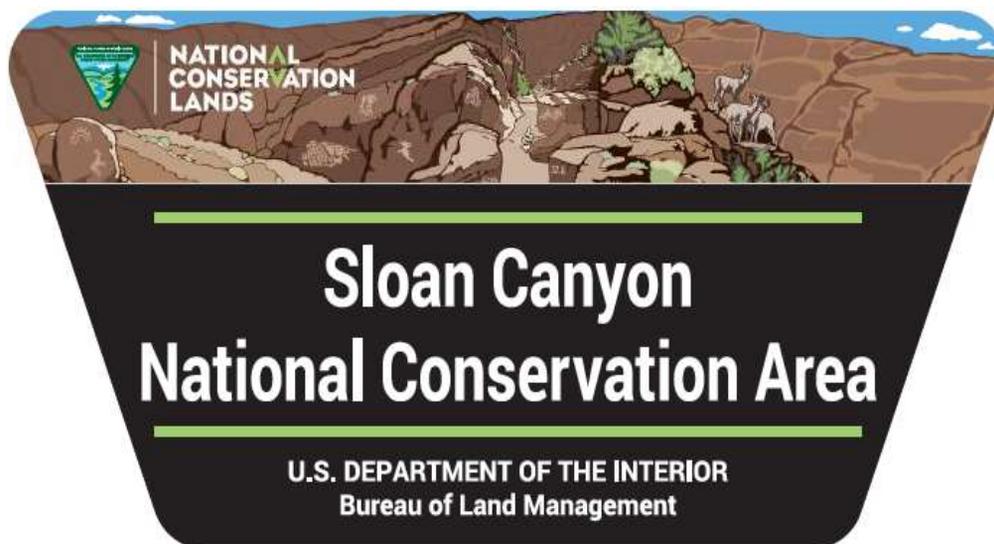


**U.S. Department of the Interior
Bureau of Land Management**

Environmental Assessment

**Right-of-Way Renewal and Amendment for
Construction of an Access Road and Temporary Contact
Station, Sloan Canyon National Conservation Area.**

**DOI-BLM-NV-S020-2015-0008-EA
N-78443**



PREPARING OFFICE

U.S. Department of the Interior
Bureau of Land Management
Red Rock/Sloan Field Office
Las Vegas, Nevada



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Abbreviations and Acronyms

BLM	Bureau of Land Management
BMP	Best Management Practices
COH	City of Henderson
EA	Environmental Assessment
EIS	Environmental Impact Statement
LVVDB	Las Vegas Valley Disposal Boundary
MBTA	Migratory Birds Treaty Act
NCA	Sloan Canyon National Conservation Area
NLCS	National Landscape Conservation System
NMWMP	North McCullough Wilderness Management Plan
NPR	Nawghaw Poa Road
PUP	Pesticide Use Proposal
RMP	Sloan Canyon Resource Management Plan
SNPLMA	Southern Nevada Public Land Management Act
TMP	Sloan Canyon National Conservation Area Trails Master Plan
WMP	Weed Management Plan

1.0 INTRODUCTION

This Environmental Assessment (EA) evaluates the U.S. Bureau of Land Management's (BLM) proposal to renew and amend right-of-way N78443 for the construction of Nawghaw Poa Road (NPR) which includes a paved pedestrian pathway; and a looped vehicle turnaround/parking lot and a platform to place a temporary contact station. NPR would replace an existing unpaved roadway.

The BLM, in partnership with City of Henderson (COH), developed the proposed project. This EA characterizes the existing environment and evaluates potential impacts associated with implementation of two action alternatives and the no action alternative.

1.1 Identifying Information and Preparing Office

- N-78443, Nawghaw Poa Road, Parking and Visitor Amenities Project
- BLM Project Number: DOI-BLM-NV-S020-2015-0008-EA
- BLM Las Vegas Field Office and Red Rock/Sloan Field Office

1.2 Background

The Clark County Conservation of Public Land and Natural Resources Act of 2002 established the Sloan Canyon National Conservation Area (NCA) and the North McCullough Wilderness. The North McCullough Wilderness is entirely contained within the NCA. The 48,438-acre NCA, which forms the natural, mountainous southern skyline of COH and Las Vegas, contains important archaeological sites, scenic resources, and wildlife habitat. The centerpiece of the NCA is Sloan Canyon Petroglyph Site, one of the most notable cultural resources in southern Nevada. More than 400 rock art panels with nearly 1,200 designs represent native cultures dating from the Archaic to Historic era.

The law establishing the NCA also required the BLM to develop a plan for the appropriate use and management of the NCA and the North McCullough Wilderness within three years of enactment. The BLM fulfilled this requirement with the release of the Sloan Canyon Resource Management Plan (RMP), North McCullough Wilderness Management Plan (NMWMP) in May 2006. The RMP and NMWMP provide the BLM Red Rock/Sloan Field Office with a comprehensive framework for managing the NCA and the North McCullough Wilderness. The documents provided for moderate levels of developed recreation, facilities, and transportation improvements to ensure that neither resources nor visitor experiences are unacceptably degraded.

In 2009, the BLM completed the Sloan Canyon National Conservation Area Trails Master Plan (TMP) to implement the recreation management directives from the RMP. Specifically, the TMP fulfilled the requirement for a systematic planning and development of a sustainable, low impact trail system that accommodates multiple non-motorized uses by utilizing a combination of new trails, existing roads and rights-of-way, and the reconstruction of unauthorized routes and social trails (BLM 2006a). Implementation of the TMP led to the construction of several trails within the NCA including Trails 100 and 101 which provide access to the Sloan Canyon Petroglyph Site as well as the North McCullough Wilderness.

However, the TMP focused primarily on the development of a trail network throughout the NCA, leaving the establishment of trailheads, parking areas, and road improvements to a future planning effort (BLM 2009, Section 2.2.5).

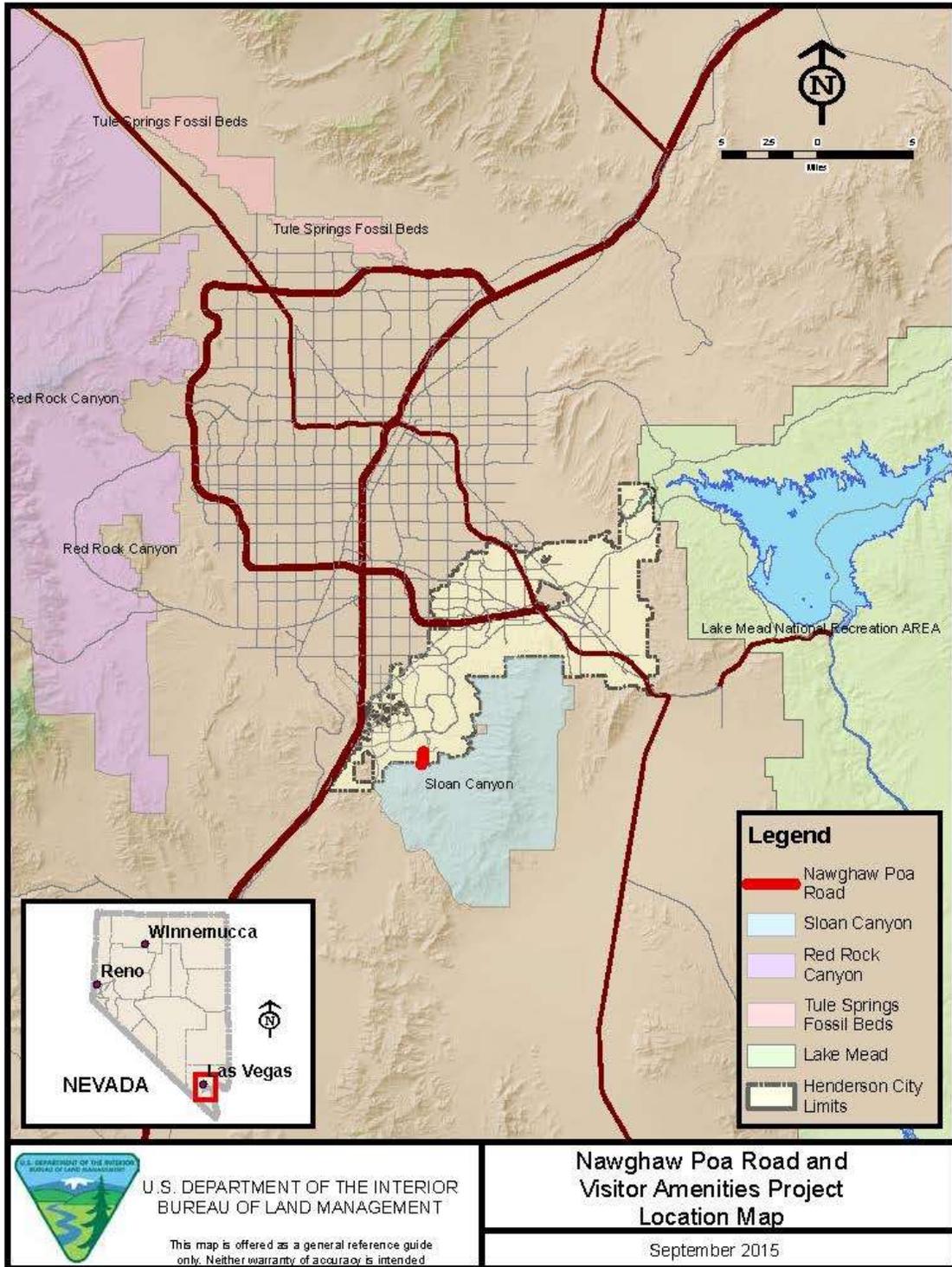
The proposed project further implements management directives from Section 2.2.8 of the RMP and compliments the TMP by implementing infrastructure improvements that would facilitate access to Trails 100 and 101 and facilitate development of educational and interpretive outreach programs to manage visitors and protect sensitive cultural and natural resources.

In May of 2015, the Sloan Canyon NCA Implementation Management Strategy was completed and examines, in detail, potential development scenarios for facilities within the NCA that meets the intent of the Resource Management Plan (RMP) while balancing the needs and expectations of visitors along with managing for the longevity of funding sources. The need for a visitor contact station at this general location has long been recognized as an essential element of any strategy to protect the area's cultural resources and manage visitation levels and activities. The Petroglyph Canyon entrance will be developed in two phases and the proposed act is the first phase. A temporary visitor contact station and parking will be placed at the end of the road and will be staffed by BLM and volunteers who will provide visitor services until the permanent facility is completed. The City of Henderson and Friends of Sloan Canyon are key partners in this initial effort.

1.2 Project Location (see figure 1)

The project is located within the immediate vicinity of expired ROW N-78443, an unpaved access road located near Sloan Canyon, upon land within the Las Vegas Field Office and Sloan Canyon National Conservation Area, legally described as Mount Diablo Meridian, T.23S, R61E, sec 26, NE, NWSE.

Figure 1:



1.3 Proposed Project

BLM proposes to renew and amend ROW N-78443 to provide access to the NCA in perpetuity. The City of Henderson is constructing Democracy Drive and the BLM is proposing to construct a road from Democracy Drive that will provide access to the NCA complete with a looped parking area and temporary visitor contact station. The project needs to meet the intent of the Resource Management Plan (RMP) while balancing the needs and expectations of visitors along with managing for the longevity of funding sources.

1.4 Purpose and Need

In order to provide public access, protect cultural resources, and provide a recreational experience with appropriate wilderness qualities to the Petroglyph Canyon area, the BLM proposes to construct a paved road and temporary contact station. The contact station will provide environmental education and provide visitors with limit use information and availability. ROW N-78443 provided legal access to the NCA but expired June, 2015. A ROW renewal application has been submitted to construct a road across public land managed by the Las Vegas Field Office and a parking area and temporary visitor contact station and amenities within the NCA.

Visitations to the Sloan Canyon Petroglyph Site and the North McCullough Wilderness are expected to increase since lands adjacent to the NCA would be developed in the near future. Pursuant to the Southern Nevada Public Land Management Act (SNPLMA), public lands currently managed by the BLM outside of the NCA's northern border have been designated for disposal. All land sales would be subject to valid existing rights. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. At full build out, these developments would abut the NCA. Currently, construction of Inspirada, a 13,500-unit master-planned community is underway. As part of the development, Democracy Drive, an east-west arterial, would be extended westward towards Sloan Canyon, facilitating access to the site. Furthermore, the City of Henderson anticipates construction of Gateway Park, a regional park near the NCA boundary (see Figure 1).

Due to the development of the surrounding area and growth of the Las Vegas metropolitan area, annual trail use visits in the NCA is expected to reach 111,600 by 2030. Likewise, annual visits to the Petroglyph Management Area are expected reach 16,500 by 2030.

In conformance with the RMP recreational management directives for the NCA and in order to complement the trail network established through the TMP, the BLM proposes to undertake infrastructure improvements to facilitate access, manage usage thresholds, and protect resources within the Sloan Canyon Petroglyph Site and the North McCullough Wilderness.

In order to effectively conserve and protect cultural and natural resources, there is need to construct a road, visitor contact station and related appurtenances. The proposed action would help:

- Implement educational and interpretive programs to foster an understanding and appreciation of cultural and natural resources.
- Implement outreach programs to foster an awareness of appropriate visitor use and site etiquette.
- Control usage at appropriate levels through the contact station.

- Provide a wilderness experience.

1.5 Decision to Be Made

The decision to be made is whether or not BLM will approve the renewal and amendment of N-78443 and if so, which alternative will be selected and what conditions or stipulations will be required.

1.6 Scoping and Public Involvement

Public comment and review will be considered throughout the development of this EA and reflected in the final decision.

2.0 Alternatives

Two action alternatives were evaluated in addition to the No Action Alternative. Of the two action alternatives, Alternative 1 is the Proposed Action.

2.1 Elements Common to Action Alternatives

2.1.1 Roadway and Vehicle Turnaround/Parking Lot Design

All alternatives will be authorized by a right-of-way issued to Sloan Canyon NCA in perpetuity. If the no action alternative is selected, then the ROW will renewed without amendments.

Under the proposal, BLM would construct NPR, an approximately 0.7 mile long roadway and pedestrian pathway across public land managed by the BLM and construct a looped vehicle turnaround/parking area. Temporary visitor amenities such as a contact station, portable restrooms, potable water supply, and bike racks would also be placed at this location. Areas disturbed during construction (e.g., staging areas, construction easements, etc.) as well as existing segments of the unpaved access road outside of the NPR alignment would be restored. Usage would be managed pursuant to thresholds identified in the RMP and NMWMP

NPR would consist of a two-lane, 32 foot wide asphalt road including five foot shoulders/ bike lanes on both sides. The roadway would be outfitted with rumble bumps at selected intervals to control speed. A 10 foot wide, pedestrian pathway would also be constructed adjacent to the road for the entirety of the 0.7 mile-long alignment. The roadway and pathway would be separated by a 9 foot wide, unpaved median. Two 6-inch-diameter conduits with pull boxes would be buried 30 inches deep in the median for installation of utilities as part of a future project. The total width of the roadway and pathway would be approximately 51 feet. See Figure 2.

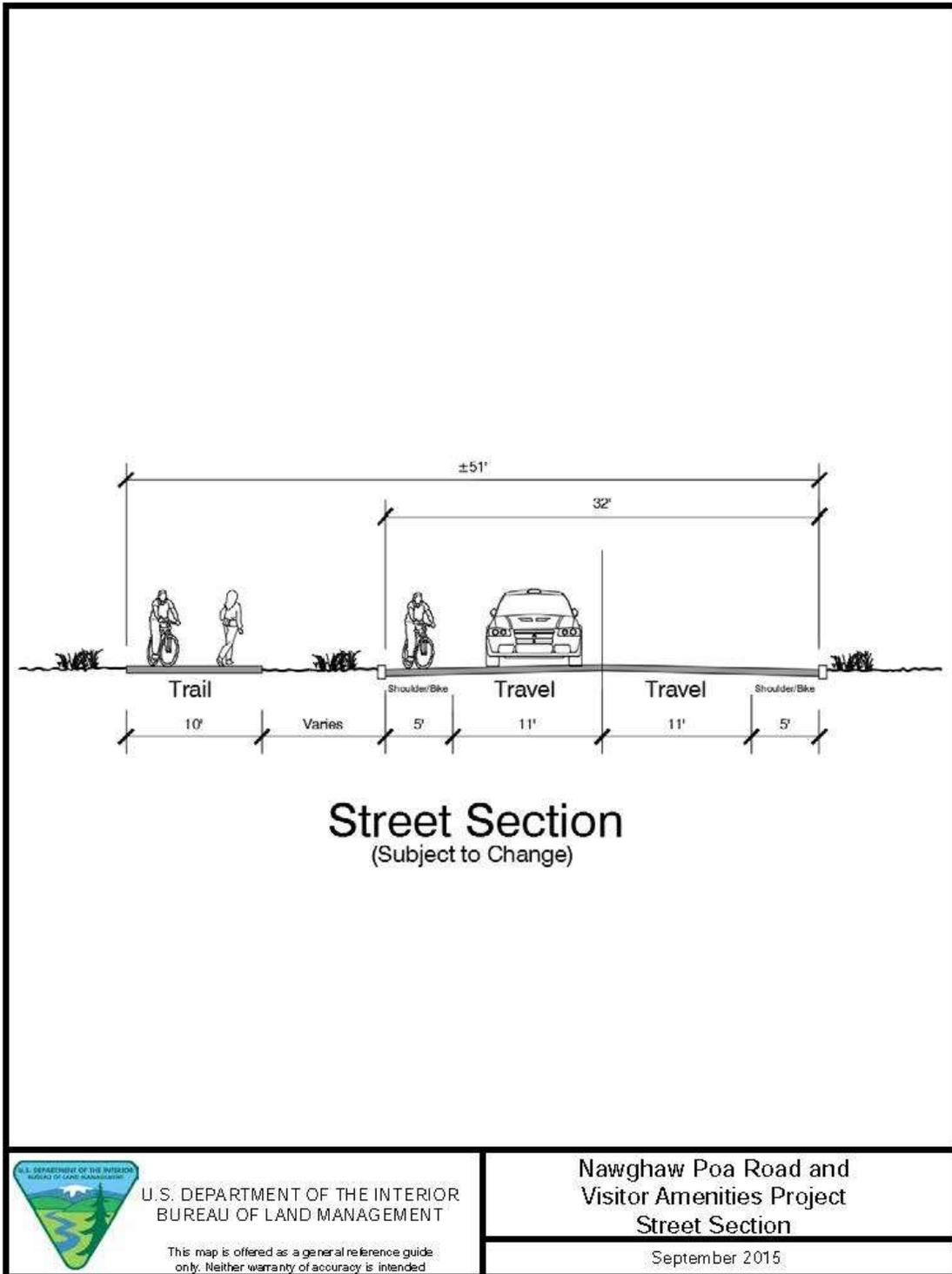
Furthermore, the road will have curb cuts every 50 feet throughout the entirety of its alignment to keep rainfall within 50 feet of where it falls and to avoid concentrating the storm water. In addition, rip rap energy dissipators would be placed at each curb cut to minimize potential for erosion.

NPR would form a T-intersection with the planned extension of Democracy Drive at the northern terminus. The intersection would incorporate a dedicated left turn lane. A gate spanning the roadway would be placed at the T-intersection. There would be no gates across

the pedestrian pathway. From the T-intersection, the roadway and pathway would proceed south and terminate at the boundary of the NCA.

A looped vehicle turnaround/parking lot would be constructed at the southern terminus within the NCA boundary. The vehicle turnaround would be sufficient for use by fire trucks and other emergency vehicles. A temporary contact station, portable toilets, potable water sources, trash receptacles, bike racks and an informational kiosk would be located on site. The temporary amenities will remain until a permanent visitor center is constructed as part of a future project. A generator or a solar panel would provide electricity to the temporary contact station. Construction would take place within a construction corridor ranging from 100 to 200 feet in width.

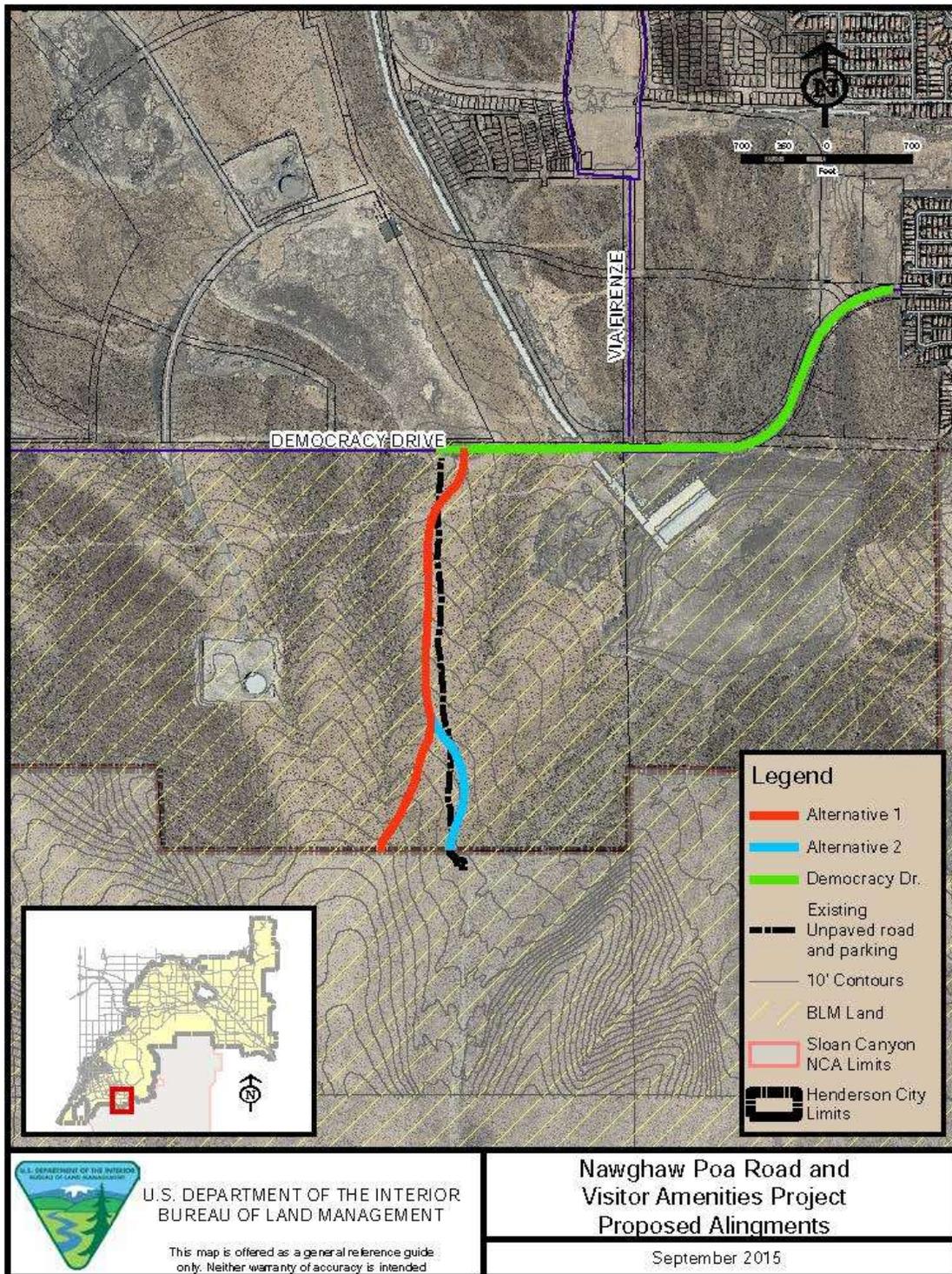
Figure 2: Nawghaw Poa Road Proposed Cross Section



2.1.2 Roadway Alignment

In general, the two action alternatives share the same alignment from the intersection with Democracy Drive proceeding south to a distance of approximately 2,500 feet. The shared alignment would be constructed immediately adjacent to the existing unpaved access road to Sloan Canyon. Under both alternatives, the northern terminus of NPR would form a T-intersection with Democracy Drive, approximately 500 feet north of the power line access road. From Democracy Drive, the alignment would diagonally veer eastward across the power line access road towards a ridge. The alignment would follow the ridgeline to the south for approximately 2,000 feet. The two action alternatives differ in their alignment from this point onwards. See Figure 3.

Figure 3: Nawghaw Poa Road Proposed Alignments



2.1.3 Roadway Construction and Best Management Practices

A grader or bulldozer would clear and grub vegetation within the road footprint. A grader or bulldozer would further prepare the road surface, leveling bumps and filling in dips. The leveled surface would be sprayed with water and compacted to its maximum density. Concrete for curbs would be poured into forms. Gravel would be placed on the roadbed between the concrete curbs and be further compacted. Asphalt would be placed on top of the gravel, and the surface finished to the design grade. Construction would occur within a construction corridor ranging in width from 100 to 200 feet. Construction of the turnaround/parking lot would require limited amounts of cut and fill. Duration for construction would be approximately three months. Street lighting would not be installed as a part of this project.

Under both action alternatives general and resources specific stipulations would be implemented to avoid or minimize impacts to resources. See Appendix A, Stipulations.

2.1.4 Restoration of Disturbed Areas

Disturbed areas within the construction corridor as well as segments of the unpaved access road outside of the construction footprint would be restored. Holes would be augered within disturbed areas for the planting of live creosote bush plants and vertical mulch such as dead Yucca. Berms on both sides of the roadway would be leveled. Appropriately-sized large, medium and smaller rocks for this specific area would be placed within the disturbance area to restore a natural vista. Appropriately colored (the coloration in the area is black rocks on light brown soil) desert varnish would be applied to replicate the natural coloration in the area.

2.1.5 Contact Station and Temporary Amenities

Upon completion of the roadway and pedestrian pathway, temporary amenities including but not limited to a contact station, information kiosk, portable restrooms, potable water supply, bicycle racks, and trash receptacles would be placed on site. Trash would be removed on a regular basis. Until installation of permanent facilities as part of a future project, bottled water would be delivered and composting or portable toilets would be serviced on a regular basis.

2.1.6 Visitor and Resource Management

If the proposed action or Alternative 1 is selected, BLM would implement management directives from the RMP for the North McCullough Wilderness and the Petroglyph Management Area in Section 2.2.3 of RMP and Section 4.2 of NMWMP and summarized below:

- **Usage Threshold Management:** BLM would manage usage thresholds in accordance with the RMP including implementation of a usage monitoring program and modification of usage thresholds as appropriate. BLM Rangers would require visitors to check in prior to entering the Petroglyph Management Area. During periods of high use, such as weekends and holidays, visitors would be required to join a BLM-sponsored tour. No more than one guided, 20-person group would be allowed in the Petroglyph Management Area at one time. With prior reservations, organized groups of 10 to 35 people would be allowed to visit the Petroglyph Management Area, accompanied by BLM sponsored guides. Permission would be required for visitation outside of high-use periods. A total of no more than 25 permits per hour will be issued. BLM Rangers, BLM Staff and/or volunteers would monitor visitation.

- **Contact Station Staffing:** BLM would staff the contact station according to the following schedule:

June - September: Friday, Saturday and Sunday from 8:00 am to 4:30 pm.

October – May: Daily from 8:00 am until 4:30 pm.

Contact Station Staff will open the gate when the contact station opens and close the gate at an appropriate time to facilitate closing the area to visitors. The gate across the roadway would manage vehicular access to NPR. Gate opening and closing times would match the contact station staffing schedule. There would be no gates across the pedestrian pathway.

- **Interpretive Element:** BLM would strive to provide information and programming to visitors consistent with the interpretive strategy of the RMP (see Appendix E of RMP) and the NMWMP (see Section 4.8 of NMWMP). Upon initial establishment of the contact station, basic orientation and education materials about the area and applicable regulations would be made available to visitors. Opportunities for in-person interaction with BLM staff would be available during operational hours of the contact station.

2.1.7 Maintenance

The road and contact station will be monitored for maintenance needs by BLM and maintenance will be conducted upon the recommendation of the District Engineer. Routine maintenance such as sweeping will be performed by City of Henderson as a contribution to this collaborative project.

2.2 Alternative 1 (Proposed Action)

Under Alternative 1, the alignment would remain on the ridge and proceed approximately 1,200 feet south and terminate at the looped vehicle turnaround inside the NCA boundary. From the looped vehicle turnaround/parking lot, an approximately 1,000 foot long connector trail would be graded towards the existing unpaved vehicle turnaround/parking lot located at the terminus of the unpaved access road. The existing graded and disturbed parking area will remain until phase II of the Implementation plan implemented. See figure 3.

2.3 Alternative 2 (Partial Ridge Alternative)

Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards Sloan Canyon Wash; and terminate at the existing vehicle turnaround/parking lot. See figure 3.

2.4 Alternative 3 (No Action Alternative)

Under the No Action Alternative, NPR would not be constructed. The unpaved access road would continue to provide access to Sloan Canyon and the North McCullough Wilderness.

Visitations would increase due to the extension of Democracy Drive and development of areas outside the NCA boundary. Increased vehicular use of the unpaved access road would result in further road deterioration. With continued deterioration, it would be increasingly difficult to drive on the road with standard passenger vehicles.

The existing unpaved turnaround/parking lot would not have sufficient space for vehicles as visitations increase. Thus, during peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, potentially resulting in disturbance of previously undisturbed areas.

As the average daily traffic on Democracy Drive continues to increase commensurate with the increased development of the surrounding area, unstructured and unregulated ingress and egress from Democracy Drive to the unpaved access road would result in potentially hazardous traffic conditions at the intersection.

The potential need for emergency services would be commensurate with increased visitations. An unpaved single lane road with no fire truck turnaround would limit access for safety personnel and first responders in case of emergencies.

Last, with no visitor amenities including a contact station, there would be no opportunities for implementation of education, interpretive and management programs. Conservation and protection of cultural and natural resources would be compromised. Conditions under the No Action Alternative would not be in compliance with management directives from the RMP and NMWMP.

2.5 Alternative Considered but not Analyzed in Detail

Gateway Park Alternative: Under this alternative, the contact station and associated visitor amenities would be sited near the City of Henderson's proposed Gateway Park. The Gateway Park is a regional park that would be located north of the NCA boundary on BLM-managed public lands. Managers dropped this alternative from further consideration since the park would be located within a disposal area pursuant to the SNPLMA. Furthermore, Managers concluded the contact station would be located too far from the trail head for effective implementation of management and interpretative programs. Last, there is an immediate need for a contact station and the Gateway Park is not planned for several years in the future.

2.6 Conformance

All alternatives in this EA were prepared in compliance with Council on Environmental Quality (CEQ) Regulations for implementing NEPA (40 CFR § 1500-1508), and all applicable regulations and laws passed subsequent to the passage of NEPA, and stipulations and format outlined in the BLM NEPA Handbook (H-1790-1).

The Proposed Action and this EA is in conformance with the National Environmental Policy Act (NEPA) and is allowable on BLM-administered lands according to Title V of the Federal Land Policy and Management Act of 1976 (FLPMA), Sec. 501 and Sec. 507, and BLM regulations 43 CFR 2800, at the discretion of the Secretary of the Interior or his/her delegated officer.

The Proposed Action is in conformance with Las Vegas Resource Management Plan and Final Environmental Impact Statement, October 1998, and the Record of Decision signed October 5, 1998.

The Proposed Action is in conformance with the 2006 Sloan Canyon NCA Resource Management Plan (RMP) and North McCullough Wilderness Management Plan (WMP). It is

also in conformance with the 2009 Omnibus Public Lands Management ACT, BLM Manual 6100 and 6200 and Secretarial Order No. 3308.

In particular, one of the RMP's goal is to "enhance visitor use and experience by providing appropriate facilities compatible with the character and characteristics of the NCA's resources" (BLM 2006a, Section 2.2.8). The management directive supporting this goal is the development of a visitor center at the northern entrance of Sloan Canyon that would "provide NCA management with office space, serve as one of the access and control points for the Petroglyph Management Area, and be the base of operations for patrols and rangers" (BLM 2006a, Section 2.2.8).

Cognizant of the increasing development adjacent to the North McCullough Wilderness and the projected increase in visitations to the area, the NMWMP seeks to conserve the natural and cultural resources through implementation of interpretive programs to foster an understanding and appreciation of cultural resources. Furthermore, the NMWMP sought to balance projected increase visitations and conservation of unique natural and cultural resources by "managing the Petroglyph Management Area intensively to prevent the degradation of natural and cultural resources that could result from visitor use" (BLM 2006b, Section 3). The management directive supporting this goal is to control visitations "through a Visitor Center located near the NCA boundary at the northern end of the Sloan Canyon wash" (BLM 2006b, Section 4.2).

In addition, the Proposed Action is in conformance with the following:

- Clean Air Act of 1970 (as amended in 1977 and 1990). 42 USC 7401 et seq. PL 91-604; 42 USC 1857h-7 et seq.
- Clean Water Act of 1977 (as amended). 33 USC 1251-1387. PL 92-500.
- Endangered Species Act of 1973 (as amended). 16 USC 1531 et seq. PL 93-205.
- Executive Order 13112. 1999. Invasive Species. February 3.
- Federal Land Policy and Management Act of 1976 (43 U.S.C. §§ 1701 et seq.).
- Migratory Bird Treaty Act of 1918, as amended (16 USC 703 et seq.).
- National Environmental Policy Act of 1969 as amended. Public Law 91-190, 42 USC 4321 4347, Public Law 94-52, July 3, 1975, Public Law 94-83, August 9, 1975, and Public Law 97 258, § 4(b), Sept. 13,1982.
- National Historic Preservation Act of 1966 as amended. 16 USC 470a et seq. 80 Stat. 915; PL 89-665.
- Federal Noxious Weed Act of 1975. Public Law 93-629. 7 USC 2801 et seq.; 88 Stat. 2148. January 3.
- Wild Free-Roaming Horses and Burros Act of 1971. PL 92-195
- Clark County Conservation of Public Land and Natural Resources Act of 2002 (Public Law 107-282).

3.0 AFFECTED ENVIRONMENT

This section discusses the resources identified by BLM as necessary to reach a reasoned choice among alternatives. In designating the resources to be carried forward for analysis, environmental resources known to occur or with the potential to occur in the proposed project have been identified.

Table 1 summarizes (1) the environmental resources that have been reviewed, (2) whether they would be affected by the proposed project, and (3) the rationale for that determination. Elements that are either not present, or are present but would not be affected, are not discussed further. Resources that may be affected are analyzed in further detail in Sections 3 and 4 of this document.

Table 1: Affected Resources Form

Environmental Resource	Not Present	Present/ Not Affected	Present/ Maybe Affected	Rationale for Determination
Air Resources		X		The federal Clean Air Act of 1990 requires that air quality throughout the United States meet certain NAAQS, with respect to criteria pollutants, in order to protect the public health and the environment. The proposed action is located in a non-attainment area (does not meet the standard) for PM ₁₀ and therefore must be managed in accordance with the Clark County SIP. Fugitive emissions from construction activities are temporary in nature and would not create any lasting impacts to the environment.
Areas of Critical Environmental Concern	X			The proposed project area is not within an Area of Critical Environmental Concern.
BLM Natural Areas	X			Resource is not present.
Cultural Resources	X			The area has been subjected to previous archaeological survey and there has not been significant cultural resources found within the Area of Potential Effect for the undertaking.
Greenhouse Gas Emissions		X		Currently, there are no emission limits for suspected greenhouse gas (GHG) emissions for this project and no technically defensible method for predicting potential climate change contributions from GHG emissions during construction of the proposed action.
Environmental Justice	X			It is unlikely that minority or low-income communities are present or near the proposed project area.
Farm Lands (Prime or Unique)	X			There are no prime or unique farmland designations in the District.
Fish and Wildlife Excluding Federally Listed Species			X	Fish and Wildlife Excluding Federally Listed Species are characterized in Section 3.1.3 and impacts are evaluated in Section 4.1.3 of this EA.

Environmental Resource	Not Present	Present/ Not Affected	Present/ Maybe Affected	Rationale for Determination
Floodplains	X			There are no FEMA designated floodplains present in the project area.
Fuels/Fire Management	X			Standard fire prevention measures and best management practices will be sufficient to prevent resource damage from fires.
Geology/Mineral Resources/Energy Production	X			No mining claims or mining operations are present.
Hydrologic Conditions			X	Hydrology is characterized in Section 3.3 and impacts are evaluated in Section 4.3 of this EA.
Invasive Species/Noxious Weeds			X	Weeds and invasive species are characterized in Section 3.1.2 and impacts are evaluated in Section 4.1.2 of this EA.
Lands/Access	X			Construction within the NCA would comply with the RMP.
Livestock Grazing	X			Not present. The proposed action is outside of an active grazing allotment.
Migratory Birds			X	Migratory birds are characterized in Section 3.1.5 and impacts are evaluated in Section 4.1.5 of this EA. Stipulation from the ARF has been incorporated in the stipulations of this EA.
Native American Religious Concerns		X		No Native American religious concerns have been identified in the project area.
National Landscape Conservation System			X	NLCS policies are characterized in Section 3.6 and compliance with applicable laws and policies are evaluated in Section 4.6 of this EA.
Paleontology	X			There are not any known paleontological resources in the vicinity.
Rangeland Health Standards		X		Potential impacts are evaluated in Section 4.1.1 (vegetation), Section 4.3 (hydrology), Section 4.1.3 (wildlife), and Section 4.1.4 (federally listed species) of this EA.
Recreation for Public Land managed by the BLM under the Las Vegas Resource Management Plan.		X		The proposed action will not prohibit or depreciate recreation opportunities in lands managed by the BLM Las Vegas Field Office.
Recreation for Public Land managed by the BLM under the Sloan Canyon Resource Management Plan.			X	The affected environment is characterized in Section 3.4 and impacts are evaluated in Section 4.4 of this EA.
Socioeconomics		X		The level of economic benefit during construction is unlikely to be a degree that would require a detailed analysis.
Soils			X	The affected environment is characterized in Section 3.2 and impacts are evaluated in Section 4.2 of this

Environmental Resource	Not Present	Present/ Not Affected	Present/ Maybe Affected	Rationale for Determination
				EA.
Threatened, Endangered or Candidate Plant Species	X			Not present within the project area.
Threatened, Endangered or Candidate Animal Species			X	The affected environment is characterized in Section 3.1.4 and impacts are evaluated in Section 4.1.4 of this EA.
Wastes (hazardous or solid)	X			Not present within the project area.
Water Resources/Quality (drinking/surface/gro und)			X	The affected environment is characterized in Section 3.3 and impacts are evaluated in Section 4.3 of this EA.
Wetland/Riparian Zones	X			No permanent surface waters or wetlands exist in or near the project area.
Wild and Scenic Rivers	X			Wild and Scenic Rivers do not exist near or in the project area.
Wilderness/WSA	X			No impacts to the Wilderness anticipated from the project.
Woodland/Forestry		X		The project area contains low densities of cactus and yucca. Impacts to BLM forestry program resources are expected to be negligible. No salvage is required.
Vegetation Excluding Federally Listed Species			X	The affected environment is characterized in Section 3.1.1 and impacts are evaluated in Section 4.1.1 of this EA.
Visual Resources for Public Land managed by the BLM under the Las Vegas Resource Management Plan.		X		The proposed project meets the visual resource management objectives of the Las Vegas RMP of 1998.

Environmental Resource	Not Present	Present/ Not Affected	Present/ Maybe Affected	Rationale for Determination
Visual Resources for Public Land managed by the BLM under the Sloan Canyon NCA Resource Management Plan.			X	Visual resources are characterized in Section 3.5 and impacts are evaluated in Section 4.5 of this EA.
Wild horses and Burros	X			The proposed road is not located in an active herd management area. There will be no impacts to wild horses or burros.
Areas with Wilderness Characteristics	X			There are no identified lands with wilderness characteristics outside of the designated Wilderness area in the project area.

The following sections provide a brief description of the affected environment for resources identified as “present and may be affected”. Please note: the order of sequence will differ from the list in Table 1 above. Biological Resources section contains subsections of the following resources: Vegetation, Invasive Species/Noxious Weeds, Fish and Wildlife Excluding Federally Listed Species, Threatened, Endangered or Candidate Animal Species, and Migratory Birds. This will be followed by Soils, Water Resources/Quality (drinking/surface/ground), Recreation (for BLM public lands managed under the Sloan Canyon NCA Resource Management Plan), Visual Resources (or BLM public lands managed under the Sloan Canyon NCA Resource Management Plan), and National Landscape Conservation System.

3.1 Biological Resources

3.1.1 Vegetation

According to the U.S. Geological Survey’s Gap Analysis Land Cover Data, creosote/bursage scrub is the most abundant vegetation type in the project area, occupying roughly 70 percent of the vegetation cover on public lands managed by the Las Vegas and Pahrump Field Offices. In this vegetation community creosote bush (*Larrea tridentata*) and bursage (*Ambrosia dumosa*) are generally the most conspicuous plant species present. This vegetation community occurs below 4,000 feet and is the primary habitat for the threatened desert tortoise. Generally occurring below 4,000, this community consists of large open expanses of vegetation, and is the primary habitat for the desert tortoise.

There have been declines of this vegetation type since 1998 because of BLM realty actions and congressionally mandated land transfers (e.g., land sales, patents, and rights-of-way authorizations). This decrease has predominantly been on multiple-use lands within designated

disposal boundaries and utility corridors. Important threats to this ecosystem include direct and indirect impacts resulting from anthropogenic activity, invasion by non-native annual grasses and increased fire frequency. Anthropogenic activities include grazing, development, highway and road construction, utility corridor construction, and off-highway vehicle uses. Disturbances associated with these activities have fragmented habitat, increased edge effects, and created conditions that facilitate establishment on non-native annual grasses.

Within an arid environment, temporary impacts to vegetation can take decades to centuries to recover depending on the impact. If disturbance is too frequent, recovery may be delayed or prevented entirely as soils become eroded or severely compacted. Slow recovery from disturbance means most impacts to this vegetation community will accumulate over time.

3.1.2 Invasive Species/Noxious Weeds

Invasive plants and noxious weeds are managed on public lands by the BLM under the direction of the National Invasive Species Council established in 1999 (Executive Order 13112). This statute defines invasive species as " ... an alien (non-native) species whose introduction does, or is likely to cause, economic or environmental harm or harm to human health" (NISC 2008). In addition, much of the management of invasive plants and the listing of noxious weeds are regulated by the US Department of Agriculture under the Federal Noxious Weed Act (7 U.S.C. 2801 et seq. 1974).

Executive Order 13112 outlines the federal responsibility to "prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause ... " Additionally, Nevada Revised Statutes, Chapter 555.05 defines "noxious weeds" and mandates the extent that land owners and land management agencies must control specific noxious weed species on lands under their jurisdiction.

Weed management in the project area is guided by the the Las Vegas Field Office Weed Plan. These resources provide guidance for an active integrated weed management program using Best Management Practices (BMP).

NPR would be located in an area known to have populations of the following invasive species/noxious weeds: Russian thistle (*Salsola tragus*), Red Brome (*Bromus rubens*), Sahara mustard (*Brassica tournefortii*), Malta starthistle (*Centaurea melitensis*), Fountain grass (*Pennisetum setaceum*), Puncture Vine (*Tribulus terrestris*), and Salt Cedar (*Tamarix ramosissima*).

3.1.3 Fish and Wildlife Excluding Federally Listed Species

The proposed project area supports and is adjacent to lands that support wildlife characteristic of the Mojave Desert. Biological diversity varies according to topography, plant community, and proximity to water, soil type, and season. For a comprehensive discussion of potential wildlife species that may be present, refer to the most recent Resource Management Plan.

BLM Sensitive Wildlife Species

BLM sensitive species are species that require special management consideration to avoid potential future listing under ESA and that have been identified in accordance with procedures set forth in BLM Manual 6840 – Special Status Species. A complete list of BLM sensitive species within the area can be found in the Resource Management Plan. Many of these species as well as other wildlife species of concern are also discussed in the Nevada State Wildlife Action Plan (NDOW 2012) and the Clark County Multiple Species Habitat Conservation Plan. Sensitive bird species are also provided protection by the Migratory Bird Treaty Act and thus are discussed in the Migratory Bird Section. The following sensitive species could potentially be impacted by the proposed action:

Chuckwalla (*Sauromalus ater*)

Chuckwalla occur in rocky desert, lava flows, hillsides, talus slopes, and rock outcrops mostly below 5000 feet, where creosote bush is typically the dominant plant species. Chuckwalla will seek shelter in rock crevices and bask on rocks during the day. They are herbivorous, preferring annuals, but they will also eat perennial vegetation. Chuckwallas are relatively common throughout their Nevada range and likely occur within the project area, but would be localized on rock outcroppings.

Banded Gila monster (*Heloderma suspectum*)

Gila monsters occur in desert washes and rocky upland desert scrub at elevations below 5,000 feet. Banded Gila monsters frequently utilize lower slopes of mountains and nearby plains. They will use and are occasionally encountered out in gentler terrain of alluvial fans. Hence, Gila monster habitat overlaps habitats of both the desert tortoise and chuckwalla. Threats to this reptile include illegal collection, traffic fatalities, and habitat destruction from urban and agricultural development.

Mojave Desert Sidewinder (*Crotalus cerastes cerastes*)

The Mojave Desert sidewinder is a nocturnal snake hiding in the day in animal burrows or coiled camouflaged in a shallow self-made pit at the base of a shrub. This species is most common where there are sand hummocks topped with creosote bushes, mesquite, or other desert plants but may also occur on flats, barren dunes, hardpan, and rocky hillsides.

3.1.4 Federally Threatened, Endangered Proposed, or Candidate Animal Species and Critical Habitat

Threatened and endangered species are placed on a federal list by the U. S. Fish and Wildlife Service (USFWS) and receive protection under the Endangered Species Act of 1973, as amended. The only federally protected species known to occur in the vicinity of the project area is the threatened Mojave Desert tortoise (*Gopherus agassizii*). The proposed project is not within desert tortoise critical habitat.

The Mojave Desert tortoise occurs primarily on flats and bajadas with soils ranging from sand to sandy-gravel. They are also found on rocky terrain and slopes. Tortoises occur in saltbush scrub, creosote scrub, and blackbrush scrub habitat types. Within these vegetation types, desert tortoises can potentially survive and reproduce provided their basic habitat requirements are met. These requirements include a sufficient amount and quality of forage species; shelter sites for protection from predators and environmental extremes; suitable substrates for burrowing, nesting, and overwintering; various plants for shelter; and adequate area for movement, dispersal, and gene flow.

The project area is within moderate density tortoise habitat. Survey data documented more than 50 burrows and 20 carcasses within one half mile of the project area. The project area is not within designated critical habitat for the species.

3.1.5 Migratory Birds

The MBTA (16 U.S.C. 703 et. seq.) protects migratory birds and their nests; a list of MBTA-protected birds are found in 50 CFR 10.13. The list of birds protected under this regulation is extensive and the project area has potential to support many of these species, including BLM sensitive species, and their nests. Typically, the breeding season, which generally occurs from February 15 through August 31, is when these species are most sensitive to disturbance. The following sensitive bird species could potentially be impacted by the proposed action:

Western burrowing owl (*Athene cunicularia hypugaea*)

The Western burrowing owl (*Athene cuniculari hypugaea*) is a diurnal bird of prey specialized for grassland and shrub-steppe habitats. Burrowing owl habitat in the Mojave Desert typically consists of open, dry, treeless areas on desert floors. Burrowing owls most frequently use mammal burrows created by other animals such as ground squirrels (*Spermophilus spp.*), coyotes (*Canis latrans*), or desert tortoises (*Gopherus agassizii*). The burrows are used for nesting, roosting, cover, and caching prey. In recent decades, the range and species count have been declining primarily because of agricultural, industrial, and urban development that reduce burrow availability.

Loggerhead shrike (*Lanius ludovicianus*)

This species prefers open country with nesting habitat preference toward scattered trees and shrubs. They are commonly found in shrub habitat types comprising savanna, desert scrub, and occasionally, open woodland. Perches are an important habitat component used for hunting. If natural perches are unavailable, they will perch on poles, wires or fence posts. Population trend data in Nevada has shown an unexplained 5 percent decline per year since 1966.

3.2 Soils

Soils in the project area consist primarily of sand and sandy loam. Much of the unvegetated areas are covered by desert pavement (thin layer of tightly packed rock) and cryptogammic or biological soil crust (fungi, bacteria, lichen, and soil algae). Desert pavement and soil crusts help to prevent the erosion of fragile soils and ultimately reduce moisture loss. Each of these resources is well adapted to severe desert climates, but is very susceptible to disturbance. Generally, the loss of or damage to these resources is considered to be permanent, as the development of biological crusts and desert pavement can take as long as several hundred years (BLM 2009).

The primary soil association within the project area is Rock Outcrop-St.Thomas Complex (BLM 2009). This association is characterized by shallow, well drained soil on hills and low mountains with moderate permeability and rapid runoff. Water erosion potential is moderate.

3.3 Water Resources/Quality (drinking/surface/ground)

The NCA is located entirely within the arid Mojave Desert. This area receives an average of approximately 4 inches of rainfall annually (BLM 2009). Most months average less than a 0.5 inch of rain. One average rainfall event per month can deliver the full amount of rainfall expected for that month. Although the Sloan Canyon area is typically very dry, occasional high intensity and large volume rainfall events do occur on site. Nineteen occasions of rainfall

exceeding 1 inch in 24 hours were recorded between 1950-2006 at McCarran Airport (BLM 2009). These infrequent, large rainfall events can produce large amounts of concentrated runoff from the larger watersheds, and may result in flash flooding within the natural on-site collection channels and washes.

Large volumes and high rates of runoff are concentrated within existing channels and washes. As stormwater flows reach the valley floor, longitudinal channel slopes decrease, the bed material becomes sandier and finer grained, and runoff eventually fans out in very shallow and wide, disorganized flowpaths through the alluvium. At this point, some portion of runoff will make its way to valley groundwater aquifers.

Infrequent but large stormwater generating precipitation events result in quick stormwater concentration and conveyance to sandy valley areas, which have the highest potential to erode. Disturbed areas with moderate erosive potential may experience local scour and contribute additional sediment to stormwater when subjected to large volumes and high rates of concentrated stormwater runoff. The infrequent nature of rainfall results in only intermittent channelized flow in the project area; there are no perennial streams or surface waters within the project area.

The project area encompasses a low gradient ridge adjacent to the mouth of Sloan Canyon. Near this location, the wash transitions from the narrow confines of the canyon to a broad floodplain with braided channels. Thus, flows transition from concentrated high energy flows to broad low energy flows distributed within the braided channel complex. The wash is ephemeral; there are no perennial or intermittent waters. Groundwater in this region tends to be very deep, often more than 500 feet underground (BLM 2009). The existing unpaved access road terminates at a vehicle turnaround located in the uplands, approximately 230 feet away from the active channel of the wash.

Due to the slight rise in gradient, drainage from the ridge towards the wash likely consists of low energy flows. Evidence of erosion such as rills are absent from the slope of the ridge. The existing unpaved access road partly lies on the ridge for approximately 2,500 feet. The alignment then veers diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround.

3.4 Recreation for Public Land managed by the BLM under the Sloan Canyon Resource Management Plan.

The project area is ¼ mile north of the boundary of the North McCullough Wilderness and the north entrance to the Petroglyph Canyon. NPR would cross public land managed by the BLM's Las Vegas Field Office and terminate just inside the Sloan Canyon NCA boundary where the temporary contact station will be located.

Overall, the North McCullough Wilderness Area receives low levels of dispersed recreational use, primarily because of its rugged terrain and limited vehicle access to its boundary. There are opportunities for wildlife watching, hunting, camping, hiking, and horseback riding. Some of the more popular destinations include Sutor and Hanna Peaks, the North McCullough escarpment, and the Sloan Canyon Petroglyph Site. Equestrian use is not permitted in the Petroglyph Management Area (BLM 2009). Currently, a cable fence at the north entrance to the main Sloan Canyon Petroglyph Site to discourage equestrian (and motorized) users from accessing this area. Access to the south entrance of the Sloan Canyon Petroglyph Site is unmarked and not physically restricted, but still not permitted.

Visitation to the Sloan Canyon Petroglyph Site increased following the designation of the NCA and wilderness, with large parties, including organized hiking groups, frequenting the site. Based on limited monitoring in 2003-2004, preliminary visitor estimates indicate approximately 5-10 persons accessing the Sloan Canyon Petroglyph Site per weekday, and 15-20 persons on weekend days (BLM 2009).

The number of visitors is limited due in part to the challenges associated with accessing the site. Currently, access is possible only through an unpaved utility access road and the unpaved access road to Sloan Canyon. The unpaved roads require high ground clearance vehicles. With the development of lands surrounding the NCA and the extension of paved roads such as Democracy Drive, the number of visitors to the Sloan Canyon Petroglyph Site is expected to increase.

3.5 Visual Resources for Public Land managed by the BLM under the Sloan Canyon Resource Management Plan.

The project area is located within a Visual Resource Management Class III area as identified in the Sloan Canyon RMP (BLM 2006a) which allows activities "That partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate and may minimally attract the attention of the casual viewer."

Views of the project area looking north to south from the ridge consist of an open and expansive landscape with low gradient hills and swales forming undulating lines in the foreground. Also present in the foreground are beige hues from the desert pavement. Olive hues as well as heterogeneous textures associated with creosote bush and bursage vegetation communities also fill the vista. These elements gradually transition in the distance to distinct triangular forms and purple hues associated with the McCullough Range that comprises the background. The existing unpaved access road forms a distinct line due to the absence of vegetation while the unpaved roadbed retains the beige hues of the surrounding desert pavement.

3.6 National Landscape Conservation System

Section 2002 of the Omnibus Public Land Management Act (OPLMA) of 2009 withdraws the NCA from the multiple use and sustained yield directive for management of public lands. Under the OPLMA, the NCA is managed for conservation of cultural, ecological, and scientific values for the benefit of current and future generations through the establishment of a National Landscape Conservation System (NLCS). BLM policy encourages development of new facilities such as administrative offices, visitor centers, and contact stations within nearby communities to enhance local economic vitality and quality of life and to minimize disturbance within the NCA (see BLM Handbooks 6100, 6220, and 8320). The RMP describes the placement of the contact station (Visitor Center) and parking area in this general location including within the NCA.

4.0 ENVIRONMENTAL CONSEQUENCES

This chapter will describe the resource impacts that would occur for each alternative, followed by cumulative impacts, and mitigation measures.

4.1 Biological Resources

4.1.1 Vegetation

Alternative 1 (Proposed Action)

Road construction would entail clearing and grubbing of existing vegetation within the road footprint. The cleared area would be graded, topsoil would be removed and the substrate would be compacted. Asphalt, concrete, and gravel would be discharged resulting in 5.19 acres of permanent impact. See Figures 4 and 5.

Construction would likely take place within a construction corridor with widths ranging from 100 to 200 feet. Vegetation within the construction corridor maybe cleared and grubbed for construction access and staging areas. Maneuvering of off-road equipment may result trample or crushed vegetation. Construction could increase fragmentation potential for the transmission of non-native invasive species. Temporary impacts would range from 8.63 acres to 17.28 acres

Disturbed areas within the construction corridor as well as segments of the unpaved access road outside of the construction footprint would be restored via installation of vertical mulch. The mulch would be irrigated until they are sufficiently established.

Table 2: Impact Acreages for Alternative 1 (Proposed Action)

	Impact Acreages			
	Temporary	Permanent	Existing	New
100 Foot Construction Corridor	8.63	5.19	3.58	1.61
200 Foot Construction Corridor	17.28	5.19	3.58	1.61

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Whereas Alternative 1 would establish a new vehicle turnaround/parking lot, the existing vehicle turnaround/parking lot would be reconstructed under Alternative 2. Thus, permanent impacts associated with Alternative 2 (5.17 acres) are slightly less than Alternative 1 (5.19 acres).

Construction would likely take place within a construction corridor with widths ranging from 100 to 200 feet. Vegetation within the construction corridor maybe cleared and grubbed for construction access and staging areas. Maneuvering of off-road equipment may result trample or crushed vegetation. Construction could increase fragmentation potential for the transmission of non-native invasive species. Temporary impacts would range from 8.58 acres to 17.18 acres. See Figures 4 and 5.

Disturbed areas within the construction corridor as well as segments of the unpaved access road outside of the construction footprint would be restored via installation of vertical mulch. The mulch would be irrigated until they are sufficiently established.

Table 3: Impact Acreages for Alternative 2

	Impact Acreages			
	Temporary	Permanent	Existing	New
100 Foot Construction Corridor	8.58	5.17	3.58	1.59
200 Foot Construction Corridor	17.18	5.17	3.58	1.59

Alternative 3 (No Action Alternative)

There would be no new impacts associated with road construction. The existing access road would continue to be utilized. The existing unpaved turnaround at the terminus of SCR would not have sufficient space for vehicles as visitations to Sloan Canyon Petroglyph Site and the North McCullough Wilderness increases. During peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, potentially resulting in disturbance of previously undisturbed areas. Though, no notable increases beyond the existing 3.58 acres of impacts are anticipated, off-road parking could increase habitat fragmentation.

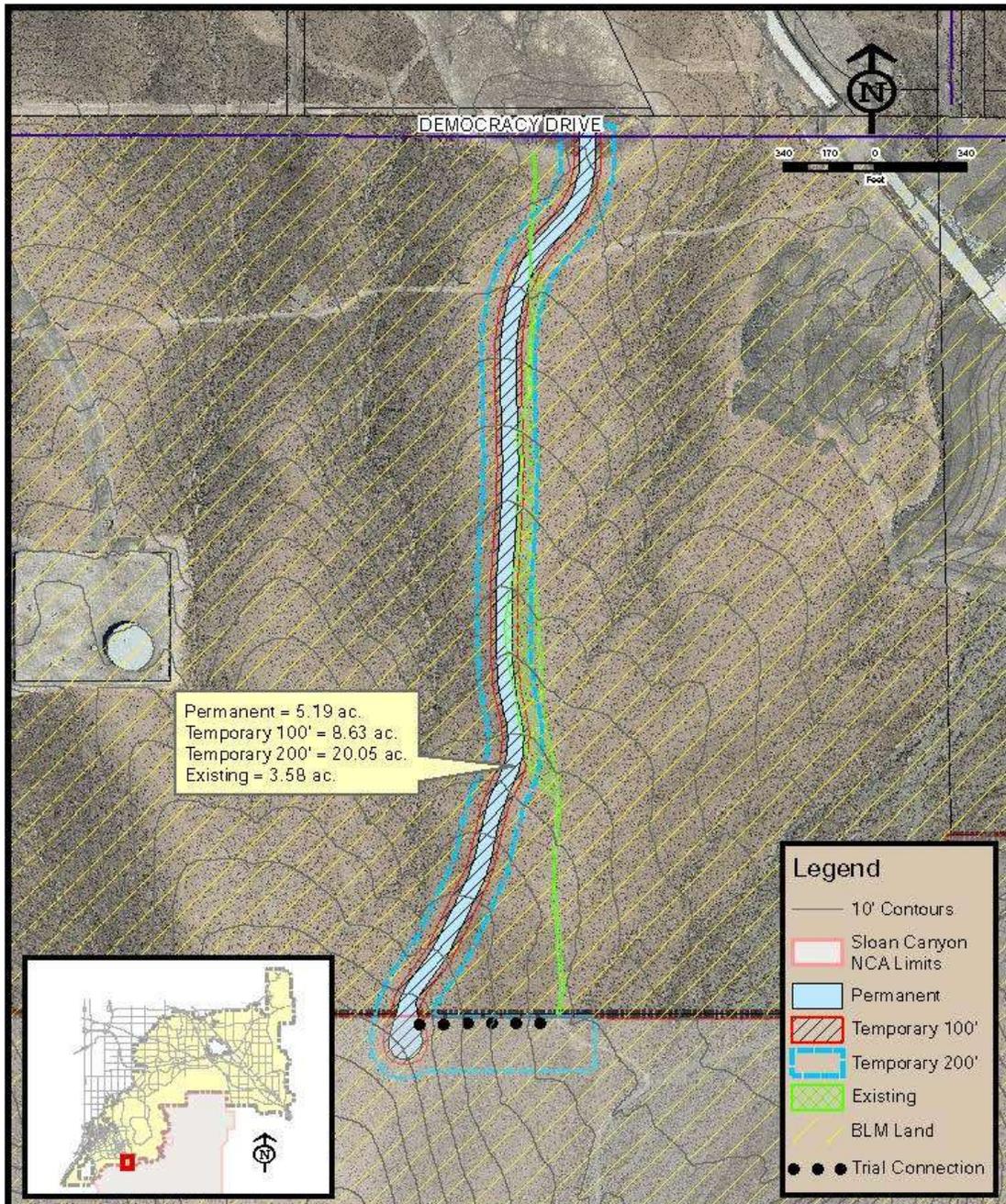
Moreover, there would be no on-site contact station and no opportunities to educate visitors on avoiding and minimizing impacts to sensitive biological resources. Off-road parking and lack of trash receptacles could indirectly result in the spread or introduction of invasive plant species.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR would contribute incrementally to regional declines of the creosote bursage scrub vegetation community. Environmental impacts associated with disposal of lands have been evaluated in the Las Vegas Valley Disposal Boundary (LVVDB) Environmental Impact Statement.

Figures 4: Nawghaw Poa Permanent and Temporary Disturbances



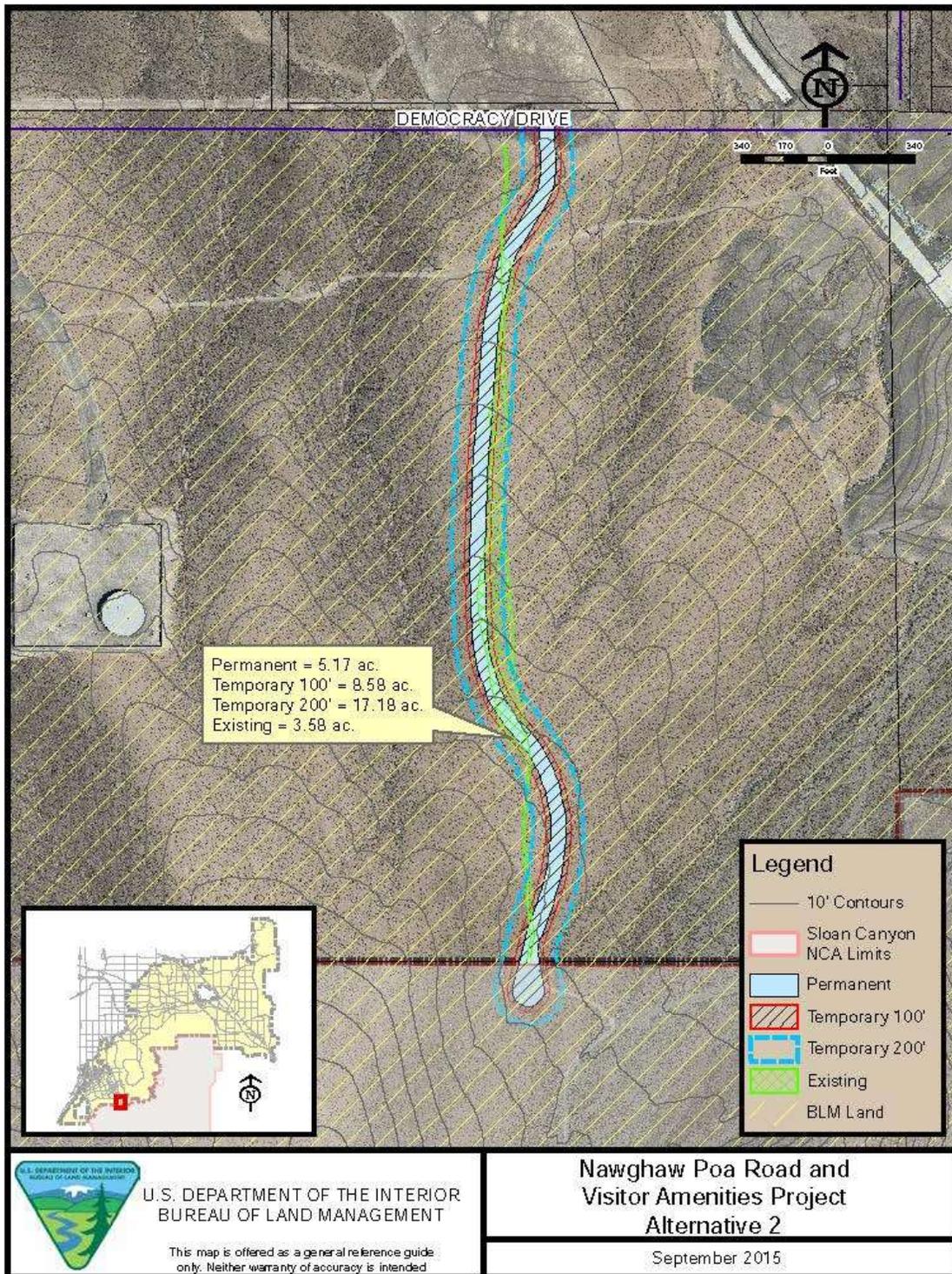
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

This map is offered as a general reference guide only. Neither warranty of accuracy is intended.

Nawghaw Poa Road and Visitor Amenities Project Alternative 1

September 2015

Figures 5: Nawghaw Poa Permanent and Temporary Disturbances



U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

This map is offered as a general reference guide only. Neither warranty of accuracy is intended.

Nawghaw Poa Road and
Visitor Amenities Project
Alternative 2

September 2015

4.1.2 Invasive Species/Noxious Weeds

Alternative 1 (Proposed Action)

Construction would require a suite of construction equipment: loaders, graders, compactors, cement mixers, compactors, rollers, water truck and haul trucks. Use of such equipment could import non-native seeds from previous job sites. Work within the construction corridor would require clearing and grubbing of existing vegetation. The cleared area would be graded, topsoil would be removed and the substrate would be compacted. Soil disturbance could reduce the native seed bank associated at the site. Furthermore, bare ground areas within the construction corridor would provide an opportunity for non-native invasive weed species to colonize the project area. If weeds are established on the site there is potential for species to out-compete native plants for resources. Noxious and/or invasive weeds effectively compete with native species for sunlight, soil, water, nutrients, and space, thereby reducing forage productivity.

Construction would likely take place within a construction corridor with widths ranging from 100 to 200 feet. Vegetation within the construction corridor maybe cleared and grubbed for construction access and staging areas. Maneuvering of off-road equipment may result trample or crushed vegetation. Construction could increase fragmentation potential for the transmission of non-native invasive species. Temporary impacts would range from 8.63 acres to 17.28 acres. See Figures 4 and 5.

Upon completion of construction, increased passenger vehicle traffic would also introduce noxious and/or invasive weed. Vehicles are effective at introducing and/or spreading weeds by disbursing weed seed along roadways. More specifically, the increased vehicular activity at the site has the potential to spread non-native invasive annual grasses. The increase of annual grasses may result in ignitions and ultimately increase the number of wildfires.

With implementation of the stipulations below, the introduction and spread of noxious and/or invasive weeds may be mitigated and the impacts less significant to the project site and adjacent lands.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Whereas Alternative 1 would establish a new vehicle turnaround/parking lot, the existing vehicle turnaround/parking lot would be reconstructed under Alternative 2. Thus, permanent impacts associated with Alternative 2 are slightly less than Alternative 1.

Construction would likely take place within a construction corridor with widths ranging from 100 to 200 feet. Vegetation within the construction corridor maybe cleared and grubbed for construction access and staging areas. Maneuvering of off-road equipment may result trample or crushed vegetation. Construction could increase fragmentation potential for the transmission of non-native invasive species. Temporary impacts would range from 8.58 acres to 17.18 acres. See Figures 4 and 5.

With implementation of the stipulations below, the introduction and spread of noxious and/or invasive weeds may be mitigated and the impacts less significant to the project site and adjacent lands.

Alternative 3 (No Action Alternative)

There would be no direct introduction and spread of invasive species/noxious weeds associated with use of construction equipment. The existing access road and vehicle turnaround/parking lot would continue to be utilized.

Similar to impacts characterized under Alternative 1, increased passenger vehicle traffic would introduce noxious and/or invasive weed. Vehicles are effective at introducing and/or spreading weeds by discharging weed seed along roadways. More specifically the increased vehicular activity at the site has the potential to spread non-native invasive annual grasses. Furthermore, due to insufficient capacity, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside as annual visitations increase, potentially resulting in introduction of invasive species beyond previously undisturbed areas. Moreover, there would be no on-site contact station and no opportunities to educate visitors on avoiding and minimizing introduction of invasive species. Off-road parking and lack of trash receptacles could indirectly result in the spread or introduction of invasive plant species.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document. Potential for the introduction and spread of invasive species/noxious weeds would be minimal relative to impacts characterized under Alternative 1 and Alternative 2.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development would increase the rate at which the noxious and invasive weeds colonize adjacent BLM lands. The affects will be considered negligible if stipulations are met to identify, prevent, and treat the spread of noxious and or invasive species. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.1.3 Fish and Wildlife Excluding Federally Listed Species

Alternative 1 (Proposed Action)

Wildlife species would be disturbed or displaced as a maximum of 17.28 acres of habitat would be disturbed within the project area. The primary direct impacts of the proposed action on wildlife would be killing or maiming of ground dwelling animals, displacement of individuals, the permanent loss and fragmentation of habitat, and increased potential for harassment of wildlife. Noise and vibration associated with earth moving equipment as well as presence of visual forms associated with an active construction site would disperse mobile terrestrial species from the construction area. Work may discourage breeding or foraging within the vicinity of the construction footprint. Adjacent areas within the construction corridor may be temporarily abandoned for the duration of construction. Mortality could also result from visitor traffic subsequent to construction. Indirect impacts could include the introduction and spread of weeds and increased erosion potential. Wildlife species in the general area are common and widely distributed throughout the area and the loss of some individuals and/or their habitat should have a negligible impact on populations of the species throughout the region. Impacts to BLM sensitive species are not anticipated to lead to further decline of the species range-wide. Any impacts to sensitive species would be avoided and/or minimized through the special stipulations provided below.

BLM Sensitive Wildlife Species

Chuckwalla, Mojave shovel-nosed snake, desert glossy snake, Nevada shovel-nosed snake, and desert Sidewinder

Potential impacts to these species from the proposed action would be similar to those discussed above for general wildlife.

Banded Gila monster

Potential impacts to the banded Gila monster from the proposed action would be similar to those discussed above for general wildlife but these can be minimized by the following special stipulations.

1. Any Gila monster encounters during project construction must be reported immediately to the Nevada Division of Wildlife at (702) 486-5127.
2. Live Gila monsters found in harms way on the construction site will be captured and detained in a cool, shaded environment (<85°F) by the project biologist trained in handling venomous reptiles until a NDOW biologist can arrive for documentation purposes. A clean 5-gallon plastic bucket w/ a secure, ventilated lid; an 18"x 18"x 4" plastic sweater box w/ a secure, vented lid; or, a tape-sealed cardboard box of similar dimension may be used for safe containment. Written information identifying mapped capture location, date, time, and circumstances (e.g. biological survey or construction) and habitat description (vegetation, slope, aspect, substrate) will also be provided to NDOW.
3. Injuries to Gila monsters may occur during excavation, road-grading, or other construction activities. In the event a Gila monster is injured, it should be transferred to a veterinarian proficient in reptile medicine for evaluation of

appropriate treatment. Rehabilitation or euthanasia expenses will not be covered by NDOW. However, NDOW will be immediately notified during normal business hours. If an animal is killed or found dead, the carcass will be immediately frozen and transferred to NDOW with a complete written description of situation circumstances, habitat, and mapped location.

4. Should NDOW be delayed to assist, biological personnel on site may be requested to remove and release the Gila monster out of harms way. Should NDOW not be immediately available to respond for photo-documentation, a 35mm camera will be used to take good quality photographs of the Gila monster in situ at the location of live encounter or dead salvage. The pictures, preferably on slide film, will be provided to NDOW and will include:
 - a. Encounter location (landscape overview with Gila monster in clear view)
 - b. A clear overhead shot of the entire body with a ruler next to it for scale (Gila monster should fill camera's field of view)
 - c. A clear, overhead close-up of the head (head should fill camera's field of view).

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Whereas Alternative 1 would establish a new vehicle turnaround/parking lot, the existing vehicle turnaround/parking lot would be reconstructed under Alternative 2. Thus, permanent impacts associated with Alternative 2 are slightly less than Alternative 1. With implementation of the stipulations below, impacts to wildlife would be avoided or minimized.

Alternative 3 (No Action Alternative)

With no construction of a new road, there would be no permanent loss of additional habitat nor long term impacts to habitat within the construction corridor. Visitations would increase due to the extension of Democracy Drive and development of areas outside the NCA boundary. The existing unpaved turnaround at the terminus of SCR would not have sufficient space for vehicles as visitations to Sloan Canyon Petroglyph Site and the North McCullough Wilderness increases. Thus, during peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, resulting in disturbance of previously undisturbed areas, further fragmenting habitat, or killing or maiming ground dwelling animals. Furthermore, increased use of the unpaved access road could further increase the potential for the introduction of noxious and/or invasive weed. With no receptacles to collect trash, trash left behind by visitors could attract nonnative species or household pets that could increase predation of native species. Moreover, there would be no on-site contact station and no opportunities to educate visitors on avoiding and minimizing impacts to native wildlife.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median

separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document. Potential for impacts to wildlife be minimal relative to impacts characterized under Alternative 1 and Alternative 2.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development would result in a decrease of habitat that could be utilized by wildlife within the vicinity of the project area. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.1.4 Federally Threatened, Endangered, Proposed, or Candidate Animal Species and Critical Habitat

The proposed project must comply with Section 7 of the Endangered Species Act of 1973 as amended (16 U.S.C. 1531 et seq.) for consultation with the USFWS on effects to federally listed species. The proposed action has a may affect, likely to adversely affect determination for the federally threatened desert tortoise (*Gopherus agassizii*) and no effect for its designated critical habitat, as the project is outside of this range. The proposed project will have no effect on any other federally protected species or designated critical habitat due to absence of the species and/or habitat.

Alternative 1 (Proposed Action)

Potential impacts to tortoise from the proposed action would be similar to those described in the Fish and Wildlife section including the permanent loss of 5.19 acres of habitat and maximum disturbance of 17.28 acres (see Table 2 and Table 3). Noise and ground vibration associated with earth moving equipment may cause individuals to temporarily abandon burrows and areas within vicinity of the construction corridor. However, due to limited mobility, individuals present within the construction corridor may be physically harmed during construction from use and maneuvering of earth moving equipment. Earth moving activities could also bury tortoise burrows. Due to habitat in the surrounding area, there is potential for tortoises to wander into the project area. If not noticed and avoided during construction and operation, desert tortoises could be either killed (by crushing) or harassed (being moved out of harm's way).

Section 7 consultation for this project is covered under the current Programmatic Biological Opinion (84320-2010-F-0365.R003) contingent on compliance with the terms and conditions which have been attached to this EA for desert tortoise. Terms and conditions and minimization measures in the above Biological Opinion contain measures to avoid and minimize potential impacts, including take, to desert tortoise.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Whereas Alternative 1 would establish a new vehicle turnaround/parking lot, the existing vehicle turnaround/parking lot would be reconstructed under Alternative 2. Construction activities would result in a permanent loss of 5.17 acres of habitat and maximum disturbance of 17.18 acres (see Table 2 and Table 3).

Alternative 3 (No Action Alternative)

With no construction of a new road, there would be no permanent loss of additional habitat nor would there be long term impacts to habitat within the construction corridor. Visitations would increase due to the extension of Democracy Drive and development of areas outside the NCA boundary. The existing unpaved turnaround at the terminus of SCR would not have sufficient space for vehicles as visitations to Sloan Canyon Petroglyph Site and the North McCullough Wilderness increases. Thus, during peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, resulting in disturbance of previously undisturbed areas, further fragmenting habitat, and killing or maiming ground-dwelling tortoises. Furthermore, increased use of the unpaved access road could further increase the potential for the introduction of noxious and/or invasive weed. With no receptacles to collect trash, trash left behind by visitors could attract nonnative species or household pets that could increase predation of native species. Moreover, there would be no on-site contact station and no opportunities to educate visitors on avoiding the desert tortoise.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document. Potential for impacts to desert tortoises would be minimal relative to impacts characterized under Alternative 1 and Alternative 2.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development would result in a decrease of habitat that could be utilized by desert tortoises within the vicinity of the project area. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.1.5 Migratory Birds

Alternative 1 (Proposed Action)

Migratory birds in the project area may be disturbed and/or displaced due to habitat impacts. Alternative 1 would result in the permanent loss of 5.19 acres of habitat and maximum disturbance of 17.28 acres (see Table 2 and Table 3). Depending on the time of year for construction, operation, or maintenance, there is the potential to disturb nesting birds within or immediately adjacent to the proposed action. The proponent must comply with the MBTA and avoid potential impacts to protected birds within the project area.

Western burrowing owl

The direct impacts of the proposed action on western burrowing owl would be loss of nesting habitat and forage, mortality and harassment of individual animals, and decrease in habitat value of adjacent remaining "wildland" areas due to increased human activity in the area. The species is protected by the Migratory Bird Treaty Act and the proponent will be required to adhere to the stipulation for migratory birds.

Loggerhead shrike, LeConte's thrasher, Bendire's thrasher

The direct impacts of the proposed action on these bird species would be loss of nesting habitat and forage, mortality and harassment of individual animals, and decrease in habitat value of adjacent remaining "wildland" areas due to increased human activity in the area. The species are protected by the Migratory Bird Treaty Act and the proponent will be required to adhere to the stipulation for migratory birds.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Whereas Alternative 1 would establish a new vehicle turnaround/parking lot, the existing vehicle turnaround/parking lot would be reconstructed under Alternative 2. Construction activities would result in a permanent loss of 5.17 acres of habitat and maximum disturbance of 17.18 acres (see Table 2 and Table 3).

Alternative 3 (No Action Alternative)

With no construction of a new road, there would be no permanent loss of additional habitat nor would there be long term impacts to habitat within the construction corridor. Visitations would increase due to the extension of Democracy Drive and development of areas outside the NCA boundary. The existing unpaved turnaround at the terminus of SCR would not have sufficient space for vehicles as visitations to Sloan Canyon Petroglyph Site and the North McCullough Wilderness increases. Thus, during peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, resulting in disturbance of previously undisturbed areas, further fragmenting habitat, and potentially destroying nests. Furthermore, increased use of the unpaved access road could further increase the potential for the introduction of noxious and/or invasive weed. With no receptacles to collect trash, trash left behind by visitors could attract nonnative species or household pets that could increase predation of migratory birds.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document. Impacts to migratory birds would be minimal and could be avoided with implementation of stipulation MB-1.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development would result in a decrease of habitat that could be utilized by migratory birds within the vicinity of the project area. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.2 Soils

Alternative 1 (Proposed Action)

Road construction would entail clearing and grubbing of existing vegetation within the road footprint. The cleared area would be graded, topsoil would be removed and the substrate would be compacted. Asphalt, concrete, and gravel would be discharged resulting in the permanent displacement of 5.19 acres of native soil. Due to the impermeable surfaces, the soil underneath the road bed would not be subject to erosion.

Furthermore, construction would likely take place within a construction corridor with widths ranging from 100 to 200 feet (see Figure 4). Vegetation within the construction corridor may also be cleared and grubbed for construction access and staging areas. Maneuvering of off-road equipment would disturb the desert pavement and soil crusts. Approximately 8.63 acres to 17.28 acres may be affected. Soil disturbance within the construction corridor would increase the potential for erosion and transportation of exposed fine-grained sands soils to lower elevations. Upon completion of construction, unconsolidated and loose topsoil would be conveyed down gradient to lower elevations during rain storms. These effects would be attenuated as vegetation and soil crusts are reestablished in the long-term. To that end, disturbed areas within the construction corridor as well as segments of unpaved access road outside of the construction footprint would be restored via installation of vertical mulch. The mulch would be irrigated until they are sufficiently established. However, soils within disturbed areas would remain disturbed for the long term.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Whereas Alternative 1 would establish a new vehicle turnaround/parking lot, the existing vehicle turnaround/parking lot would be reconstructed under Alternative 2. Since the alignment under Alternative 2 would be located down gradient within vicinity of a wash, the potential for soil erosion is slightly less relative to Alternative 1. However, given that both alternatives share the same alignment for approximately 2,500 feet, differences in erosion rates would not be notable.

Alternative 3 (No Action Alternative)

With no construction of a new road, there would be no permanent loss of native soil nor would there be long term disturbances of native soil within the construction corridor. There would be no increase in down gradient sedimentation rates during rainfalls.

Visitations would increase due to the extension of Democracy Drive and development of areas outside the NCA boundary. The existing unpaved turnaround at the terminus of SCR would not have sufficient space for vehicles as visitations to Sloan Canyon Petroglyph Site and the North McCullough Wilderness increases. Thus, during peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, resulting in disturbance of previously undisturbed soils. Moreover, there would be no on-site contact station and no opportunities to educate visitors on minimizing impacts to native soil.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development would result in a decrease of native soils within the project vicinity. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.3 Water Resources/Quality (drinking/surface/ground)

Alternative 1 (Proposed Action)

The construction footprint is located on a ridge outside of surface waterways. The existing unpaved vehicle turnaround, the southern terminus of the project footprint, is located in the uplands, approximately 230 feet away from the active channel of the wash. Thus, construction would not permanently or temporarily impound, redirect, or modify the desert wash traversing Sloan Canyon. Thus, the hydrology characterizing the wash would remain unaltered. Asphalt and concrete would be placed primarily placed along the ridgeline. Thus, there would be no decrease in permeable surface area that could decrease ground water recharge areas.

The road and trail system would follow the existing contours and gradient of the existing ridgeline. Thus, the existing drainage pattern would be retained. Furthermore, the road will have curb cuts every 50 feet throughout the entirety of its alignment to keep rainfall within 50 feet of where it falls and to avoid concentrating the storm water. In addition, rip rap energy dissipaters would be placed at each curb cut to minimize potential for erosion.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Due to the slight rise in gradient, velocity of flows exiting the curb cuts on the slope of the ridge would be relatively higher. However, rip rap energy dissipaters will be placed at each curb cut decrease velocity and minimize potential for erosion.

Alternative 3 (No Action Alternative)

With no construction of a new road the existing hydrology and drainage patterns would remain unaltered.

Visitations would increase due to the extension of Democracy Drive and development of areas outside the NCA boundary. The existing unpaved turnaround at the terminus of SCR would not have sufficient space for vehicles as visitations to Sloan Canyon Petroglyph Site and the North McCullough Wilderness increases. Thus, during peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, resulting in disturbance of previously undisturbed soils. The increase of disturb soils could increase the potential for erosion.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document. Thus, construction of the permanent visitor

center and installation of utilities are not likely to result in substantial to the hydrology, drainage, or erosion.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development could result in changes to hydrology, drainage and erosion patterns within the project vicinity. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.4 Recreation (for BLM publiclands managed under the Sloan Canyon NCA Resource Management Plan)

Alternative 1 (Proposed Action)

Construction of NPR from Democracy Drive would provide improved vehicle access to the Petroglyph Management Area and the North McCullough Wilderness. Visitations would increase even in the absence of development within the immediate vicinity. Temporary visitor amenities such as portable restrooms, potable water sources, trash receptacles, parking areas, and an informational kiosk would be available to visitors. These elements would improve the visitation experience.

Interpretive programs would further improve the visitation experience and help to conserve, protect and restore this Nationally Significant area. Upon initial establishment of the contact station, basic orientation and education materials about the area and applicable regulations would be made available to visitors. Opportunities for in-person interaction with BLM staff would be available during operational hours of the contact station. In-person interaction as well as orientation and education materials would foster amongst visitors an appreciation and understanding of the cultural resources within the Petroglyph Management Area as well as recreational opportunities within the North McCullough Wilderness. In-person interactions would also foster an awareness of appropriate visitor use and site etiquette at cultural resources sites and within the North McCullough Wilderness.

Visits to the Petroglyph Management Area would be monitored to ensure usage thresholds are in conformance with the Management Emphasis Areas the RMP and NMWMP to conserve and protect cultural resources.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1.

Alternative 3 (No Action Alternative)

NPR would not be constructed. However, the COH would extend Democracy Drive as planned facilitating vehicular and pedestrian access to the Petroglyph Management Area and the North McCullough Wilderness. The unpaved access road to the Sloan Canyon Petroglyph Site would remain. Temporary visitor amenities such as portable restrooms, potable water sources, trash

receptacles, parking areas, and an informational kiosk would not be available to visitors. With no contact station, there would be no opportunities for BLM staff to interact with and educate visitors. Usage thresholds pursuant to those identified in the RMP and NMWMP would not be managed. With increased visitors and no infrastructure and programs to manage and educate visitors, human-caused deterioration of sensitive cultural resources and natural resources would increase.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development would result additional visitors to the Sloan Canyon Petroglyph Site and increase recreational uses of the North McCullough Wilderness. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.5 Visual Resources - (for BLM public lands managed under the Sloan Canyon NCA Resource Management Plan)

Alternative 1 (Proposed Action)

Within the NCA, placement of a temporary contact station and other temporary amenities such as portable restrooms would result in introduction of rectangular forms. However, the size of the structures would be similar to small construction trailers and would be limited to one story in height and will be replaced with permanent facilities during Phase II of the Sloan Canyon Implementation Strategy. These small rectangular forms would easily resolve to the undulating lines characterizing the low gradient hills within the larger view shed and will be colored an appropriate environmental standard color. The black asphalt would introduce a distinct color contrast to the landscape. However, given the limited geographic footprint within the NCA, the level of change to the characteristic landscape would be moderate and may minimally attract the attention of the casual viewer. Based on the above, Alternative 1 would be in conformance with the visual resource management measures in the RMP.

Furthermore, construction would likely take place within a construction corridor with widths ranging from 100 to 200 feet (see Figure 4). Vegetation within the construction corridor may also be cleared and grubbed for construction access and staging areas. Maneuvering of off-road equipment would disturb the desert pavement and soil crusts. Approximately 8.63 acres to

17.28 acres may be affected. These temporarily disturbed areas would be visually distinct from hues and textures associated with desert pavement as well as creosote bush and bursage vegetation communities. Disturbed areas within the construction corridor as well as segments of the unpaved access road outside of the construction footprint would be restored. Upon sufficient recovery of restored areas, visual impacts associated with disturbed areas would be minimized.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1 since both alternatives share the same alignment for approximately 2,500 feet before diverging. Under Alternative 2, the alignment would veer diagonally towards the southeast down the ridge; continue south towards a wash; and terminate at the existing vehicle turnaround. Whereas Alternative 1 would establish a new vehicle turnaround/parking lot, the existing vehicle turnaround/parking lot would be reconstructed under Alternative 2.

Alternative 3 (No Action Alternative)

With no construction of a new road, there would be no temporary or permanent visual impacts associated with the construction of an asphalt road.

Visitations would increase due to the extension of Democracy Drive and development of areas outside the NCA boundary. The existing unpaved turnaround at the terminus of SCR would not have sufficient space for vehicles as visitations to Sloan Canyon Petroglyph Site increases. Thus, during peak visitation periods, visitors may park cars in areas beyond the existing boundary of the turnaround or park roadside, resulting in disturbance of previously undisturbed soils and vegetation.

These disturbed areas would be visually distinct from hues and textures associated with desert pavement as well as creosote bush and bursage vegetation communities. With no implementation of restoration measures, there would be long-term visual impacts associated with the disturbed areas.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would need to be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. Construction of the permanent visitor center and installation of utilities are likely to result in minimal disturbance of additional areas beyond the construction footprint evaluated in this document.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for

low density residential uses and designated open spaces. However, BLM would retain a right-of-way for NPR. Thus, disposal of land adjacent to NPR and its subsequent development would result in the permanent replacement of natural forms and textures with geometric forms and textures associated with residential developments. Environmental impacts associated with disposal of lands have been evaluated in the LVVDB Environmental Impact Statement.

4.6 National Landscape Conservation System

Alternative 1 (Proposed Action)

The project area is located within the immediate vicinity of the North McCullough Wilderness and encompasses public lands managed by the Las Vegas Field Office (BLM) as well as a portion of land within the NCA managed by the Red Rock/Sloan Field Office (BLM). The majority of NPR would be located outside the NCA boundary on public lands managed by the Las Vegas Field Office. The looped vehicle turnaround/parking area would be located immediately inside the NCA boundary, extending no further than 100 feet into the NCA. Upon completion of construction, temporary amenities including but not limited to a contact station, information kiosk, portable restrooms, potable water supply, bicycle racks, and trash receptacles would be placed on site.

BLM guidelines encourage placement of visitor amenities outside of the NCA in part to minimize disturbance within the NCA (see BLM Handbooks 6100, 6220, and 8320). However, due to the unique nature of the cultural resources within Sloan Canyon, its proximity to develop areas and the expected increase in annual visits, there is a need to effectively manage cultural and natural resources within the Petroglyph Management Area and the North McCullough Wilderness. The most effective method is to locate visitor facilities in close proximity to the site. This would better facilitate implementation of permitting and monitoring programs. Visitor amenities such as trash receptacles, portable restrooms, and potable water sources nearby would minimize litter.

Of most importance is the ability of BLM staff to implement outreach and interpretive programs. These programs would foster amongst visitors an appreciation and understanding of the cultural resources within the Petroglyph Management Area as well as recreational opportunities within the North McCullough Wilderness. In-person interactions would also foster an awareness of appropriate visitor use and site etiquette at the petroglyph site.

Locating temporary amenities within the NCA would effectively comply with the intent of the Omnibus Public Land Management Act in establishing the National Landscape Conservation System; establishment of the NCA; and BLM guidelines: the conservation and protection of sensitive cultural and natural resources.

Alternative 2 (Partial Ridge Alternative)

Impacts would be similar to those characterized for Alternative 1.

Alternative 3 (No Action Alternative)

NPR would not be constructed. There would be no temporary visitor amenities within the NCA boundary. The COH would extend Democracy Drive as planned facilitating vehicular and pedestrian access to the Petroglyph Management Area and the North McCullough Wilderness.

The unpaved access road to the Sloan Canyon Petroglyph Site would remain. Temporary visitor amenities such as portable restrooms, potable water sources, trash receptacles, parking areas, and an informational kiosk would not be available to visitors. With no contact station, there would be no opportunities for BLM staff to interact with and educate visitors. Usage thresholds pursuant to those identified in the RMP and NMWMP would not be managed. With increased visitors and no infrastructure and programs to manage and educate visitors, conservation and protection of cultural and natural resources would be compromised.

Cumulative Impacts

As part of a future project, the BLM would construct a permanent visitor center at the looped vehicle turnaround/parking lot. Likewise, electrical utilities would be installed within the median separating the road from the paved trail (see Figure 2). Connections to COH water and sewer lines are not feasible. If the permanent facility offers these services, a water well and septic system would likely be installed. The rectangular asphalt area on which the temporary contact station and portable restrooms will be located will likely be replaced by a concrete pad for the construction of a permanent visitor center. The replacement of temporary facilities with permanent structures would serve to further facilitate implementation of management and interpretive programs rendering more effective the efforts to conserve and protect sensitive cultural and natural resources.

The majority of NPR is located outside the NCA boundary on public lands managed by the BLM. These lands have been designated for disposal pursuant to the SNPLMA. Local governments would be allowed to acquire these lands for public purposes prior to auctioning to the general public. These lands are within the COH's West Henderson planning area. According to the West Henderson Land Use Plan, lands outside the NCA boundary would likely be developed for low density residential uses and designated open spaces. Since the NLCS only affects the NCA, disposal of land adjacent to NPR and its subsequent development would not directly impact lands protected under the NLCS.

5.0 PREPARERS AND CONTRIBUTORS

Preparers and contributors are listed in alphabetical order:

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 Kenneth Wong (Environmental Planner, US Army Corps of Engineers)

6.0 COORDINATION

Consultation letters were sent to the tribes listed in the table below on June 7 and July 5, 2015. Invitations were also extended the same tribes for meetings arranged on July 23 and 31, 2015, which were held in Henderson, Nevada. A field visit was scheduled after a project presentation. The letters and meetings were intended to provide the opportunity for the tribes to discuss any concerns that they may have associated with the development of the project. In addition, contact information for Ms. Robbie McAboy, Assistant Field Office Manager, was provided to solicit comments for interested tribal members that were unable to participate and wished to speak to someone directly about the project.

Mr. Benny Tso, Chairman Las Vegas Paiute Tribe	Ms. Barbara Durham, THPO Timbisha Shoshone Tribe
Mr. Charles Good, Chairman Chemehuevi Indian Tribe	Mr. Eddie Jim, Chair Pahrump Paiute Tribe
Mr. Daren Daboda, Chairman Moapa Band of Paiutes	Ms. Lora Tom, Chairperson Paiute Indian Tribe of Utah
Ms. Deanna Domingo Moapa Band of Paiutes	Ms. Dorena Martineau, Cultural Coordinator Paiute Indian Tribe of Utah
Mr. Timothy Williams, Chairman Fort Mojave Indian Tribe	Mr. Herman Honanie, Chairperson Hopi Tribe
Ms. Linda Otero, Director Aha Makav Cultural Society	Mr. Leigh Kuwanwisiwma, Cultural Coordinator Hopi Tribe
Mr. Wayne Patch Sr., Chairman Colorado River Indian Tribe (CRIT)	Ms. Sherry Counts, Chairwoman Hualapai Tribe
Mr. George Gholson, Chairperson Timbisha Shoshone Tribe	Mr. Darrell Mike, Chairman Twenty-Nine Palms Band of Mission Indians

7.0 REFERENCES

Bureau of Land Management. 2006a. Sloan Canyon Resource Management Plan and Environmental Impact Statement.

Bureau of Land Management. 2006b. North McCullough Wilderness Management Plan.

Bureau of Land Management. 2009. Sloan Canyon National Conservation Area Trails Master Plan and Environmental Assessment.

City of Henderson. 2014. Updated West Henderson Land Use Plan.

Appendix A Stipulations for N-78443

1.0 Special Stipulations

- 1.1. The Holder shall abide by the monitoring, maintenance, and reporting requirements of the United States Fish and Wildlife Service's Appended Biological Opinion 84320-2010-F-0365.R003 for this project.
- 1.2. Prepare and complete a Weed Management Plan (WMP) which would be prepared and submitted to the BLM for review and approval prior to construction. The Weed Management Plan is a planning document that acknowledges, assesses, and provides an inventory of weed infestations for treatment. The Weed Management Plan will recognize the project's impact on vegetation and define the expected treatments and activities necessary to both maintain the determined desired condition for the vegetation community, and control the weeds that may occur within the project area. Should the weed spread beyond the project foot print then these weeds will be treated as a part of the project. This will include access routes.
- 1.3. Disturbed areas within the construction corridor as well as segments of the unpaved access road outside of the construction footprint will be restored. Holes would be augered within disturbed areas for the planting of live creosote bush plants and vertical mulch such as dead Yucca. Berms on both sides of the roadway would be leveled. Appropriately-sized large, medium and smaller rocks for this specific area would be placed within the disturbance area to restore a natural vista. Appropriately colored (the coloration in the area is black rocks on light brown soil) desert varnish would be applied to replicate the natural coloration in the area.

2.0 General Stipulations

- 2.1. The right-of-way (ROW) is issued subject to all valid existing rights.
- 2.2. No signs of advertising devices shall be placed on the premises or on adjacent public lands, except those posted by or at the direction of the authorized officer.
- 2.3. The ROW shall be maintained in a sanitary condition at all times. Waste materials at those sites shall be disposed of promptly at an approved waste disposal site. "Waste", as used in this paragraph, shall mean all discarded matter of any kind.
- 2.4. The holder shall ensure that the road has a proper drainage system and should include the best combination of various design elements, such as ditches, culverts, drainage dips, crowns, low-water crossings, subsurface drains and bridges, per Clark County standards.
- 2.5. Holder shall mark the exterior boundaries of the ROW with stake and/or lath at 100 to 200 foot intervals. The intervals may be varied at the time of staking at the discretion of the Authorized Officer. The tops of the stakes and/or laths will be painted and the laths flagged in a distinctive color as determined by the Holder. Holder shall maintain all boundary stakes and/or laths in place until final cleanup and restoration is completed.

- 2.6. Holder shall conduct all activities associated with construction, operation, maintenance and termination of this ROW within its authorized limits.
- 2.7. Holder shall maintain the ROW in a safe, useable condition, as directed by the Authorized Officer. A regular maintenance program shall include, but is not limited to, soil stabilization.
- 2.8. Holder shall maintain copy of the authorization along with stipulations on construction site at all times. In the event that the public land underlying this ROW, encompassed in this grant, or a portion thereof, is conveyed out of Federal ownership and administration of the ROW or the land underlying the ROW is not being reserved to the United States in the patent/deed and/or the ROW is not within a ROW corridor being reserved to the United States in the patent/deed, the United States waives any right it has to administer the ROW, or portion thereof, within the conveyed land under Federal laws, statutes, and regulations, including the regulations at 43 CFR Part [2800][2880], including any rights to have the holder apply to BLM for amendments, modifications, or assignments and for BLM to approve or recognize such amendments, modifications, or assignments. At the time of conveyance, the patentee/grantee, and their successors and assigns, shall succeed to the interests of the United States in all matters relating to the ROW, or portion thereof, within the conveyed land and shall be subject to applicable State and local government laws, statutes, and ordinances. After conveyance, any disputes concerning compliance with the use and the terms and conditions of the ROW shall be considered a civil matter between the patentee/grantee and the ROW Holder.

3.0 Air Quality

- 3.1. The Holder shall not violate applicable air standards or related facility siting standards established by or pursuant to applicable federal, state, or local laws or regulations. The Holder shall be responsible for dust abatement within the limits of the ROW and is responsible for obtaining all necessary permits from appropriate authorities for acceptable dust abatement and control methods (e.g., water, chemicals). The Holder shall be solely responsible for all violations of any air quality permit, law or regulation, as a result of its action, inaction, use or occupancy of the ROW.

Notwithstanding whether a violation of any air quality permit, law or regulation results, the Holder will cooperate with the Authorized Officer in implementing and maintaining reasonable and appropriate dust control methods in conformance with law and appropriate to the circumstances at the sole cost of the Holder.

- 3.2. Ensure a dust control permit is obtained through Department of Air Quality (DAQ) for all soil disturbing activity of .25 acres or greater, in the aggregate, and permit stipulations are in compliance for the duration of the activity.
- 3.3. Prior to relinquishment, abandonment, or termination of this ROW, the Holder shall apply reasonable and appropriate dust abatement and control measures to all disturbed areas. The abatement and measures shall be designed to be effective over the long-term (e.g., rock mulch or other means) and acceptable to the Authorized Officer.
- 3.4. During excavation, backfilling, and contouring, the disturbed soil should be wetted sufficiently in order to effectively reduce airborne dust and reduce soil erosion.

4.0 Cultural

- 4.1. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the Holder, or any person working on his behalf on public or Federal lands shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The Holder will be responsible for the cost of evaluation. Any decision regarding suitable mitigation measures will be made by the Authorized Officer after consulting with the Holder. Holder shall be responsible for the resultant mitigation costs.

5.0 Hazardous Material/Pesticides/Liability

- 5.1. No hazardous material, substance, or hazardous waste, (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et seq.*, or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) shall be used, produced, transported, released, disposed of, or stored within the ROW area at any time by the Holder. The Holder shall immediately report any release of hazardous substances (leaks, spills, etc.) caused by the Holder or third parties in excess of the reportable quantity as required by federal, state, or local laws and regulations. A copy of any report required or requested by any federal, state or local government agency as a result of a reportable release or spill of any hazardous substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved federal, state or local government agency.
- 5.2. The Holder shall immediately notify the Authorized Officer of any release of hazardous substances, toxic substances, or hazardous waste on or near the ROW potentially affecting the ROW of which the Holder is aware.
- 5.3. As required by law, Holder shall have responsibility for and shall take all action(s) necessary to fully remediate and address the hazardous substance(s) on or emanating from the ROW.
- 5.4. Use of pesticides shall comply with the applicable Federal and state laws. Pesticides shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, the Holder shall obtain from the Authorized Officer written approval of a plan showing the type and quantity of material to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers and any other information deemed necessary by the Authorized Officer. The plan shall be submitted no later than December 1 of any calendar year that covers the proposed activities for the next fiscal year. Pesticides shall not be permanently stored on public lands authorized for use under this ROW. Coordinate construction activities with the BLM Weed Coordinator at 702-515-5000 regarding any proposed herbicide treatment. Prepare, submit, obtain and maintain a pesticide use proposal (PUP) for the work. Contact Sean McEldery or Ben Klink for assistance with the PUP.
- 5.5. The Holder shall comply with all applicable local, state, and federal air, water, hazardous substance, solid waste, or other environmental laws and regulations, existing or hereafter enacted or promulgated. To the full extent permissible by law, the Holder agrees to indemnify and hold harmless, within the limits, if any, established by state law (as state law exists on the

effective date of the ROW), the United States against any liability arising from the Holder's use or occupancy of the right-of way, regardless of whether the Holder has actually developed or caused development to occur on the ROW, from the time of the issuance of this ROW to the Holder, and during the term of this ROW. This agreement to indemnify and hold harmless the United States against any liability shall apply without regard to whether the liability is caused by the Holder, its agents, contractors, or third parties. If the liability is caused by third parties, the Holder will pursue legal remedies against such third parties as if the Holder were the fee owner of the ROW.

Notwithstanding any limits to the Holder's ability to indemnify and hold harmless the United States which may exist under state law, the Holder agrees to bear all responsibility (financial or other) for any and all liability or responsibility of any kind or nature assessed against the United States arising from the Holder's use or occupancy of the right-of way regardless of whether the Holder has actually developed or caused development to occur on the ROW from the time of the issuance of this ROW to the Holder and during the term of this ROW.

- 5.6. Mineral material generated, and not needed for the development of the proposed action within the ROW site, requires a specific BLM use authorization in accordance with regulations at 43 CFR 3600 prior to the removal of the excess mineral material.

6.0 Survey Monuments

- 6.1. Holder shall protect all survey monuments found within the authorization area. Survey monuments include, but are not limited to, General Land Office and Bureau of Land Management Cadastral Survey Corners, reference corners, witness points, U.S. Coast and Geodetic Survey benchmarks and triangulation stations, military control monuments, and recognizable civil (both public and private) survey monuments. If any of the above are to be disturbed during operations, the holder shall secure the services of a Professional Land Surveyor or Bureau cadastral surveyor to perpetuate the disturbed monuments and references using surveying procedures found in the Manual of Instructions for the Survey of the Public Lands of the United States and Nevada Revised Statutes, Chapter 329, Perpetuation of Corners. The holder shall record such survey in the appropriate county and send a copy to the authorized officer. If the Bureau cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monuments, the holder shall be responsible for the survey cost.

7.0 Paleontology

- 7.1. If any paleontological resources are discovered during construction, the BLM Archaeologist will be notified prior to work commencing in the immediate vicinity of the find.

8.0 Vegetation/Noxious Weeds/Land surface/Soil/Water/Riparian/Woodland/Forestry

- 8.1. Woodland /Forestry: Cactus and yucca are considered special forest and are regulated under the BLM Nevada Forestry Program. Low densities of cactus and yucca could be present within the project area. To the extent practical they should be avoided.
- 8.2. Land surface treatment for areas previously disturbed: Following excavation, trenches will be backfilled with the excavated soil. The soil will be distributed and contoured evenly over

the surface of the disturbed area. The soil surface will be left rough to help reduce potential wind erosion.

- 8.3. Land surface treatment for areas previously undisturbed: Strip the top three to six inches of soil material with associated plant material over all surfaces to be disturbed by construction. Stockpile this material along the course of construction will be salvaged and transplanted out of harm's way but still within the right of way. At the conclusion, including trench backfilling and compaction, replace the stockpiled soil with plant debris uniformly back on the surface of the disturbed area.
- 8.4. Water/Riparian/Floodplains: Applicant must follow guidelines set by the Clark County Regional Flood Control District (CCRFCD) and Clark County specifications for design of drainage systems. If work is to occur in Ephemeral channels, need to consult with Army Corp of Engineers (ACOE) and Nevada Department of Environmental Protection (NDEP). Federal Emergency Management Agency (FEMA) standards are applicable.
- 8.5. Soils: Trail construction shall comply with the guidelines and BMPs outlined in USDA/USDOT Notebook 2300-Recreation, July 2007, 0723-2806-MTDC).
- 8.6. If drilling boreholes, holder needs to follow Nevada Administrative Code (NAC) protocols for drilling. Consult with ACOE to make sure you do not need a 404 permit. All holes should be drilled according to the Nevada Regulations for Water Well and Related Drilling, per NRS Statutes 534. All holes should be reclaimed according to NRS and NAC regulations and reclaimed immediately after drilling. If groundwater is intercepted, holes will need to be reclaimed appropriately. Additionally, applicant is responsible for obtaining any CWA permits from NDEP that may be necessary.
- 8.7. Prepare and complete a Weed Management Plan (WMP) which would be prepared and submitted to the BLM for review and approval prior to construction. The Weed Management Plan is a planning document that acknowledges, assesses, and provides an inventory of weed infestations for treatment. The Weed Management Plan will recognize the project's impact on vegetation and define the expected treatments and activities necessary to both maintain the determined desired condition for the vegetation community, and control the weeds that may occur within the project area. Should the weed spread beyond the project foot print then these weeds will be treated as a part of the project. This will include access routes.
- 8.8. Limit the size of any vegetation and/or ground disturbance to the absolute minimum necessary to perform the activity safely and as designed. Avoid creating soil conditions that promote weed germination and establishment.
- 8.9. Begin construction in weed free areas whenever feasible before operating in weed-infested areas.
- 8.10. Locate equipment storage, machine and vehicle parking or any other area needed for the temporary placement of people, machinery and supplies in areas that are relatively weed-free. Avoid or minimize all types of travel through weed-infested areas or restrict major activities to periods of time when the spread of seed or plant parts are least likely.
- 8.11. Establish equipment-cleaning sites (if equipment is infested with weed seeds, plant parts or mud and dirt). Clean project related equipment and machinery (this especially includes the

nooks and crannies of undercarriages) using compressed air or water to remove mud, dirt and plant parts before moving into and from relatively weed-free areas. Collect, bag and deposit seeds and plant parts in dumpsters destined for local landfills as practical.

- 8.12. Inspect, remove, and dispose of weed seed and plant parts found on personnel clothing and personal equipment. Bag and dispose of seeds and plants in a dumpster for deposit in local landfills. Disposal methods may vary depending on the project. If you have questions consult with the Las Vegas Field Office Noxious Weed Coordinator.
- 8.13. Evaluate options, including area closures, to regulate the flow of traffic on sites where native vegetation needs to be established.

9.0 **Fire Restrictions**

- 9.1. Fire restrictions are generally enacted May through October. Compliance with fire restrictions is mandatory while fire restrictions are in place. Specific activities may be waived on a case by case basis by a line officer after review and approval by the Fire Management Officer.

10.0 **Wilderness/WSA**

- 10.1. Trail construction should only use native materials.

11.0 **Visual**

- 11.1. The proposed action is in VRM Class III. VRM Class III aims to partially retain the existing character of the landscape. Levels of change to the landscape can be moderate, but should not dominate the view of the casual observer.

12.0 **Migratory Birds**

- 12.1. Migratory birds, including the BLM sensitive species the western burrowing owl, *Athene cunicularia*, may be present on the project site. Depending on the time of year for construction, there is the potential to disturb nesting birds within or immediately adjacent to the proposed action. The proponent must comply with the MBTA and avoid potential impacts to protected birds within the project area. The proponent will be required to adhere to the following mitigation measures:

1. Avoid potential impacts to protected birds within the 200 foot wide construction corridor throughout the length of the proposed alignment. Habitat-altering activities should be scheduled outside the bird breeding season, which generally occurs from February 15th through August 31st. If such an activity has to occur during the breeding season, then a qualified biologist must first survey the area for nests immediately prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests are found, an appropriately-sized buffer area must be established and maintained until the young birds fledge. This buffer must connect to other suitable undisturbed habitat. As the above dates are a general guideline, if active nests are observed outside this range they are to be avoided as described above.

2. If a project that may alter any breeding habitat has to occur during the breeding season, then a qualified biologist must survey the area for nests prior to commencement of construction activities. This shall include burrowing and ground nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found, an appropriately-sized buffer area must be avoided until the young birds fledge. As the above dates are a general guideline, if active nest are observed outside this range they are to be avoided as described above.

13.0 Threatened, Endangered or Candidate Animal Species

- 13.1. The Holder shall comply with the terms and conditions of the Appended Biological Opinion 84320-2010-F-0365.R003 and abide by the monitoring, maintenance, and reporting requirements for this project.