

APPENDIX 3F
SUPPLEMENTAL NATIONAL TRAILS SYSTEM INFORMATION

SUPPLEMENTAL NATIONAL TRAILS SYSTEM INFORMATION
LONG CANYON PROJECT
ELKO COUNTY, NEVADA

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LIST OF ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
CMP	Comprehensive Management Plan
dB	Decibel
EIS	Environmental Impact Statement
GIS	Geographic Information System
I-80	Interstate 80
KOP	Key Observation Point
NEPA	National Environmental Policy Act of 1969
NHT	National Historic Trails
NPS	National Park Service
NST	National Scenic Trails
NTSA	National Trails System Act of 1968
TSF	Tailings Storage Facility
USC	United States Code
VRM	Visual Resource Management
WRSF	Waste Rock Storage Facility

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1.0 INTRODUCTION

National Scenic Trails (NST) and National Historic Trails (NHT) are part of the National Trails System, which is a network of scenic, historic, and recreation trails created by the National Trails System Act of 1968 [16 United States Code [USC] 1241-1251] (NTSA). Designation of a trail as either a NST or NHT is authorized only by an Act of Congress. A NST is a continuous trail that is at least 100 miles long, and provides non-motorized and exceptional recreational opportunities. A NHT is an extended, long-distance trail that is not necessarily managed as continuous but follows as closely as possible and practicable the original trails or routes of travel of national historic significance, such as settlement of the western United States. The purpose of a NHT is to identify and protect the historic route, remnants, and artifacts for public use and enjoyment (Bureau of Land Management [BLM], 2012a).

To adhere to recent BLM guidance for National Trails (see Section 1.1 for regulatory framework), this document focuses on the inventory and impact assessment of congressionally designated NHT, referred to herein as “National Trails”.

1.1 REGULATORY FRAMEWORK

Federal agencies must consider the effects of their actions on National Trails under the National Environmental Policy Act of 1969 (NEPA) and the NTSA (16 USC 1246). The NTSA states that other uses along a National Trail that would not substantially interfere with the nature and purpose of the trail may be permitted by the Secretary charged with the administration of the trail. Reasonable efforts shall be made to provide sufficient access opportunities to such trails and, to the extent practicable, efforts shall be made to avoid activities incompatible with the purposes for which such trails were established (16 USC 1246). Section 5 of the NTSA requires “a protection plan for any high-potential historic sites or high-potential route segments.”

A trail must undergo a National Trail Feasibility Study prior to its Congressional designation as either an NST or NHT. While a trail is undergoing a National Trail Feasibility Study, or when it has been recommended as suitable for designation and Congress has not yet acted, the BLM shall manage the values, setting, and characteristics of the trail in accordance with the Federal Land Policy and Management Act of 1976. After Congressional designation, a trail comprehensive management plan (CMP) must be developed. The CMP is used by various agencies in the development of land use planning documents (e.g., BLM Field Office resource management plans) (BLM, 2013).

BLM implementation of the requirements established by the NTSA are found within BLM manuals 6280, 6250, and 8353 (BLM, 2012a; 2012b; 2012c). For the purposes of NEPA and the analysis addressed in this Environmental Impact Statement (EIS), BLM Manual 6280

(2012a) served as the primary regulatory guidance. This manual provides policy direction regarding the BLM management approach and NEPA analysis requirements for National Trails.

As part of the NEPA analysis, for any implementation-level action proposed or that may potentially affect National Trails or trails under feasibility study, the BLM shall describe and analyze the potential impacts to the nature and purposes of the National Trail, and the National Trail resources, qualities, values, and associated settings and the primary use or uses (BLM, 2013). Among other things, the BLM shall also coordinate with the National Trail administering agency during the environmental review and land use planning processes regarding the establishment of any National Trail Management Corridor.

A National Trail Management Corridor is the area of land that is of sufficient width to encompass resources, qualities, values, and associated settings, and the primary use or uses of a particular National Trail or segment of National Trail (BLM, 2012a). Thus, the current conditions within a National Trail Management Corridor effectively comprises the existing affected environment associated with the trail. Formal establishment of a National Trail Management Corridor is accomplished through the land use planning process at the time of development of the resource management plan or amendment of the resource management plan (BLM, 2013).

1.2 ISSUES IDENTIFIED FOR ANALYSIS

No evidence of National Trails was encountered during project-specific cultural resource inventories of the Long Canyon Mine project area (Berg, 2012). Thus, geographic information systems (GIS) data published by the National Park Service (NPS) identifying the location of National Trails (2011) were used to determine if any National Trails with no remaining evidence occur within the area of analysis. The NPS GIS data identified a segment of the Hastings Cutoff of the California Trail as crossing the southern portion of the project area (Figure 1).

The Hastings Cutoff, developed by Lansford Hastings in 1846, was an alternative route to the California Trail for emigrants to travel to California (NPS, 1999). The Hastings Cutoff diverged from the California Trail in Wyoming, passed through the Wasatch Range and crossed the Great Salt Lake Desert in Utah before entering into Nevada and rejoining the California Trail about seven miles west of modern Elko, Nevada. The Hastings Cutoff was not used after 1850 (NPS, 1999). The California Trail, including Hastings Cutoff is a designated NHT. The section of Hastings Cutoff that NPS has mapped across the project area in GIS data (2011) is part of a designated high-potential segment of the California Trail (NPS, 1999). No other National Trails are known or mapped within the area of analysis. Trails undergoing a National Trail Feasibility Study or trails that have been recommended as suitable for designation but for which Congress has yet to act are not known to occur within area of analysis.

2.0 AFFECTED ENVIRONMENT

2.1 DATA SOURCES AND METHODOLOGY

As stated in Section 1.2, NPS GIS data (2011) was used to determine the approximate location of National Trails within the project area or within proximity to the project area. Hastings Cutoff, part of the California Trail, was the only National Trail mapped within the area. A National Trail Management Corridor has not been established for Hastings Cutoff or the California Trail in the *Proposed Wells Resource Management Plan and Final Environmental Impact Statement* (BLM, 1983) or the *Record of Decision: Wells Resource Management Plan: Wells Resource Area* (BLM, 1985). Thus, a National Trail study corridor was developed in context with the proposed Long Canyon Mine project to inventory, and assess impacts to, the National Trail (i.e., Hastings Cutoff) in terms of resource, values, qualities, and associated settings. The study corridor used for the National Trail within the area of analysis measured approximately 0.5 mile from either side of the trail centerline, as depicted in the NPS GIS data (2011), for a total width of 1 mile (Figure 1).

Based on the guidance provided in BLM Manual 6280 and the nature of the project activities that would result from implementation of the Proposed Action and/or North Facilities Alternative, the visual setting and noise resources were considered in inventorying the affected environment of the National Trail. The specific methodology used for the characterization of the existing conditions relating to the visual setting and noise resources is described below. The methodology described below was also used for the No Action Alternative.

2.1.1 Visual Setting

According to BLM manual 6280 (2012a), BLM designated Visual Resource Management (VRM) classes should be used for the management of the visual setting of a National Trail Management Corridor. Accordingly, the BLM VRM system provided the basis for the methods used to assess and characterize the existing visual setting of the National Trail study corridor within the area of analysis. The VRM system was also used for inventorying visual resources for the proposed project, independently of National Trails, as described in Section 3.14 of this EIS document. Thus, the methods used for the National Trail study corridor, in the context of this document, are the same as described in Section 3.14 of the EIS. However, the area of analysis and the Key Observation Point (KOP) locations that were selected for the National Trail study corridor are different than those described and used for visual resources analysis in Section 3.14 of the EIS.

The area of analysis for visual setting of the National Trail study corridor is bound to the west by the ridgeline of the Pequop Mountains and to the east by the Toano Range (Figure 2). The area of analysis extends approximately two miles south of the project area and extends north to the Interstate 80 (I-80) corridor. This area was selected for the area of analysis because proposed project facilities would not be visible in context with the National Trail study corridor from outside of this area. The KOP locations selected for the National Trail study corridor are identified and described below in Section 2.2.1.

Inventory data, including observations and photographs collected during prior but recent field visits were used to characterize the existing visual setting from within National Trail study corridor. Other data and information sources used for characterizing the existing visual setting of National Trail trail corridor include *BLM Manual H-8410-1: Visual Resource Inventory* (BLM, 1986a) and BLM VRM class areas GIS data (BLM, 2002). A BLM Visual Contrast Rating Sheet was completed from each KOP for Proposed Action and North Facilities Alternative and are included as an attachment at the end of this document.

2.1.2 Noise Resources

There are several factors which affect the propagation of sound: geometric spreading factors, atmospheric factors, and surface factors. Geometric spreading refers to spreading of sound energy from expansion of sound waves as the distance from the noise source increases (Truax, 1978). In other words, as distance from a noise source increases, the sound energy from noise produced at the source becomes less concentrated. With no sound barriers or mitigation (e.g., sound walls, band of dense trees, etc.), sound produced from a point source radiates equally in all directions from the source. Each time the distance from the point source is doubled, the sound level is reduced approximately 6 decibels (dB) (Truax, 1978; ATCO Noise Management, 2003). Each time the distance from a linear noise source, such as traffic noise from a highway, is doubled, the geometric spreading reduces sound level by approximately 3 dB (Truax, 1978; NoiseNet.org, 2008). This property of noise is often referred to as the *doubling of distance rule*. Atmospheric and surface factors refer to weather conditions and ground cover through which sound energy travels from its source. Either factor may combine with geometric spreading to reduce sound levels at a rate greater than for geometric spreading alone (Truax, 1978).

An existing noise study for the proposed project was prepared by J.C. Brennan and Associates, Inc. (2013). The noise study established the existing ambient noise level at several sites within the project area. The *doubling of distance rule* was applied to two of the sites in the noise study in order to model the ambient noise levels within the National Trail study corridor, which was used as the area of analysis for noise resources. Only geometric spreading factors were applied to ensure that the existing ambient noise levels modeled in the study corridor represented the maximum level likely to occur under normal, typical conditions. Additional sound level reduction from atmospheric or surface factors were not applied when developing the model.

2.2 EXISTING CONDITIONS

The existing conditions of the visual setting and noise resources described below apply to the Proposed Action and North Facilities Alternative, as well as the No Action Alternative.

2.2.1 Visual Setting

According to the BLM Visual Resource Management Areas GIS data (BLM, 2002), the area of analysis contains BLM-administered public lands that have been assigned to VRM Class II, III, and IV. However, the area within the plan boundary has been designated as BLM VRM Class III and IV. The majority of the area within the plan boundary, and the entire National Trail study

corridor within the area of analysis, has been designated as VRM Class IV (Figure 2). According to BLM Manual 8431-1 (BLM, 1986b), the objectives of BLM VRM Class IV provides for management activities that require major modifications of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

Two KOPs were selected for the analysis of potential impacts on the visual setting of the National Trail study corridor within the area of analysis. One of the KOPs (KOP-CT1) is located where the California Trail crosses an existing railroad grade, just east of the project boundary in Section 6, Township 35 North, Range 67 East (Figure 2). This location was selected for KOP-CT1 because the railroad grade is several feet higher in elevation than the surrounding valley floor and provides an optimal vantage point of the trail corridor and the proposed project components. The second KOP (KOP-CT2) is located in Section 11, Township 35 North, Range 66 East, within the Long Canyon plan boundary (Figure 2). This location was selected for KOP-CT2 because views of the proposed project components would be readily visible in context with the National Trail study corridor from this location. A description of the existing visual setting from each KOP is provided below.

KOP-1

The foreground-middleground zone of the landscape consists of Goshute Valley, which has a wide, flat form and no distinct line elements. Nearly the entire valley floor within view of KOP-CT1 is vegetated. Vegetation cover consists mostly of low shrubs and is fairly uniform because there appears to be very little species diversity. In the immediate foreground-middleground zone area, closest to the KOP, shrubs can be distinguished from one another. When viewed individually, each shrub has a small, generally globular form. The foliage gives each shrub the appearance of a coarse dense texture and a generally muted color consisting mostly of gray and very pale green. The gray and light tan colors of valley soils are more prominent than the vegetation colors in the area where shrubs are most sparsely distributed.

Shrubs cannot be distinguished from one another in areas foreground-middleground zone more distant from KOP-CT1. Instead, the shrubs appear as a collective mass of vegetation cover that has a large flat block-shaped form spanning the width of the viewshed. The color of the vegetation ranges from pale green to olive, and slight variations in the color patterns create subtle horizontal lines that weakly separate the block form into flat strips.

Structures visible in the foreground-middleground zone consist of several unpaved dirt roads that cross Goshute Valley. The roads contribute relatively straight line and form elements that are thin and light tan in color. One unpaved road follows the NPS mapped centerline of the Hastings Cutoff almost exactly for approximately 1.6 miles. At the most distant areas of the foreground-middleground zone the Big Springs ranch is visible and unpaved road density is greater. At its closest point, the Big Springs Ranch is approximately 1.6 miles away from the

National Trail study corridor for the Hastings Cutoff. The ranch structures contribute block shaped forms, but the forms are small due to the distance separating them from KOP-CT1 and the Hastings Cutoff. The existing railroad grade at the location of KOP-CT1 would also be visible and contribute long, generally straight lines to the existing foreground-middleground zone.

The background zone is comprised of the east slope of the Pequop Mountains. The crest of the mountains is marked by rugged peaks and ridges, which create a jagged and irregular form and a strong irregular silhouette line against the backdrop of the sky. Ridgelines between peaks and the floor of Goshute Valley result in weak triangular-shaped forms. A strong horizontal line is formed where the flat valley floor and base of the mountains meet.

Individual trees comprising the coniferous vegetation that covers most of the Pequop Mountains cannot be distinguished from KOP-CT1. Instead, vegetation appears as large irregular-shaped forms that are generally dark green in color. Where vegetation cover is absent on some of the highest peaks of the mountains, the tan and slate gray color of soils and rocks are visible. Colors in the most distant areas of the background zone generally appear to have low chroma.

Unpaved roads along the base and slopes of the Pequop Mountains are the only structures visible in the background zone of the viewshed. A concentrated network of unpaved roads appearing to be associated with mining exploration is visible near the base of the mountains, in the direct line of sight from KOP-CT1. The roads have a thin, relatively straight line that is very light tan in color. The light color and distinct line element contrasts fairly sharply with the dark green and irregular-shaped forms of the background zone vegetation. There are no buildings visible in the background zone of the viewshed.

KOP-CT2

The foreground-middleground zone of the landscape consists of Goshute Valley, which has a wide, flat form and no distinct line elements. Almost the entire valley floor within view of KOP-CT2 is vegetated with the exception of a few isolated, small barren patches within close proximity to the KOP. Because KOP-CT2 is located in the wetland drainage area below Big Springs, vegetation cover in the immediate foreground-middleground zone, closest to the KOP, consists of very short forbs, primarily povertyweed (*Iva axillaris*). Forbs are generally a lush green color with a rough stippled texture. Vegetation in upland areas of the foreground-middleground zone is dominated by mixed shrub species that appear the same as described for KOP-CT1. Barren patches are generally light tan to very light brown in color and have a very fine stippled texture.

The many unpaved roads visible in the foreground-middleground zone from KOP-CT1 are not visible from KOP-CT2 because KOP-CT2 is located within a wetland drainage area that lessens the distance between the viewing angle and the ground surface. Big Springs Ranch is visible at the far boundary of the foreground-middleground zone, approximately 2.4 miles away from KOP-CT2. The ranch contributes small block shaped forms that are dark gray in color.

The east slope of the Pequop Mountains comprises that background zone of KOP-CT2. Rugged peaks and ridges along the crest of the mountains create a jagged and irregular form and a strong irregular silhouette line against the backdrop of the sky. Ridgelines descending from the crest to the floor of Goshute Valley result in weak triangular-shaped forms. A strong horizontal line is formed where the flat valley floor and base of the mountains meet. Individual trees comprising the coniferous vegetation that covers most of the Pequop Mountains cannot be distinguished from KOP-CT1. Instead, vegetation appears as large irregular-shaped forms that are generally dark green in color. Where vegetation cover is absent on some of the highest peaks of the mountains, the tan and slate gray color of soils and rocks are visible. Colors in the most distant areas of the background zone generally appear to have low chroma.

Unpaved roads on the lower side slopes of the Pequop Mountains are the only structures visible in the background zone of the viewshed. The concentrated network of unpaved roads appearing to be associated with mining exploration that is visible from KOP-CT1 is also visible from KOP-CT2. The roads have a thin, relatively straight line that is very light tan in color. The light color and distinct line element contrasts fairly sharply with the dark green and irregular-shaped forms of the background zone vegetation.

2.2.2 Noise Resources

In general, vehicle traffic on I-80 and ranching operations associated with Big Springs Ranch are the primary sources of most ambient noise within the project area. These noise sources also likely contribute to most ambient noise within the National Trail study corridor, including areas outside of the project area. Wind, particularly wind gusts, also contribute to the existing ambient noise levels in the area (J.C. Brennan & Associates, Inc., 2013). Existing ambient noise levels within the National Trail study corridor are loudest where the study corridor approaches the I-80 corridor, east of the project area. Average ambient noise levels in this portion of the trail corridor are estimated to be approximately 65.2 dB. Ambient noise levels within the National Trail study corridor decrease to approximately 50 dB near the Big Springs Ranch. South of the ranch, noise levels continue to decrease, and are reduced to approximately 35 dB at the southernmost boundary of the project area. Figure 3 shows the range of estimated ambient noise levels throughout the National Trail study corridor located within the project area and surrounding proximity.

3.0 EFFECTS ANALYSIS

3.1 ANALYSIS METHODOLOGY

Each of the alternatives considered in the EIS was analyzed for its potential to result in effects on the affected environment of the Hastings Cutoff, specifically the existing visual setting and noise resources. The following are general descriptions of the terms used through Section 3.0 to describe the intensity of potential effects on the nature and/or purpose of a National Trail as result of the construction and/or operation of the Proposed Action or the North Facilities Alternative, as well as the No Action Alternative.

- **Major Impact** – The intended experience of the National Trail, derived from the nature and purpose in the NTSA, is no longer possible or is substantially compromised based on the construction and operation of the proposed project. Impacts cannot be effectively mitigated.
- **Moderate Impact** – The intended experience of the National Trail is affected but would not be substantially compromised, and can be effectively mitigated.
- **Minor Impact** – The intended experience of the trail is affected but would not be substantially compromised. Mitigation is most likely to not be necessary.
- **Negligible Impact** – The intended experience of the trail would be affected negligibly. Mitigation would not be necessary.

The methods used in the analysis of potential effects and the criteria used to determine the intensity of potential effects on the visual setting and noise resources are described in Sections 3.1.1 and 3.1.2, respectively.

3.1.1 Visual Setting

The following indicators were considered when analyzing the potential effects that each alternative would have on the visual setting of National Trail study corridor:

1. Degree of contrast or conflicts with established BLM VRM class objectives; and
2. Change in the scenic quality of the existing visual landscape of the National Trail study corridor that conflict with the intended purpose(s) or use(s), or the setting of the National Trail.

The assessment of potential impacts on the visual setting of the National Trail study corridor resulting from the Proposed Action and the other alternatives was completed using the BLM Visual Contrast Rating System. Under the BLM Visual Contrast Rating System, the extent of an alternative's impact is dependent on the degree of visual contrast the proposed project would have with the existing landscape features in terms of form, line, color, and texture. A detailed description of the BLM Visual Contrast Rating System is provided in BLM Manual H-8431, *Visual Resource Contrast Rating* (BLM, 1986b).

A comparison of the proposed project features that would be visible under each alternative and the existing landscape features was performed from KOP-CT1 and KOP-CT2. Specifically, the form, line, color, and texture elements that characterize the components of proposed project (e.g., heap leach facility, WRSF, etc.) were identified and compared with the form, line, color, and texture elements of the existing landscape features. The amount of difference among the form, line, color, and texture elements of the proposed project and the existing visual setting determines the degree of contrast an alternative would be expected to have. The results of this comparison and expected degree of contrast were applied to the effect indicators listed above to determine the potential for each alternative to impact visual resources, and thus the visual setting of National Trail study corridor. If an alternative was found to be incompatible with the designated VRM class objectives, the impact was considered either major or moderate, depending on the level of conflict with the objectives. Compatibility with the objectives of the designated BLM VRM Class was considered either a minor or negligible impact, depending on whether the visual intrusion of the project approached the acceptable limits of visual alterations assigned to the VRM Class. It should be noted that a project component could have strong or moderate contrast within the existing landscape, while the proposed project could have an overall minor to negligible impact because some degree of contrast is permissible and allowed under each VRM Class.

Although the VRM Class designation of the BLM-administered public lands within the National Trail study corridor located within the area of analysis is currently Class IV, BLM Manual 6280 states that VRM Class IV should not be considered for use within a National Trail Management Corridor. Thus, project components located within an anticipated future National Trail Management Corridor for the Hastings Cutoff were also assessed for compliance with the visual objectives of BLM VRM Class III. The objective of VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape (BLM, 1986b).

3.1.2 Noise Resources

Existing ambient noise levels presented in Section 2.2.2, representative of baseline conditions, were evaluated for their potential to be affected from construction and operation of the proposed project as a result of the implementation of each alternative considered in this EIS. The noise analysis presented within this section is based on information presented in a noise study prepared by J.C. Brennan and Associates, Inc. (2013). For purposes of this analysis, construction noise and operational noise within the National Trail study corridor was determined by extrapolating data contained in the noise study. Temporary or permanent increases of less than 5 dB within the National Trail study corridor would be considered to have no impacts on noise levels. The threshold for no impacts was set at 5 dB because an increase of 5 dB is generally required before the human ear detects a meaningful change in noise level.

3.2 DIRECT AND INDIRECT EFFECTS

3.2.1 Proposed Action

Visual Setting

The proposed mine pit would be the only component of the proposed project located in the background zone and visible from KOP-CT1 or KOP-CT2. The proposed pit would appear as an irregular-shaped form that is generally light gray in color from both KOP locations. The light gray color would have a strong degree of contrast with the dark green color of the surrounding vegetation. The contrasting color of the mine pit would accentuate its irregular-shaped form, which would make it readily noticeable from KOP-CT1 and KOP-CT2. Slope benches along the pit wall would add weak, subtle lines that are horizontal and straight to the background zone. Although there are no horizontal lines in the background zone, the addition from the proposed mine pit would have negligible contrast because of their subtleness.

The other components of the proposed project that would be visible from either KOP are located within the foreground-middleground distance zone. Proposed project components that would be visible from both of the KOPs and consist of landforms, as opposed to structures, include the WRSF, heap leach facility, a growth medium material stockpile, borrow site, and a class III landfill. Due to its relatively larger size, the proposed waste rock storage facility (WRSF) would be the most discernible among these project components. The WRSF would add a wide, elongated and generally flat trapezoid-shaped form to the foreground-middleground distance zone. The color of the WRSF would appear light gray to dark gray, depending on specific rock zones encountered when mining. From KOP-CT1, the upper portions of the WRSF would be seen against the background zone, creating a strong angular silhouette line with the dark green vegetation in the background. From KOP-CT2, the upper portions of the WRSF would be viewed against the backdrop of the blue sky, which would also create a strong angular silhouette line. The proposed WRSF would have a strong degree of contrast due to its trapezoidal form, height above the valley floor, and strong angular silhouette line.

The heap leach facility would have a nearly identical form, line, color, and texture as the WRSF, but would be smaller in size, both width and height. The growth medium material stockpile would appear as a small trapezoidal form, similar to the WRSF and heap facility, but much smaller. The color of the growth medium material stockpile would be green and olive. The class III landfill would appear very similar to a growth medium material stockpile, but not as tall or wide, and would typically be dark brown to tan in color. The heap leach facility would have a moderate degree of contrast with the existing visual setting, while the growth medium material stockpiles and Class III landfill would have a negligible to minor degree of contrast.

The borrow site visible from both KOPs would be partially located within the National Trail study corridor. The borrow site would appear to have a flat, horizontal form that is similar to the form of the land features in this zone. However, the color would be brown and it would have no distinct texture. The brown color and absence of texture would cause the borrow site to have a minor degree of contrast with the surrounding vegetation cover. The minor degree of contrast would be expected to prevent the borrow site from attracting the attention of the casual observer

or dominating the view from KOP-CT1 or KOP-CT2. A second borrow site, not visible from either KOP, would also be located partially within the National Trail study corridor.

The tailings storage facility (TSF) would only be visible from KOP-CT1 due to the viewing angle selected from KOP-CT2. The TSF would introduce a low, flat form element to an area of the foreground-midground zone most distant from the KOP. The form would appear trapezoid-shaped, much like the shape of the proposed WRSF and heap leach facility. The TSF would appear light gray to dark gray in color and have no discernible texture from KOP-CT1. The color of the TSF would have a minor degree of contrast with the color of the existing vegetation surrounding it. However, the low, flat form of the facility would repeat the flat form of the vegetation in this area of the foreground-midground zone, helping to reduce its contrast. The minor contrast in color and the flat quality of the TSF form element create a subtle straight line across the top and bottom edges of the facility. These lines would have a negligible degree of contrast because there are subtle horizontal lines due to variations in the vegetation colors in this area, and because they would be weak lines. The proposed TSF would have a minor degree of contrast with the existing landscape because the form and line elements it would add repeat those found in the foreground-midground zone.

The proposed project components consisting of structures that would be visible from both KOP-CT1 and KOP-CT2 include several miles of mine fence and power poles and conductor wire associated with several miles of the proposed overhead power line. Sections of the mine fence and the power line would also be located within the National Trail study corridor. The mine fence would consist of fence posts and strand wire between posts. The posts would add short and thin vertical lines that are dark brown to dark gray in color, depending on whether wooden or metal posts are used. The strand wire would add extremely thin, straight horizontal lines. Strand wire would only be visible between posts within relatively close proximity to KOP-CT1 or KOP-CT2. The form and line elements of fence would have a minor degree of contrast with existing visual setting. The colors would have a weak degree of contrast, and texture would not contrast. Power poles would add thin, tall, vertical form and line elements to the foreground-midground zone. Line elements would also appear parallel with one another and generally evenly spaced. The power poles would appear very dark brown in color and have no discernible texture from either KOP. Overhead conductor wires spanning between power poles would contribute very thin, curvilinear lines that are dark gray in color. The form and line elements added to the existing visual setting from the proposed power line would cause it to have a moderate degree of contrast.

Mine haul roads would also be visible from both KOP locations and would contribute relatively straight line and form elements that are light tan in color. The line, form, color, and texture elements of the mine haul roads would repeat the elements associated with existing unpaved roads in the foreground-midground zone and would have a negligible degree of contrast.

Several other project structures would be visible from KOP-CT1 that would not be visible from KOP-CT2 because the proposed heap leach facility would obstruct them from sight at KOP-

CT2. These structures include the mine support and mill facilities, a lime silo, and a communications tower. The mine support and mill facilities would appear as small, rectangular forms with straight lines at the edge of the forms. The facilities would appear as dark gray and have low chroma because they would be located at the area of the foreground-middleground zone most distant from KOP-CT1. The proposed lime silo and communications tower would be located next to the mine support and mill facilities, and both would also appear to be gray and low chroma in color. Although the silo would likely be cylindrical, it would appear to have a rectangular form from KOP-CT1 because it would appear to be flat. The tower would appear as a tall, thin form, with similar tall and thin line elements. The form and line elements of these project structures would have a moderate degree of contrast with existing visual setting. The color of these structures would have a weak degree of contrast, and texture would not contrast.

At the time of permanent cessation of mining and ore processing activities, most components of the proposed project would undergo final reclamation consistent with the approved Reclamation Plan and a Final Permanent Closure Plan. Final reclamation would involve decommissioning, demolition or disposition of facilities; contouring and grading; growth medium replacement; growth medium sampling for nutrient analyses; seeding, planting and mulching; and, maintenance and monitoring. Reclamation seeding and planting would establish on the WRSF, heap leach facility, TSF, and Class III landfill. Thus, the color and the texture of these project components would be fundamentally identical to the color and texture of the existing vegetation cover surrounding them. The form and line elements associated with the WRSF, heap leach facility, TSF, and landfill would persist after final closure. However, because the color and texture of these components would repeat those in the existing landscape after reclamation, the degree of contrast that these elements would have would be reduced.

Both borrow sites would be reclaimed so as to remove them completely from the landscape, including the portion of the landscape consisting of the National Trail study corridor. The proposed mine fence would also be removed from the trail corridor as well as all other areas at the time of final reclamation. The contrast that the borrow sites and mine fence would have with the landscape during operation would not persist after cessation of mining and ore processing.

The proposed mine pit would not be reclaimed and would continue to appear nearly the same after the cessation of mining and processing, with the only noticeable difference being slight variations in the color due to weathering of the rock in the pit wall. The slight color variations from weathering would not reduce or increase the strong degree of contrast that the proposed pit would have with the existing landscape during operation of the proposed project. Additionally, the proposed power lines and several mine support structures, including the mine office and truck shop would not be reclaimed. Thus, the degree of contrast that these project components have with the existing landscape during operation of the proposed project would persist after permanent cessation of mining.

The addition of the proposed pit and WRSF to the existing landscape would result in strong contrast with the basic elements that characterize the existing landscape. Both of these project

components would be expected to be the major focus of viewer attention from KOP-CT1 and KOP-CT2 during the operational life of the proposed project. Reclamation vegetation would be expected to reduce the contrast of the WRSF, and it would not be expected to continue to be the major focus of attention after the operational life of the project. The level of change to the existing landscape that would result from the addition of the other proposed project components that would be visible from KOP-CT1 and KOP-CT2 would be less than high. These components would have negligible to moderate degree of contrast with the existing landscape. Reclamation would further reduce the contrast that these components would have beyond the life of the project. Accordingly, the visual contrast and intrusion of the proposed project would be compliant with the management objectives of BLM VRM Class III and Class IV. The Proposed Action would not conflict with established BLM VRM class objectives, and therefore, effects on the visual setting of the National Trail study corridor associated with the first effects indicator identified in Section 3.1.1 would be **negligible**.

The second effects indicator identified in Section 3.1.1 pertains to changes in the scenic quality of the existing visual setting of the National Trail study corridor that conflicts with the intended purpose(s) or use(s) of the National Trail. Many components of the proposed project would be visible from within the National Trail study corridor and represent a change in scenic quality, but the change would be minor because the existing visual setting contains similar modifications, including I-80 and vehicle traffic on I-80. Additionally, most project components, including those located within or partially within the National Trail study corridor would be reclaimed at the time of permanent cessation of mining and ore processing activities. Impacts related to the second indicator of visual setting effects would be **minor**.

Noise Resources

Construction of the proposed project would result in estimated noise levels within the National Trail study corridor ranging from approximately 45 dB to less than 35 dB, depending on the construction activity's proximity to the trail corridor. The estimated noise levels during construction would not exceed existing ambient noise levels within the study corridor. Thus, construction noise would not be expected to have noticeable effects on existing ambient noise levels.

Operation of the proposed project would result in estimated noise levels within the National Trail study corridor ranging from approximately 45 dB to less than 35 dB, depending on the type of operation activity being performed and its proximity to the trail corridor. These levels would not exceed the existing ambient noise levels within the study corridor. Accordingly, the ambient noise levels within the National Trail study corridor would not be affected by project noise.

3.2.2 North Facilities Alternative

Visual Setting

The proposed mine pit would appear the same regardless of the potential implementation of the Proposed Action or the North Facilities Alternative. Thus, the light gray color of the mine pit would accentuate its irregular-shaped form, which would make it readily noticeable from KOP-

CT1 and KOP-CT2. The degree of contrast the pit would have with the existing landscape would be strong, including after final reclamation of the proposed project has been performed.

A growth medium material stockpile, communications tower, and road to access the tower would also be visible in the background zone from both KOP locations. These components of the project would be separated from KOP-CT1 by approximately 4.6 miles and KOP-CT2 by approximately 3.3 miles. The growth medium material stockpile would appear as a trapezoidal form that is very small due to the viewing distance from both KOPs. The communications tower would appear as a thin vertical form, but would also appear relatively small or low to the ground because of the viewing distance. The tower and the growth medium material stockpile would both appear as gray and low chroma colors with no distinguishable texture. Both would have a negligible degree of contrast with the existing landscape. The access road would add straight line and form elements to the landscape, and would be light tan in color. The access road would repeat the elements associated with existing unpaved roads visible in the background zone. Thus, the tower access road would not contrast with the existing landscape.

The other components of the proposed project that would be visible from either KOP are located within the foreground-midleground distance zone. Project components that would be visible from both KOP-CT1 and KOP-CT2 include the WRSF, growth medium material stockpiles, a borrow site, and several miles of mine fence and overhead power line. Due to its relatively larger size, the proposed WRSF would be the most discernible among these project components. The WRSF would add a wide, elongated and generally flat trapezoid-shaped form to the foreground-midleground distance zone. The color of the WRSF would appear light gray to dark gray, depending on specific rock zones encountered when mining. From KOP-CT1, the upper portions of the WRSF would be seen against the background zone, creating a strong angular silhouette line with the dark green vegetation in the background. From KOP-CT2, the upper portions of the WRSF would be viewed against the backdrop of the blue sky, which would also create a strong angular silhouette line. The proposed WRSF would have a strong degree of contrast due to its trapezoidal form, height above the valley floor, and strong angular silhouette line.

The form element of growth medium material stockpiles would appear as trapezoidal, and generally the same as the form of the WRSF, only much smaller in scale. The color of the growth medium material stockpile would be green and olive because vegetation cover would be maintained on their surface. Growth medium material stockpiles would have a negligible to minor degree of contrast due to their small size and color elements that are repetitive of those found in the existing landscape.

The borrow site visible from both KOPs would be partially located within the National Trail study corridor. The borrow site would appear to have a flat, horizontal form that is similar to the form of the land features in this zone. However, the color would be brown and it would have no distinct texture. The brown color and absence of texture would cause the borrow site to have a minor degree of contrast with the surrounding vegetation cover. The minor degree of contrast

would be expected to prevent the borrow site from attracting the attention of the casual observer or dominating the view from KOP-CT1 or KOP-CT2. A second borrow site, not visible from either KOP, would also be located partially within the National Trail study corridor.

Sections of the mine fence and the power line visible from both KOPs would also be located within the National Trail study corridor. The mine fence would consist of fence posts and strand wire between posts. The posts would add short and thin vertical lines that are dark brown to dark gray in color, depending on whether wooden or metal posts are used. The strand wire would add extremely thin, straight horizontal lines. Strand wire would only be visible between posts within relatively close proximity to KOP-CT1 or KOP-CT2. The form and line elements of fence would have a minor degree of contrast with existing visual setting. The colors would have a weak degree of contrast, and texture would not contrast. Power poles would add thin, tall, vertical form and line elements to the foreground-middleground zone. Line elements would also appear parallel with one another and generally evenly spaced. The power poles would appear very dark brown in color and have no discernible texture from either KOP. Overhead conductor wires spanning between power poles would contribute very thin, curvilinear lines that are dark gray in color. The form and line elements added to the existing visual setting from the proposed power line would cause it to have a moderate degree of contrast.

Mine haul roads would also be visible from both KOP locations and would contribute relatively straight line and form elements that are light tan in color. The line, form, color, and texture elements of the mine haul roads would repeat the elements associated with existing unpaved roads in the foreground-middleground zone and would not contrast with the existing landscape.

Although the heap leach facility would not be visible from KOP-CT2, the eastern approximately half of the facility would be visible from KOP-CT1. The heap leach facility would have a nearly identical form, line, color, and texture as the WRSF, but would be smaller in scale, with regard to both width and height. The heap leach facility would have a moderate degree of contrast with the existing visual setting.

At the time of permanent cessation of mining and ore processing activities, most components of the proposed project would undergo final reclamation consistent with the approved Reclamation Plan and a Final Permanent Closure Plan. Reclamation seeding and planting would cause vegetation to establish on the WRSF and heap leach facility, as well as most mine roads visible from the KOPs. Thus, the color and the texture of these project components would be fundamentally identical to the color and texture of the existing vegetation cover surrounding them. The form and line elements associated with the WRSF and heap leach facility would persist after final reclamation. However, because the color and texture of these components would repeat those in the existing landscape after reclamation, the degree of contrast that these elements would have would be reduced.

Both borrow sites would be reclaimed so as to remove them completely from the landscape, including the portion of the landscape consisting of the National Trail study corridor. The

proposed mine fence would also be removed from the trail corridor as well as all other areas at the time of final reclamation. The contrast that the borrow sites and mine fence would have with the landscape during operation would not persist after cessation of mining and ore processing.

The proposed mine pit would not be reclaimed and would continue to appear nearly the same after the cessation of mining and processing, with the only noticeable difference being slight variations in the color due to weathering of the rock in the pit wall. The slight color variations from weathering would not reduce or increase the strong degree of contrast that the proposed pit would have with the existing landscape during operation of the proposed project. Additionally, the proposed power lines would be retained after final reclamation. Thus, the degree of contrast that the power line would have with the existing landscape during operation of the proposed project would persist after permanent cessation of mining.

The addition of the proposed pit and WRSF to the existing landscape would result in strong contrast with the basic elements that characterize the existing landscape. Both of these project components would be expected to be the major focus of viewer attention from KOP-CT1 and KOP-CT2 during the operational life of the proposed project. Reclamation vegetation would be expected to reduce the contrast of the WRSF, and it would not be expected to continue to be the major focus of attention after the operational life of the project. The level of change to the existing landscape that would result from the addition of the other proposed project components that would be visible from KOP-CT1 and KOP-CT2 would be less than high. These components would have negligible to moderate degree of contrast with the existing landscape. Reclamation would further reduce the contrast that these components would have beyond the life of the project. Accordingly, the visual contrast and intrusion of the proposed project would be compliant with the management objectives of BLM VRM Class III and Class IV. The North Facilities Alternative would not conflict with established BLM VRM class objectives, and therefore, the potential effects on the visual setting of the National Trail study corridor associated with the first effects indicator identified in Section 3.1.1 would be **negligible**.

The second effects indicator identified in Section 3.1.1 pertains to changes in the scenic quality of the existing visual setting of the National Trail study corridor that conflicts with the intended purpose(s) or use(s) of the National Trail. Many components of the proposed project would be visible from within the National Trail study corridor and represent a change in scenic quality, but the change would be minor because the existing visual setting contains similar modifications, including I-80 and vehicle traffic on I-80. Additionally, most project components, including those located within or partially within the National Trail study corridor would be reclaimed at the time of permanent cessation of mining and ore processing activities. Impacts related to the second indicator of visual setting effects would be **minor**.

Noise Resources

Under implementation of the North Facilities Alternative, construction-related noise levels associated with the proposed project would not have any effects on existing ambient noise levels within the National Trail study corridor. Operation of the proposed project would not

result in noise levels that differ from the existing ambient noise levels within the National Trail study corridor. Thus, implementation of the North Facilities Alternative would be expected to have **no impacts** on the physical setting, characteristics, or uses of the National Trail study corridor, as they relate to noise resources.

3.2.3 No Action Alternative

The No Action Alternative includes the assumption that existing approved mineral exploration activities would continue within the area of analysis, as would livestock grazing. Vehicle traffic on I-80 would also continue. The effects that these activities cause on the existing ambient noise levels would not change, so no new impacts to the ambient noise levels within the National Trail study corridor would occur from the continuation of these activities. Also, under the No Action Alternative, the proposed project would not be constructed, so the visual impacts associated with construction and operation of the project would not occur. As such, the No Action Alternative would avoid all construction-related or operational changes to the visual setting of the area of analysis.

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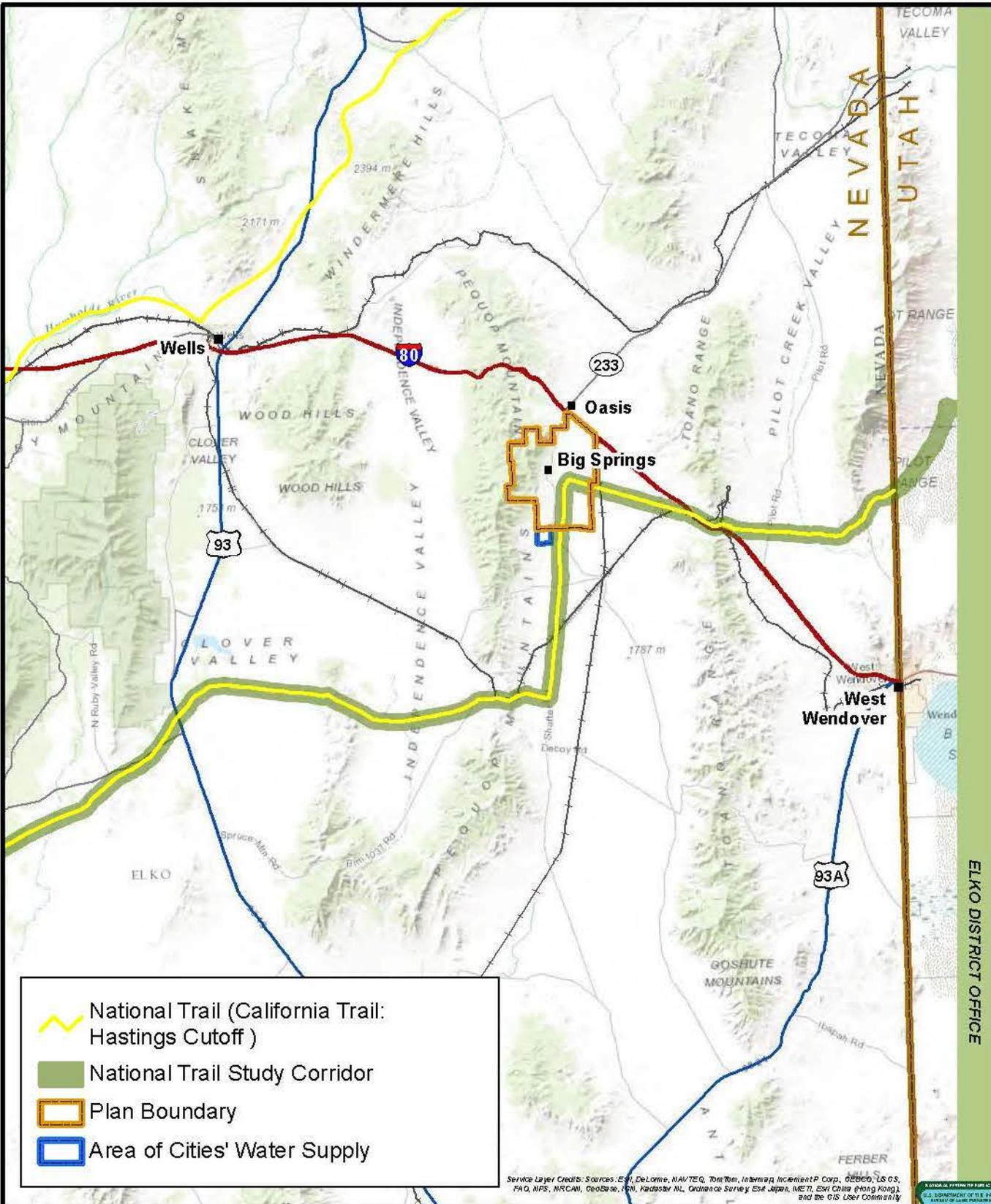
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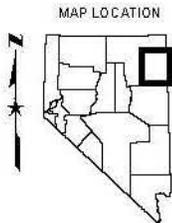
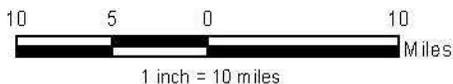
FIGURES



-  National Trail (California Trail: Hastings Cutoff)
-  National Trail Study Corridor
-  Plan Boundary
-  Area of Cities' Water Supply

Service Layer Credits: Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, Incorp Corp, GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), and the GIS User Community

**FIGURE 1 CALIFORNIA TRAIL
(HASTINGS CUTOFF)
NEWMONT MINING CORPORATION
LONG CANYON MINE PROJECT**



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ELKO DISTRICT
WELLS FIELD OFFICE

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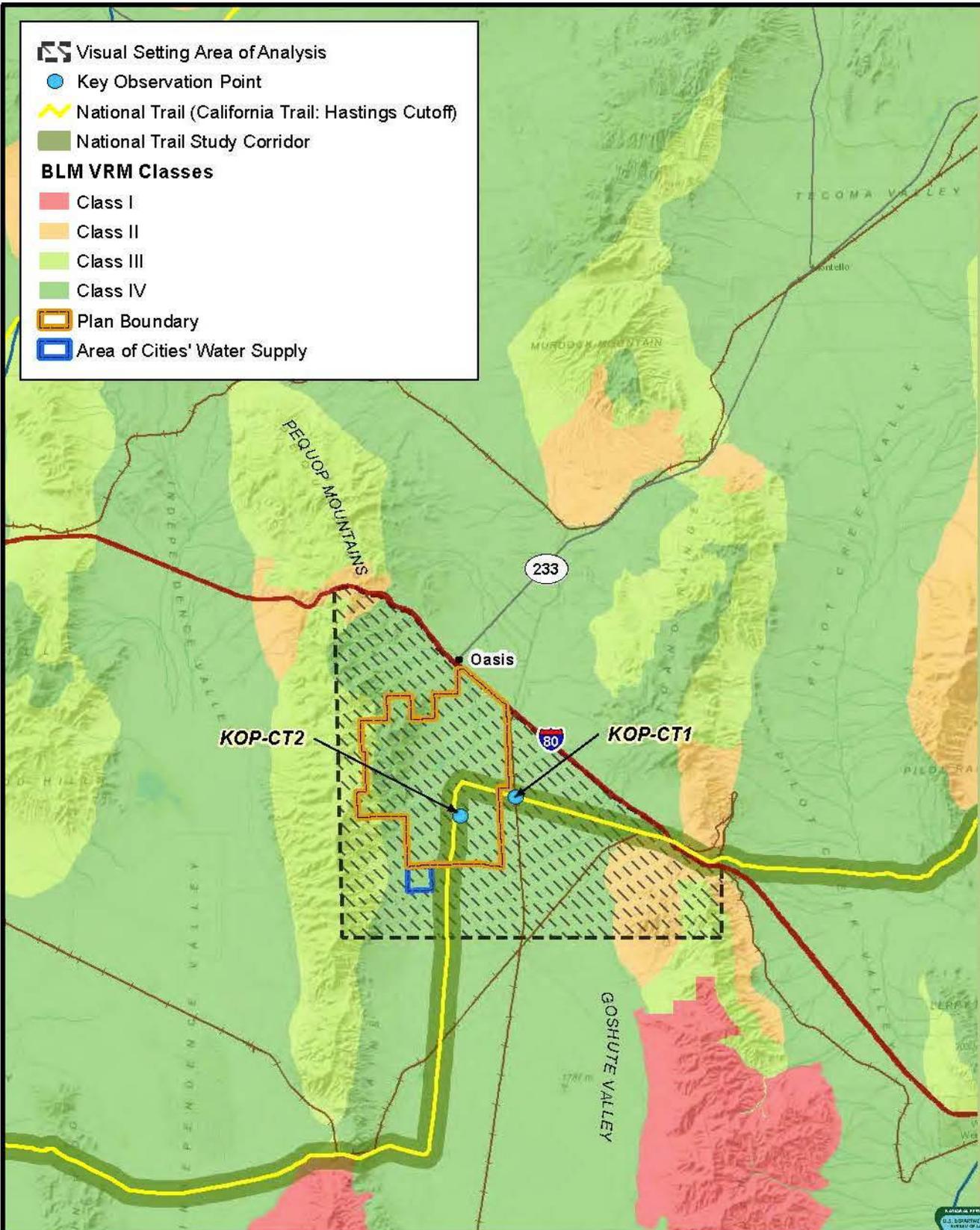
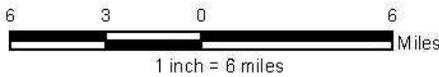
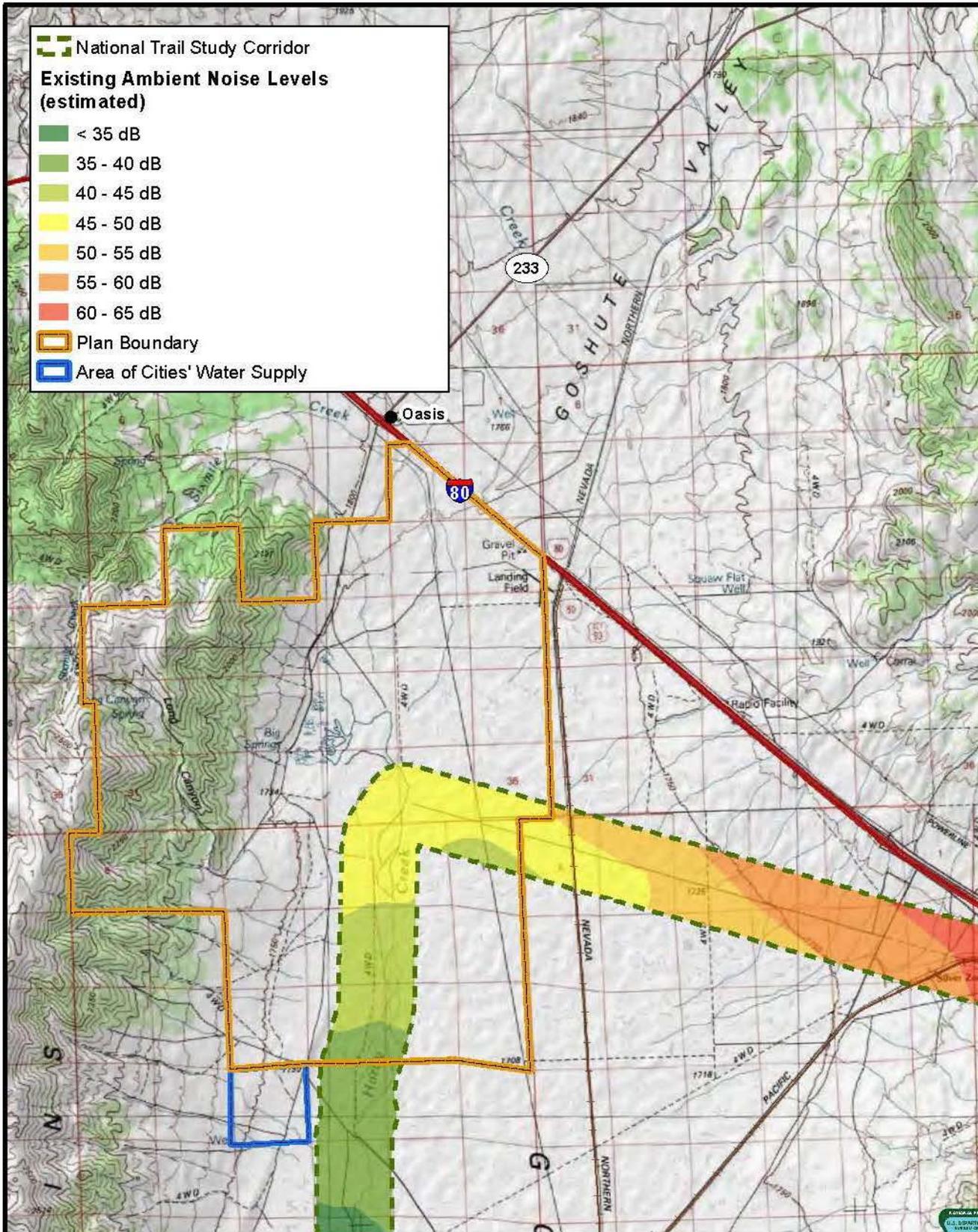
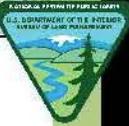


FIGURE 2 VISUAL SETTING ANALYSIS
NEWMONT MINING CORPORATION
LONG CANYON MINE PROJECT

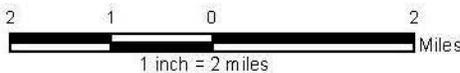


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**FIGURE 3 EXISTING AMBIENT NOISE LEVELS
NEWMONT MINING CORPORATION
LONG CANYON MINE PROJECT**



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ATTACHMENT 1

VRM Datasheets

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date December 26, 2013
District Elko, NV
Resource Area Wells
Activity (program) Minerals

SECTION A. PROJECT INFORMATION

1. Project Name <u>LONG CANYON MINE PROJECT</u>	4. Location Township <u>35 N</u> Range <u>6 E</u> Section <u>6</u> <u>Mount Diablo B & M</u>	5. Location Sketch 
2. Key Observation Point <u>KOP-CT1 (Proposed Action)</u>		
3. VRM Class <u>CLASS IV</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Foreground-Midground (FM): wide, flat Background (BG): weak triangular and strong irregular	FM: small globular form in areas close to KOP; large flat block form further from the KOP BG: large irregular shaped forms	FM: thin and straight, but not vertical (roads); small block form from Big Springs Ranch. BG: thin and zigzagging; also thin and straight
LINE	FM: no distinct lines BG: strong, irregular silhouette line of crest of mountains; strong horizontal line at base	FM: variations in color create impression of weak horizontal lines BG: no distinct lines	FM: thin and straight BG: thin and non-directional
COLOR	FM: gray and light tan BG: slate gray and tan; colors are generally low chroma	FM: pale green, olive, gray BG: dark green and low chroma	FM: light tan (roads); low-chroma gray (ranch) BG: very light tan
TEXTURE	FM: no distinct texture BG: no distinct texture	FM: coarse dense texture near the KOP BG: no distinct texture	FM: no distinct texture BG: no distinct texture

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	FM: low and flat trapezoidal; wide, elongated trapezoidal; generally large BG: large, contiguous, and asymmetrical	FM: generally large and trapezoidal forms that correspond with form of land features BG: pit would not be revegetated; however, removal of ex. vegifer pit would create large forms	FM: thin and tall; simple and parallel; low, small and rectangular BG: no structures visible
LINE	FM: weak, straight and horizontal; strong irregular BG: generally irregular, but weak, subtle straight lines from pit wall benches	FM: no distinct lines BG: no distinct lines	FM: thin; vertical and parallel; simple and regular; very thin and horizontal; straight BG: no structures visible
COLOR	FM: light to dark gray BG: light gray	FM: green to olive generally, also some tan BG: no distinct colors	FM: very dark brown; dark gray and low chroma BG: no structures visible
TEXTURE	FM: finely stippled nearer KOP; no distinct texture further from KOP BG: no distinct texture	FM: finely stippled and uniform; becoming indistinguishable with distance from KOP BG: no distinct texture	FM: no distinct texture BG: no distinct texture

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None		
ELEMENTS	Form	X				X				X				3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)
	Line	X						X		X				
	Color	X					X				X			
	Texture			X				X					X	
Evaluator's Names												Date		
George Dix												December 26, 2013		
JBR Environmental Consultants, Inc.														

SECTION D. (Continued)

Comments from item 2.

The irregular-shaped form and color of the proposed mine pit and the tall form and angular silhouette line of the proposed waste rock storage would not be repetitive of form and color elements found in the background zone of the existing landscape. The addition of the proposed pit and waste rock storage facility to the existing landscape would result in a high level of change because both would strongly contrast with the basic elements that characterize the existing landscape. Both of these project components would be expected to be the major focus of viewer attention from KOP-CT1 during the life of the project. The level of change to the existing landscape that would result from the addition of the other proposed project components that would be visible from KOP-CT1 would be less than high. These components would have negligible to moderate degree of contrast with the existing landscape. Reclamation would further reduce the contrast that the project components would have beyond the life of the project. Accordingly, the visual contrast and intrusion of the proposed project would be compliant with the management objectives of BLM VRM Class IV.

Additional Mitigating Measures (See item 3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date December 26, 2013

District Elko, NV

Resource Area Wells

Activity (program) Minerals

SECTION A. PROJECT INFORMATION

1. Project Name LONG CANYON MINE PROJECT	4. Location Township 35 N Range 66 E Section 11 Mount Diablo B&M	5. Location Sketch 
2. Key Observation Point KOP-CT2 (Proposed Action)		
3. VRM Class Class IV		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Foreground-Midground (FM): wide and flat Background (BG): weak triangular; strong irregular	FM: short and spiked near KOP; large flat black forms farther from KOP BG: large and irregular-shaped forms	FM: small black forms; simple BG: thin and zigzagging; and thin and straight
LINE	FM: no distinct lines BG: strong irregular silhouette line of mountain crests; strong horizontal line at base of mountains	FM: variations in color of large black forms of vegetation create weak, subtle horizontal lines BG: no distinct lines	FM: no distinct lines BG: thin, relatively straight lines that are non-directional
COLOR	FM: light tan and very light brown BG: tan and slate gray; low chroma	FM: lush green near KOP; further from KOP colors are olive, tan, and pale green BG: dark green and low chroma	FM: dark gray and dirt BG: very light tan
TEXTURE	FM: very fine stippled BG: no distinct texture	FM: rough and stippled near the KOP BG: no distinct texture	FM: no distinct texture BG: no distinct texture

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	FM: low and flat trapezoidal; generally large and wide BG: large, contiguous and asymmetrical	FM: generally large trapezoidal forms corresponding with form of land features BG: removal of vegetation in pit would accentuate the form of the pit.	FM: thin, tall and vertical; short and vertical, straight BG: no structures visible
LINE	FM: strong angular silhouette; weak and horizontal BG: generally irregular with weak subtle horizontal lines	FM: no distinct lines BG: no distinct lines	FM: short and tall, thin vertical lines that appear parallel and evenly spaced; very thin curvilinear and horizontal lines near KOP BG: no structures visible
COLOR	FM: light gray; dark gray; brown BG: light gray	FM: green, olive, limited tan BG: no distinct colors	FM: dark brown; dark gray; light tan BG: no structures visible
TEXTURE	FM: no distinct texture BG: no distinct texture	FM: finely stippled near the KOP, but indistinguishable farther away. BG: no distinct texture	FM: no distinct texture BG: no structures visible

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)	
ELEMENTS	Form													Evaluator's Names George Dix JBR Environmental Consultants, Inc. December 26, 2013
	Line												Date December 26, 2013	
	Color													
	Texture													

SECTION D. (Continued)

Comments from item 2.

The irregular-shaped form and color of the proposed mine pit would not be repetitive of form and color elements predominant in the background zone of the characteristic landscape. The proposed WRSF, heap leach facility, and growth medium material stockpiles would have trapezoidal-shaped forms that contrast with the wide flat form that dominates the foreground-midground zone. These components would also have angular silhouette lines that are unlike any line elements in the foreground-midground zone of the characteristic landscape. The strong contrast that these components would have would result in a high level of change to the characteristic landscape. They would be expected to be a major focus of view attention from KOP-CT2 during the life of the project. Reclamation would reduce the contrast that these components have after closure of the project, but the WRSF and mine pit would still be apparent and attract attention. The level of change to the existing landscape that would result from the addition of the other proposed project components that would be visible from KOP-CT2 would be less than high. These components would have negligible to moderate degree of contrast with the existing landscape. Reclamation would also reduce the contrast that these other components would have after closure of the project. Accordingly, the visual contrast and intrusion of the proposed project would be compliant with the management objectives of BLM VRM Class IV.

Additional Mitigating Measures (See item 3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

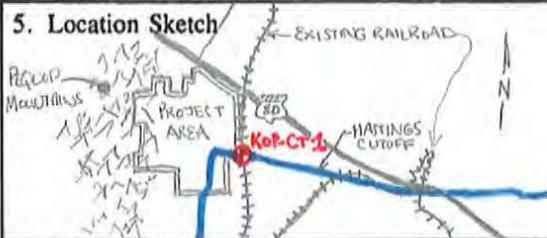
Date December 26, 2013

District Elko, NV

Resource Area Wells

Activity (program) Minerals

SECTION A. PROJECT INFORMATION

1. Project Name <u>LONG CANYON MINE PROJECT</u>	4. Location Township <u>35 N</u> Range <u>67 E</u> Section <u>6</u> <u>Mount Diablo B&M</u>	5. Location Sketch 
2. Key Observation Point <u>KOP-CT 1 (North Facilities Alt.)</u>		
3. VRM Class <u>CLASS IV</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	FG: foreground-Middleground (FM): wide flat BG: irregular, triangular and strong irregular	FM: simple polygonal close to KOP, large flat block further from KOP. BG: large, irregular shaped	FM: small black shaped forms BG: thin and zigzagging; thin and straight
LINE	FM: no distinct lines BG: strong irregular silhouette from mountain crest, strong horizontal at base of mountain	FM: variations in colors create impression of weak, subtle horizontal lines BG: no distinct lines	FM: thin and straight BG: thin and nondirectional
COLOR	FM: gray and light tan BG: slate gray and tan; colors are generally low chroma	FM: pale green, olive, gray, lush green at KOP BG: dark green and low chroma	FM: low chroma gray and light tan BG: very light tan
TEXTURE	FM: no distinct texture BG: no distinct texture	FM: coarse dense texture near the KOP BG: no distinct texture	FM: no distinct texture BG: no distinct texture

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	FM: wide, elongated and flat trapezoidal-shaped form-occurring from very large to small. BG: large, contiguous, and asymmetrical	FM: generally large and trapezoidal form that correspond with form of land features BG: pit would not be vegetated, but removal/ absence of vegetation would accentuate form	FG: thin tall vertical forms; straight and flat; simple and parallel BG: thin and vertical (tower), straight and thin (tower caps)
LINE	FM: weak, straight and horizontal; strong angular silhouette BG: generally irregular; but weak, subtle lines that are straight (pit wall benches)	FM: no distinct lines BG: no distinct lines	FG: short and thin vertical lines; extremely thin horizontal lines; thin tall vertical lines; curvilinear BG: thin and straight
COLOR	FM: light gray to dark gray; brown BG: light gray	FM: green and olive; also some tan BG: no distinct color	FG: dark brown, dark gray; tan BG: gray and low chroma; light tan
TEXTURE	FM: no distinct texture BG: no distinct texture	FM: no distinct texture BG: no distinct texture	FG: no distinct texture BG: no distinct texture

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

ELEMENTS	1. DEGREE OF CONTRAST												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)				
	3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)												Evaluator's Names <u>George Dix</u> <u>JBR Environmental Consultants, Inc. December 26, 2013</u>				
															Date		
	Form	X				X					X						
	Line	X									X						
Color	X						X					X					
Texture				X			X						X				

SECTION D. (Continued)

Comments from item 2.

The irregular-shaped form and color of the proposed mine pit and the tall form and angular silhouette line of the proposed waste rock storage would not be repetitive of form and color elements found in the background zone of the existing landscape. The addition of the proposed pit and waste rock storage facility to the existing landscape would result in a high level of change because both would strongly contrast with the basic elements that characterize the existing landscape. Both of these project components would be expected to be the major focus of viewer attention from KOP-CT1 during the life of the project. The level of change to the existing landscape that would result from the addition of the other proposed project components that would be visible from KOP-CT1 would be less than high. These components would have negligible to moderate degree of contrast with the existing landscape. Reclamation would further reduce the contrast that the project components would have beyond the life of the project. Accordingly, the visual contrast and intrusion of the proposed project would be compliant with the management objectives of BLM VRM Class IV.

Additional Mitigating Measures (See item 3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date December 26, 2013
District E1K0, NV
Resource Area Wells
Activity (program) Minerals

SECTION A. PROJECT INFORMATION

1. Project Name <u>Long Canyon Mine Project</u>	4. Location Township <u>35 N</u> Range <u>60 E</u> Section <u>11</u> <u>Mount Diablo B&M</u>	5. Location Sketch 
2. Key Observation Point <u>KOP-CT2 (North Facilities Alternative)</u>		
3. VRM Class <u>Class IV</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	FM: wide and flat BG: weak triangular; strong, irregular	FM: short and spiked near KOP; large flat block forms farther from KOP BG: large and irregular-shaped forms	FM: small block forms that are simple BG: thin and zigzagging; thin and straight
LINE	FM: no distinct lines BG: strong irregular silhouette line at crest of mountains; strong horizontal line at base of mountains	FM: variations in color of large block forms of vegetation create weak, subtle horizontal lines BG: no distinct lines	FM: no distinct lines BG: thin, relatively straight lines that are non-directional
COLOR	FM: light tan and very light brown BG: tan and slate gray; low chroma	FM: lush green near the KOP; farther from KOP colors are olive, pale green, and tan BG: dark green and low chroma	FM: dark gray and dull BG: very light tan
TEXTURE	FM: very fine stippled BG: no distinct texture	FM: rough and stippled near KOP BG: no distinct texture	FM: no distinct texture BG: no distinct texture

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	FM: low and flat trapezoidal; generally large and wide; growth medium stockpile would be small BG: large, contiguous and asymmetrical	FM: generally large trapezoidal forms corresponding with form of land features BG: removal of vegetation in pit area would accentuate the form of the pit	FM: thin; vertical; tall and short, straight BG: thin, vertical (communications tower)
LINE	FM: strong angular silhouette line against backdrop of sky; weak horizontal BG: generally irregular with weak subtle horizontal lines	FM: no distinct lines BG: no distinct lines	FM: short and tall, thin vertical lines that appear parallel and evenly spaced, short and straight (mine dis.) BG: thin straight line
COLOR	FM: light gray; dark gray, brown BG: light gray	FM: primarily green and olive, but tan in limited amounts BG: no distinct colors	FM: dark brown; dark gray; light tan BG: light tan; dark gray and low chroma
TEXTURE	FM: no distinct texture BG: no distinct texture	FM: no distinct texture BG: no distinct texture	FM: no distinct texture BG: no distinct texture

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

ELEMENTS	1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)	3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None		
		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>					
		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>					

Evaluator's Names George Dix Date December 26, 2013
JBR Environmental Consultants, Inc.

SECTION D. (Continued)

Comments from item 2.

The irregular-shaped form and color of the proposed mine pit would not be repetitive of form and color elements predominant in the background zone of the characteristic landscape. The proposed WRSF and growth medium material stockpiles would have trapezoidal-shaped forms that contrast with the wide flat form that dominates the foreground-midground zone. These components would also have angular silhouette lines that are unlike any line elements in the foreground-midground zone of the characteristic landscape. The strong contrast that these components would have would result in a high level of change to the characteristic landscape. The WRSF and mine pit would be expected to be a major focus of view attention from KOP-CT2 during the life of the project. Reclamation would reduce the contrast that these components have after closure of the project, but the WRSF and mine pit would still be apparent and attract attention. The level of change to the existing landscape that would result from the addition of the other proposed project components that would be visible from KOP-CT2 would be less than high. These components would have negligible to moderate degree of contrast with the existing landscape. Reclamation would also reduce the contrast that these other components would have after closure of the project. Accordingly, the visual contrast and intrusion of the proposed project would be compliant with the management objectives of BLM VRM Class IV.

Additional Mitigating Measures (See item 3)
