this scene. It has few cultural modifications, besides the roadway and a residence, and would hold the same vegetative cover and color values but in greater concentration.						
(6) Scarcity	4	The area has higher topographical relief compared to the rest of the study area. This scene has unique landforms and interesting color and is visually unique.						
(7) Cultural Modification	2	Only cultural feature is the dirt and gravel roadway, a small sign, and a barbed-wire and wooden post fence that does not detract from the quality of scenic views and is harmonious with and in keeping with the rural visual character.						
(8) Total Score	23							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 26, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 13: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA								
Scenic Quality Rating: <b>EXISTING SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	4	The concave valley and prominent hills and draws create a lot of topographical interest and form an intimate space. The hills are low and domed, yet have numerous folds and articulations around the perimeters of each hill. From the view the sides appear somewhat smooth or suede-like. Underlying rock strata are subtle, but visible.						
(2) Vegetation	4	Verdant agricultural fields are in the base of valley. Grasslands with sage comprise the understory on the uplands and slopes. The slopes of the hills, especially the folds and crevices host trees mostly pine species and other conifers.						
(3) Water	0	Absent						
(4) Color	4.5	The rosy pink gravel of the road and the red, rose, and rust hillsides harmonize with each other. The reds and rose hues complement and play off of the deep emerald greens of the fields in the bottom of the valley and the pine greens of the trees dotting the hillsides. The red and green color harmony is dramatic. In winter months the reds and greens would remain present, with field greens missing, and could have white snow present to add contrast and more drama with highlights.						
(5) Adjacent Scenery	4.5	The forested mountains in the background nearby, and riparian forest along a stream add additional beauty to these colorful hills.						
(6) Scarcity	4	This space is quite unique to the region						
(7) Cultural Modification	0	The picturesque country gravel road and barbed-wire fence are countered by the unnatural angled engineered slope with erosion gullies visible up the hillside opposite the valley.						
(8) Total Score	21							
(9) Scenic Quality Rating	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: November 26, 2013

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 13: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen		
Scenic Quality Rating: <b>EXISTING</b> SCENIC QUALITY		
Key Factors	Scenic Quality Rating	Explanation
(1) Landform	4	The terrain is characterized by large, rounded hills surrounding a broad and generally flat valley floor. These landforms contribute to the overall scenic quality of this area.
(2) Vegetation	4	Verdant grasslands cover the valley floor and contrast slightly with sage uplands; trees are scattered along hillsides and hilltops.
(3) Water	0	No water is visible.
(4) Color	4	The hillside's rose and rust colors contrast and complement the bright green agricultural field on the valley floor. The smoky pink road harmonizes well with the distant hillside and complements the adjacent sage and light green grasslands as well as the bright green valley floor. The expansive blue sky provides a striking backdrop.
(5) Adjacent Scenery	4.5	The adjacent scenery is generally free of cultural modifications and is characterized by the same vegetation and color, contributing to the overall visual quality of this area.
(6) Scarcity	4	This space offers picturesque views that are notable within the area.
(7) Cultural Modification	1	The only visible cultural modifications appear to be a dirt/gravel road, a barbed-wire fence with rustic wooden posts, two small signs (one of which is a roadway sign), and a small structure on the roadside which may be a mailbox.
(8) Total Score	21.5	
(9) Scenic Quality Rating	C	A = 29-32    B = 24-28    C = 19-23    D = 14-18    E = 9-13    F = 4-8    G = 0-3

## O.8.26 KOP 13 Rendered

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: 2/07/2014

Landscape Character Unit: N/A

KOP 13: Revised Decker Alternative (Affected Alternatives: Decker Alts.)

### SCENIC QUALITY RATING SUMMARY

Evaluators ( <i>names</i> ): Jennifer Stock, PLA								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	The proposed rail line would substantially alter the terrain with cut and large, angular areas of fill. Variable landscape would include irregular mounding hills with moderately steep sides that would have somewhat irregular repeating, conical forms created by erosion. Deep valleys would also be present. Visible striations would be very noticeable. The bases of the hills would give way to a fairly level river valley. Terrain would contribute to scenic quality of view and provide visual interest.						
(2) Vegetation	4	The proposed rail line would require a lot of vegetation removal. The terrain would be predominantly covered by a mix of grasses and hay fields that would create a smooth landscape cover. Evergreen trees would be prominent.						
(3) Water	0	The river corridor would be nearby, but not visible from this vantage.						
(4) Color	3.5	The proposed rail line would remove vegetation and replace it with large exposed areas of cut and fill. The bright green hay fields would provide a picturesque contrast to the tan and pinkish soils, the light green and tan grasses and the evergreen trees. The striated hills would be pink, gray, and tan. The pinkish-gray roadway would complement the green grasses and colors of the hillsides. The blue of the sky would provide a distinct visual separation to landform and land cover. Seasonal variation would occur during the winter (snow cover, dead grass), spring (green grass, wildflowers), summer (browns and tans with grasses dying, wildflowers), and fall (mostly dead grasses).						
(5) Adjacent Scenery	4.5	The adjacent scenery would also be unique and variable, which would further contribute to the picturesque quality of this scene. It would have few cultural modifications, besides the roadway and a residence, and would hold the same vegetative cover and color values but in greater concentration.						
(6) Scarcity	3	The proposed rail line would substantially alter the terrain with cut and large, angular areas of fill. It would also reduce the varied topographical relief and uniqueness of the scene.						
(7) Cultural Modification	-2	The large areas of cut and fill area would be a focal point and would greatly disrupt the unity of the view and its overall visual quality. It would also degrade the scenic view by removing vegetation. Other cultural features would remain unchanged.						
(8) Total Score	16							
(9) Scenic Quality Rtg	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

**SCENIC QUALITY RATING SUMMARY**

Date: February 6, 2014

Landscape Character Unit: N/A

KOP 13: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

Evaluators ( <i>names</i> ): Paul Weller, PLA							
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>							
Key Factors	Scenic Quality Rating	Explanation					
(1) Landform	3.5	The concave valley and prominent hills and draws would create a lot of topographical interest and would form an intimate space. The hills would be low and domed, yet would have numerous folds and articulations around the perimeters of each hill. From the view the sides would appear somewhat smooth or suede-like. Underlying rock strata would be subtle, but visible. The sides of some of the hills would be hidden, about a third of the way down, by fill from an engineered grade.					
(2) Vegetation	4	Verdant agricultural fields would be in the base of valley. Grasslands with sage would comprise the understory on the uplands and slopes. The slopes of the hills, especially the folds and crevices, would host trees mostly pine species and other conifers. An engineered fill area would have uniform short vegetation on the slopes.					
(3) Water	0	Absent					
(4) Color	4	The rosy pink gravel of the road and the red, rose, and rust hillsides would harmonize with each other. The reds and rose hues would complement and play off of the deep emerald greens of the fields in the bottom of the valley and the pine greens of the trees dotting the hillsides. The red and green color harmony would be dramatic. In winter months the reds and greens would remain present, with field greens missing, and could have white snow present to add contrast and more drama with highlights.					
(5) Adjacent Scenery	4.5	The forested mountains in the background nearby, and riparian forest along a stream would add additional beauty to these colorful hills.					
(6) Scarcity	4	This space would be unique to the region, but slightly modified by engineered slopes					
(7) Cultural Modification	-1	The engineered slope along the hills in the background would detract from the aesthetics of this place. The picturesque country gravel road and barbed-wire fence in the foreground would be countered by the unnatural-angled engineered slope to the right with erosion gullies visible up the hillside opposite the valley.					
(8) Total Score	19						
(9) Scenic	C	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8 G = 0-3

Quality Rating								
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UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Date: February 6, 2014

**SCENIC QUALITY RATING SUMMARY**

Landscape Character Unit: N/A

KOP 13: Revised Decker Alternative (Affected Alternatives: Decker Alternatives)

Evaluators ( <i>names</i> ): Teresa Giffen								
Scenic Quality Rating: <b>RENDERED SCENIC QUALITY</b>								
Key Factors	Scenic Quality Rating	Explanation						
(1) Landform	3	The terrain would be characterized by large, rounded hills surrounding a broad and generally flat valley floor. These landforms would contribute to the overall scenic quality of this area. A human-made landform would substantially alter the view, presenting an unnaturally straight line among otherwise rounded and sloping landforms.						
(2) Vegetation	3	Verdant grasslands would cover the valley floor and contrast slightly with sage uplands; trees would be scattered along hillsides and hilltops. Vegetation would have been removed where the human-made landform has been constructed.						
(3) Water	0	No water would be visible.						
(4) Color	3.5	The hillside's rose and rust colors would contrast and complement the bright green agricultural field on the valley floor. The smoky pink road would harmonize well with the distant hillside and complement the adjacent sage and light green grasslands, as well as the bright green valley floor. The expansive blue sky would provide a striking backdrop. The uniform color of the human-made landform would interrupt the visual variation otherwise present in the natural landforms.						
(5) Adjacent Scenery	4.5	The adjacent scenery would be generally free of cultural modifications and would be characterized by the same vegetation and color, contributing to the overall visual quality of this area.						
(6) Scarcity	3.5	This space would offer picturesque views that would be notable in the area. The landscape would be altered by the uniform human-made landform associated with the proposed rail line.						
(7) Cultural Modification	-2	The proposed rail line would degrade the visual character of the scene by reducing vegetation and contrasting with the natural terrain.						
(8) Total Score	15.5							
(9) Scenic Quality Rating	D	A = 29-32	B = 24-28	C = 19-23	D = 14-18	E = 9-13	F = 4-8	G = 0-3

## O.9 References

- Bureau of Land Management. 1980. *Visual Resource Management Program* (Stock No. 024-001-00116-6.) Washington DC: U.S. Government Printing Office.
- Bureau of Land Management. 1986a. *Visual Resource Inventory* (BLM Manual Handbook 8410-1.) Washington DC: U.S. Government Printing Office.
- Bureau of Land Management. 1986b. *Visual Resource Contrast Rating* (BLM Manual Handbook 8431-1.) Washington DC: U.S. Government Printing Office.
- Bureau of Land Management. 2013. *Miles City Field Office Draft Resource Management Plan and Environmental Impact Statement*. Miles City, MT. February.
- Bureau of Land Management. 2015a. *National Conservation Lands*. Last updated: August 9, 2013. Available: [http://www.blm.gov/mt/st/en/prog/blm\\_special\\_areas.html](http://www.blm.gov/mt/st/en/prog/blm_special_areas.html). Accessed: February 17, 2015.
- Bureau of Land Management. 2015b. *Lewis and Clark National Historic Trail*. Last updated: August 9, 2013. Available: [http://www.blm.gov/mt/st/en/prog/blm\\_special\\_areas/lcnht.html](http://www.blm.gov/mt/st/en/prog/blm_special_areas/lcnht.html). Accessed: February 17, 2015.
- Federal Highway Administration. 1988. *Visual Impact Assessment for Highway Projects*. (FHWA-HI-88-054.) U.S. Department of Transportation.
- Litton, R. Burton, Jr. 1968. *Forest Landscape Description and Inventories – A Basis for Land Planning and Design*. U.S. Department of Agriculture Forest Service Research Paper PSW-49. Berkeley, CA: Pacific Southwest Forest and Range Experiment Station.
- Montana Department of Transportation. 2005. *Lewis & Clark in Montana*. State of Montana, Department of Transportation, Road Inventory and Mapping Section. Helena, MT. March.
- U.S. Forest Service. 1987. *Custer National Forest Management Plan*. Available: <http://www.fs.usda.gov/detail/custer/landmanagement/planning/?cid=stelprdb5352260>. Accessed: February 2014.
- U.S. Forest Service. 1995. *Landscape Aesthetics: A Handbook for Scenery Management*. Agriculture Handbook Number 701.
- U.S. Soil Conservation Service. 1978. *Procedure to Establish Priorities in Landscape Architecture*. Technical Release No. 65. Washington, DC.

## O.9.1 Personal Communications

Bloom, Mary. BLM Planning Specialist. Miles City Field Office, Miles City, MT. July 9, 2013—Phone conversation.

Ruchman, Jane. Landscape Architect. Developed Recreation Program Manager, Recreation Special Uses. Custer - Gallatin National Forests, Bozeman, MT. January 28, 2014—Phone conversation.

Wiser, Tom. Consulting Railway Engineer. January and February 2014—Emails to Tim Messick and Jennifer Stock, ICF International, regarding design data including siting, alignment, and structures.

## O.10 Figures

Figure O-1. Key Observation Point 1



**KOP 1a.** Looking north towards I-94, Miles City, and the Tongue River Alternative from the Fort Keogh Livestock & Range Research Laboratory (Summer 2013: 3152).



**KOP 1b.** Looking southeast towards the Tongue River Alternative from the Fort Keogh Livestock & Range Research Laboratory (Summer 2013: 3159).

0056512 (02/15)

**Figure O-2. Key Observation Points 2 and 3**



**KOP 2.** Looking east towards the Ashland East Alternative from Green Ranch (Summer 2013: 1608).



**KOP 3.** Looking east towards Bice Ranch and the Tongue River and Moon Creek Alternatives from Moon Creek Road (Summer 2013: 2303).

00595.12 (08/15)

**Figure O-3. Key Observation Points 4 and 5**



**KOP 4.** Looking northwest towards Bice Ranch and the Tongue River and Moon Creek Alternatives from Moon Creek Road (Spring 2013: 1210).



**KOP 5.** Looking northwest towards the Tongue River Road Alternative from Beaver Creek Road (Summer 2013: 1765).

0059512 (03/15)

**Figure O-4. Key Observation Point 6**



**KOP 6a.** Looking north towards the Tongue River and Moon Creek Alternatives from Tongue River Road (Summer 2013: 1058).



**KOP 6b.** Looking southwest towards the Tongue River and Moon Creek Alternatives from Tongue River Road (Summer 2013: 1052).

0666513 (0015)

**Figure O-5. Key Observation Points 7 and 8**



**KOP 7.** Looking southwest towards the Tongue River and Moon Creek Alternatives from Tongue River Road (Summer 2013: 1046).



**KOP 8.** Looking southeast towards the Tongue River, Colstrip, Tongue River Road, and Moon Creek Alternatives from River Ranch (Summer 2013: 1560).

0050513\_08115

**Figure O-6. Key Observation Points 9 and 10**



005551.2 (03/15)

**Figure O-7. Key Observation Points 11 and 12**



**KOP 11.** Looking southwest towards the Tongue River Road Alternative from Tongue River Road (Summer 2013: 2050).



**KOP 12.** Looking northeast towards the Tongue River Road Alternative from Tongue River Road (Summer 2013: 2439).

0056513 (03/15)

**Figure O-8. Key Observation Points 13 and 14**



**KOP 13.** Looking south towards the Tongue River, Colstrip, Tongue River Road, and Moon Creek Alternatives from Highway 212 (Spring 2013: 1610).



**KOP 14.** Looking north towards the Tongue River Road Alternative from Tongue River Road (Summer 2013: 2683).

0656512 (03/15)

**Figure O-9. Key Observation Points 15 and 16**



**KOP 15.** Looking west towards the Tongue River Alternative from 12 Mile Dam public use area (Spring 2013: 1078).



**KOP 16.** Looking west towards the Tongue River Alternative from the Fix Ranch (Spring 2013: 1764).

06/06/13 (00115)

**Figure O-10. Key Observation Points 17 and 18**



**KOP 17.** Looking southeast towards the Tongue River and Moon Creek Alternatives from the Fix Ranch (Summer 2013: 2920).



**KOP 18.** Looking southeast towards the Tongue River and Moon Creek Alternatives from Tongue River Ranch (Summer 2013: 3398).

006651.2 (03/15)

**Figure O-11. Key Observation Points 19 and 20**



**KOP 19.** Looking north towards the Tongue River and Moon Creek Alternatives from Tongue River Ranch (Summer 2013: 3422).



**KOP 20.** Looking east towards the Moon Creek Alternative from Stinson Ranch (Summer 2013: 3298).

0056512 (03/15)

**Figure O-12. Key Observation Points 21 and 22**



**KOP 21.** Looking south towards the Colstrip Alternative from Greenleaf Road (Summer 2013: 1213).



**KOP 22.** Looking east towards the Colstrip Alternative from Greenleaf Road (Summer 2013: 1257).

0059512 (03/15)

**Figure O-13. Key Observation Points 23 and 24**



**KOP 23.** Looking northwest towards the Colstrip Alternative from Greenleaf Road (Summer 2013: 1253).



**KOP 24.** Looking northwest towards the Colstrip Alternative from Greenleaf Road (Summer 2013: 1285).

001565.12 (03/15)

**Figure O-14. Key Observation Points 25 and 26**



**KOP 25.** Looking northwest towards the Colstrip Alternative from Greenleaf Road (Summer 2013: 3159).



**KOP 26.** Looking southwest towards the Tongue River, Colstrip, Tongue River Road, and Moon Creek Alternatives from Otter Creek Road (Summer 2013: 736).

0056512 (03/15)

**Figure O-15. Key Observation Points 27 and 28**



**KOP 27.** Looking north towards the Decker Alternative from Tongue River Road within the Wolf Mountains Battlefield National Historic Landmark (Summer 2013: 338).



**KOP 28.** Looking northwest towards the Decker Alternative from Tongue River Road (Summer 2013: 316).

09585-12 (02/15)

**Figure O-16. Key Observation Points 29 and 30**



**KOP 29.** Looking northwest towards the Decker Alternative from Tongue River Road (Summer 2013: 260).



**KOP 30.** Looking north towards the Decker Alternative from Tongue River Road (Summer 2013: 194).

0356512 (08/15)

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**Figure O-17. Key Observation Points 31 and 32**



**KOP 31.** Looking northwest towards the Decker Alternative from Tongue River Road  
(Summer 2013: 186).



**KOP 32.** Looking northwest towards the Decker Alternative from Tongue River Road  
(Summer 2013: 56).

0056512 (03/15)

**Figure O-18. Key Observation Points 33 and 34**



**KOP 33.** Looking northeast towards the Amish community and the Tongue River, Colstrip, Tongue River Road, and Moon Creek Alternatives from Tongue River Road (Summer 2013: 914).



**KOP 34.** Looking east towards the Tongue River, Colstrip, Tongue River Road, and Moon Creek Alternatives from Tongue River Road on the Northern Cheyenne Indian Reservation (Summer 2013: 889).

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Figure O-19. Spring Key Observation Points. April 15–17, 2013

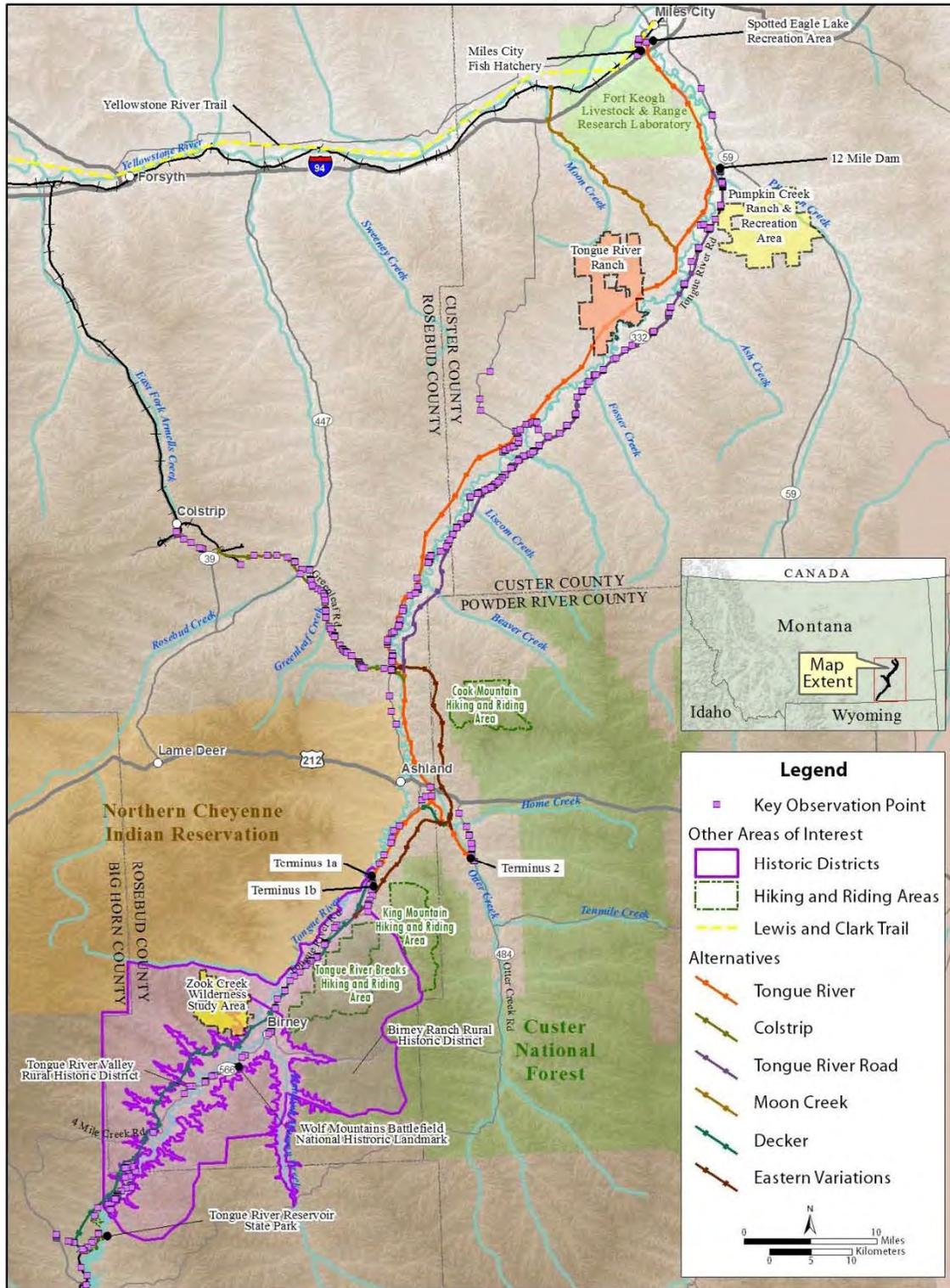


Figure O-20. Summer Key Observation Points. August 12–14, 2013

