

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

Record of Decision and Approved Resource Management Plan Amendments for the Northern Corridor Right-of-way, Red Cliffs National Conservation Area Resource Management Plan, and St. George Field Office Resource Management Plan

January 2021



Estimated Total Lead Agencies'
Costs Associated with Developing
and Producing this Document:
\$8,415,000

BLM Mission

It is the mission of the Bureau of Land Management to sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations.

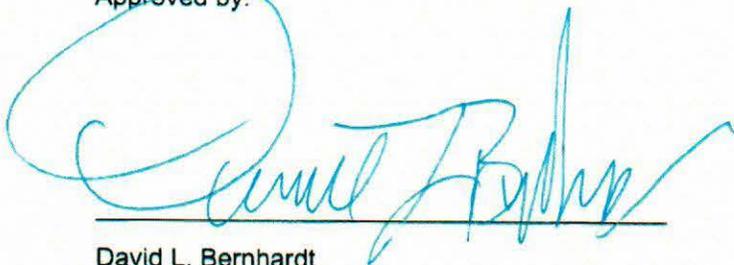
Record of Decision

I hereby approve:

- (1) the Red Cliffs National Conservation Area Resource Management Plan (RMP) Amendments defined in Alternative B, as described in further detail in Section 2.2 of this Record of Decision (ROD);
- (2) the issuance of a right-of-way grant on BLM-administered lands within the 500' corridor defined in Alternative 3, the UDOT Application Alignment, as described in further detail in Section 3.2 of this ROD; and
- (3) the St. George Field Office RMP Amendments defined in Alternative B, as described further detail in Section 4.2 of this ROD.

My approval of this Decision constitutes the final decision of the Department of the Interior and, in accordance with the regulations at 43 CFR § 4.410(a)(3), is not subject to appeal under Departmental regulations at 43 CFR Part 4.

Approved by:



David L. Bernhardt
Secretary of the Interior

JAN 13 2021

This page intentionally left blank.

Table of Contents

Record of Decision

1	Introduction and Background	1
1.1	Introduction	1
1.2	Statutory Background	2
1.2.1	Section 1974 and 1977 of the Omnibus Public Lands Management Act of 2009...	2
1.2.2	The Land and Water Conservation Fund	4
1.2.3	Council on Environmental Quality regulations regarding supplemental analysis ...	5
2	Red Cliffs National Conservation Area Resource Management Plan Amendments.....	7
2.1	Purpose and Need	7
2.2	Decision	7
2.3	Alternatives Analyzed	8
2.3.1	Red Cliffs NCA RMP Amendment Alternative A (No Action)	8
2.3.2	Red Cliffs NCA RMP Amendment Alternative B.....	8
2.3.3	Red Cliffs NCA RMP Amendment Alternative C.....	8
2.3.4	Environmentally Preferred Alternative	8
2.4	Management Considerations and Rationale for the Decision	9
2.5	Mitigation Measures	10
3	Northern Corridor Highway Right-of-Way	10
3.1	Purpose and Need	10
3.2	Decision	11
3.3	Alternatives Analyzed	12
3.3.1	Northern Corridor: No Action Alternative	12
3.3.2	Northern Corridor: T-Bone Mesa Alignment	12
3.3.3	Northern Corridor: UDOT Application Alignment	12
3.3.4	Northern Corridor: Southern Alignment	13
3.3.5	Red Hills Parkway Expressway	13
3.3.6	St. George Boulevard/100 South One-way Couplet	13
3.3.7	Environmentally Preferable Alternative	14
3.4	Management Considerations and Rationale for the Decision	15
3.5	Design Features and Mitigation Measures	17
3.5.1	Design Features of the Proposed Action	18
3.5.2	Mitigation Measures and Terms and Conditions	18
4	St. George Field Office Resource Management Plan Amendments	19

4.1	Purpose and Need	19
4.2	Decision	19
4.3	Alternatives Analyzed	20
4.3.1	St. George Field Office RMP Amendment Alternative A (No Action)	20
4.3.2	St. George Field Office RMP Amendment Alternative B.....	20
4.3.3	St. George Field Office RMP Amendment Alternative C	20
4.3.4	Environmentally Preferred Alternative	21
4.4	Management Considerations and Rationale for the Decision	21
4.5	Mitigation Measures	22
5	Public Involvement, Consultation, and Coordination	22
5.1	Public Involvement.....	22
5.2	Protest Resolution.....	23
5.3	Consultation and Coordination	24
5.3.1	Cooperating Agencies.....	24
5.3.2	Governor’s Consistency Review	24
5.3.3	Native American Tribal Consultation	25
5.3.4	National Historic Preservation Act Section 106 Consultation.....	25
5.3.5	Endangered Species Act Section 7 Consultation	26
6	Availability of the Approved RMPs	27

Approved Resource Management Plan Amendments for the Red Cliffs National Conservation Area

1	Introduction	30
2	Purpose and Need	30
3	Planning Area	31
4	Scoping/Issues	31
5	Consideration of Other Plans	32
6	Management Decisions.....	32
6.1	Visual Resource Management	32
6.2	Recreation and Visitor Services	32
6.3	Lands and Realty	32
7	Public Involvement, Consultation, and Coordination	33
7.1	Public Involvement.....	33
7.2	Consultation and Coordination.....	34
7.2.1	Cooperating Agencies.....	34
7.2.2	Governor’s Consistency Review	34
7.2.3	Native American Consultation.....	35
7.2.4	National Historic Preservation Act Section 106 Consultation.....	35
7.2.5	Endangered Species Act Section 7 Consultation	36
8	Monitoring the Plan	36

Approved Resource Management Plan Amendments for the St. George Field Office

1	Introduction	39
2	Purpose and Need	39
3	Planning Area	39
4	Scoping/Issues	40
5	Consideration of Other Plans	40
6	Management Decisions.....	40
6.1	Lands and Realty	40
6.2	Energy and Mineral Resources	42
6.3	Fish and Wildlife	44
6.4	Livestock Grazing	45
6.5	Recreation	45
6.6	Comprehensive Travel and Transportation	48
6.7	Fire Management.....	48
7	Public Involvement, Consultation, and Coordination	49
7.1	Public Involvement.....	49
7.2	Consultation and Coordination.....	49
7.2.1	Cooperating Agencies.....	49
7.2.2	Governor’s Consistency Review	49
7.2.3	Native American Consultation.....	50
7.2.4	National Historic Preservation Act Section 106 Consultation.....	50
7.2.5	Endangered Species Act Section 7 Consultation	51
8	Monitoring the Plan	51

1 Introduction and Background

1.1 Introduction

The Utah Department of Transportation (UDOT) applied to the Bureau of Land Management (BLM) for a right-of-way (ROW) grant on September 18, 2018, to construct a multi-lane, divided highway (referred to as the Northern Corridor) across the Red Cliffs National Conservation Area (NCA). Washington County, Utah applied to the United States Fish and Wildlife Service (FWS) for an Incidental Take Permit (ITP) addressing species listed under the Endangered Species Act of 1973, as amended (ESA) (16 U.S.C. §1531 et seq.). The Final Environmental Impact Statement and Proposed Resource Management Plan Amendments (FEIS/Proposed RMPA) was prepared to consider both applications.

The BLM used the National Environmental Policy Act of 1969 (NEPA) process to consider several alternative northern transportation routes and, in addition to analyzing the potential impacts of the proposed ROW, evaluate if the ROW application is consistent with the statutory purposes of the Red Cliffs National Conservation Area (NCA) and the 2016 Red Cliffs NCA Record of Decision and Approved Resource Management Plan (RMP) or whether it is necessary to amend the Red Cliffs NCA RMP to accommodate a ROW. The amendments to the Red Cliffs NCA RMP and issuance of a ROW grant would allow the BLM to identify that ROW as a specific northern transportation route (i.e., a Northern Corridor) as part of a future travel management planning process as Congress has instructed in Section 1977 of the Omnibus Public Land Management Act of 2009 (OPLMA).

The BLM's consideration of the ROW application and potential RMP amendments also furthers the Department of the Interior's policy goals, as stated in the Strategic Plan for Fiscal Years 2018-2022, to "enhance conservation stewardship whereby all levels of government and private landowners work cooperatively together in an atmosphere of mutual respect to achieve shared natural resource management goals across landscapes" and to "[develop] and [maintain] strong partnerships with State, local, and private stakeholders in shared conservation stewardship." The BLM, FWS, State of Utah, and Washington County worked very closely throughout this project to ensure cohesion between the four Federal actions analyzed in the FEIS/Proposed RMPA and to continue the decades-long successful partnership to protect the threatened Mojave desert tortoise.

The Red Cliffs NCA comprises 73% of the land base of a multi-jurisdictional, 62,000-acre Red Cliffs Desert Reserve (Reserve). The Reserve was established in 1996 through a partnership between Washington County, the FWS, BLM, and others in connection with the FWS approval of the Washington County's 1995 Habitat Conservation Plan (1995 HCP) for the threatened Mojave desert tortoise. Also in 1996, the FWS issued an ITP to Washington County for the take of Mojave desert tortoise incidental to covered activities in the County's permit area. As a result of the ITP and protective management of the Reserve's land base by the respective land managing agencies, necessary development has been able to occur in tortoise habitat on non-Federal lands in the County. The ITP was issued for a term of 20 years and expired in 2016.

Prior to expiration, Washington County submitted an application to renew and amend the ITP as described in their proposed Habitat Conservation Plan for Washington County, Utah, Restated and Amended October 2020 (Amended HCP), which includes a proposal to expand the Red Cliffs Desert Reserve by approximately 6,813 acres within a new sixth zone (Reserve Zone 6) if the BLM issues a ROW grant crossing the existing Reserve. In order to support the enhanced

protections proposed in Washington County's Amended HCP, the BLM considered changes to management prescriptions for approximately 3,471 acres of public lands in Reserve Zone 6 through amendments to the St George Field Office RMP.

1.2 Statutory Background

The designating statutory authority for the Red Cliffs NCA is 16 U.S.C. 460www. The Red Cliffs NCA was designated by Congress through the Omnibus Public Land Management Act of 2009 (OPLMA) (Public Law 111-11, Title 1, Subtitle O, Section 1974). The Congressionally defined purpose of the 45,000-acre NCA is to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the Red Cliffs NCA and to protect each species that is located in the NCA and listed as a threatened or endangered species under the Endangered Species Act (ESA). Section 1974 also states that the NCA shall be managed by the Secretary of the Interior through the BLM and that the Secretary shall only allow uses of the NCA that the Secretary determines would further a purpose for which the NCA was designated.

Section 1977 of OPLMA further instructs the Secretary to develop a comprehensive travel management plan for the land managed by the BLM in Washington County and, in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701 et seq.), "in developing the travel management plan, the Secretary shall- (A) in consultation with appropriate Federal agencies, State, tribal, and local governmental entities (including Washington County and St. George City, Utah), and the public, identify one or more alternatives for a northern transportation route in the County."

The NCA boundary generally follows the boundary of the Reserve, a multi-jurisdictional land base that has been collaboratively managed by the BLM, the State of Utah, Washington County, and local municipalities since 1996 to protect Mojave desert tortoise. Prior to the designation of the NCA, these public lands were managed to support the Reserve, which was established by the 1995 HCP to offset the development of private lands and the incidental take of Mojave desert tortoise elsewhere in Washington County. The NCA represents 73% of the lands within the larger Reserve. As a signatory to the 1995 HCP Implementation Agreement, the BLM committed to acquiring private lands within the Reserve for two primary purposes: (1) the consolidation of land tenure; and (2) the acquisition of wildlife or threatened and endangered species habitat. The BLM has continued to pursue these twin purposes since the NCA was established and many of the acquisitions made within the now-NCA were paid for with funding from the Land and Water Conservation Fund.

1.2.1 Section 1974 and 1977 of the Omnibus Public Lands Management Act of 2009

This Decision complies with both Sections 1974 and 1977 of OPLMA because it gives meaning to both sections, furthers certain purposes of the NCA, and allows the BLM to identify and fully consider a transportation route in northern Washington County.

Since 2009, the BLM has endeavored to balance the competing instructions in Sections 1974 and 1977. In 2016, when the BLM completed the Red Cliffs NCA RMP, it considered a conceptual northern corridor as one alternative in response to a request from Washington County. However, the agency ultimately selected a different alternative that established a ROW avoidance area, which could potentially accommodate a future northern corridor route. Under the 2016 RMP, an avoidance area is an area identified through resource management planning to be avoided, but that may be available for ROW location with special stipulations. At that time, the BLM explained

to Congress that a “plain reading of the statute (OPLMA section 1977[b][2]) does not direct the BLM to [approve or otherwise establish a transportation route through the Red Cliffs NCA]. Instead, the Act prohibits such a route through the NCA unless it furthers one of the purposes for which the NCA was established.”¹

The BLM has now received a specific ROW application from UDOT. The ROW application is designed to address the growing population and transportation needs in Washington County. However, the application seeks a ROW in the NCA that is larger than the current avoidance area can accommodate and, thus, cannot be fully considered without also amending the Red Cliffs NCA RMP.

Section 1974(b)(2) states that the Secretary, through the BLM, “shall only allow uses of the [NCA] that the Secretary determines would further a purpose described in subsection (a).” 16 U.S.C 460www (emphasis added). The list of purposes in subsection (a) include recreation, scenic, and educational resources of the NCA. As explained in Sections 2.4 and 3.4 in this ROD, the ROW will enhance these purposes by providing a new paved hike and bike path for recreation and scenic views that will benefit certain members of the public. This path will also further the educational purpose of the NCA by including additional interpretive displays that inform the public about the history and other purposes of the NCA. Therefore, this Decision satisfies the management requirement Congress gave the BLM and ensures that the agency fulfills the instructions provided in Section 1974.

The BLM’s authority to issue a road ROW through the NCA is confirmed by reading section 1974 in harmony with Section 1977 of the same law, which requires the BLM to “identify 1 or more alternatives for a *northern* transportation route in [Washington] County.” 123 Stat. 1088-89 (2009); Public Law 111-11, Title 1, Subtitle O, Section 1977; (emphasis added). At the time Congress enacted OPLMA, the only BLM-managed lands located north of the city of St. George in Washington County were those lands in the Reserve/NCA. The BLM must assume that Congress was aware of this fact. Therefore, the BLM understands Section 1977 to instruct the agency to identify and consider a ROW in the NCA and to permit it to authorize such a route through the NCA – even if it may impact some purposes for which the NCA was designated – because there is no other viable BLM-administered land that can reasonably support a ROW of this size or meet the Applicant’s needs in northern Washington County.

As discussed in this ROD and further analyzed in the FEIS, the BLM has determined that granting a ROW for Alternative 3 appropriately gives meaning to the legislative instructions in *both* Sections 1974 and 1977. Contrary to certain public comments, the BLM cannot elevate Section 1974 above Section 1977 because that would violate a basic tenet of statutory construction, which requires the agency to give effect to all provisions in a statute so that no individual section is rendered superfluous. Here, the Decision to issue the ROW furthers the recreational, scenic, and educational purposes of the NCA, which is consistent with the explicit instruction in Section 1974(b)(2). But the Decision also allows the BLM to identify one or more alternatives for a northern transportation route in a future comprehensive travel and transportation management plan, which is consistent with the explicit instruction in Section 1977.

¹ While this Decision may be construed as being inconsistent with BLM’s prior interpretations of and statements regarding Sections 1974 and 1977, it is consistent with a plain reading of the statute and the principles of statutory construction because it gives meaning to both Sections at issue.

1.2.2 The Land and Water Conservation Fund

The Land and Water Conservation Fund Act of 1965 (54 U.S.C. 200301 et seq.) (LWCF) established a funding source to assist the Federal agencies and States in acquiring certain lands for certain recreation and other conservation purposes. The LWCF has a Federal agency component (54 U.S.C. 200306) and a State and local government component (54 U.S.C. 200305), which have different uses and requirements. For Federal land management agencies such as the BLM, the LWCF may be used to purchase private in-holdings to meet certain resource management objectives. For State and local governments, funds from the LWCF are allocated to a State for the planning, acquisition, and development of needed land and water public outdoor recreation projects. Section 6(f)(3), as described in 36 Code of Federal Regulations (CFR) 59.3(a), is the cornerstone of Federal efforts that ensure Federal investments in State LWCF assistance are being maintained for public outdoor recreation use. Once land has been purchased or developed (partially or entirely) with LWCF assistance from the State side of the LWCF program, it cannot be wholly or partially converted to a use other than public outdoor recreation use(s) without the approval of the National Park Service. The LWCF Act, as amended, does not include these provisions for funds allocated for Federal purposes. Lands acquired for Federal purposes are administered by the respective Federal land management agency and subject to other laws.

Since the establishment of the Reserve, and in accordance with the 1995 HCP Implementation Agreement, the BLM has acquired private property parcels for the purposes of land tenure consolidation and wildlife habitat acquisition. The majority of these acquisitions were made with LWCF funds and consistent with the agency's acquisition authority under 43 U.S.C. 1715, which post-dates LWCF and is part of the larger comprehensive statutory scheme for public lands management established by the Federal Land and Policy Management Act (43 U.S.C. 1701 et seq.). All Federal fee-lands acquired with LWCF funds in Alternative 3 are managed by the BLM (FEIS Map 3.16-1). In addition to these fee-lands, the BLM also acquired a conservation easement over certain lands owned by the City of St. George within Alternative 3, but the BLM cannot issue a ROW over lands it does not own in fee. 43 C.F.R. § 2802.10.

Consistent with the 1995 HCP Implementation Agreement, the wildlife habitat acquired was for the endangered Mojave desert tortoise. The BLM is unaware of any express statutory or regulatory provision prohibiting the issuance of a ROW over portions of these NCA lands. The BLM's review of the warranty deeds did not reveal any reference to LWCF, limitations on additional encumbrances, or other restrictions on the parcels within Alternative 3. Lands that are acquired pursuant to 43 U.S.C. 1715 are subsequently managed in accordance with the governing land use plan, the Red Cliffs NCA RMP. The Red Cliffs NCA RMP contemplates issuing ROWs over acquired NCA lands (LAR-12). However, UDOT has included a measure in the Plan of Development (Appendix C) to make reasonable efforts to comply with any specific requirements applicable to impacted LWCF parcels.

Further, the BLM is not bound by the decision in *Gifford Pinchot Task Force v. Perez*, 2014 WL 3019165, *10 (D. Ore. July 3, 2014). That judicial decision represents an interpretation of LWCF, but it is not binding on my decision here. There are distinguishable facts related to that case that are not at issue in this project. Further, that court also acknowledged that LWCF does not require that the land be used exclusively for the purposes for which it was acquired. Based, in part, on the small LWCF acreage involved in Alternative 3, the I have determined that issuing a ROW over these parcels is not inconsistent with the purposes for which these lands were acquired.

The BLM has also reviewed the prior Appropriation Acts that authorized the acquisitions of LWCF parcels within the Reserve and/or NCA that were potentially impacted by Alternative 3. Based on this review, I have determined that both its purchases and planned management are consistent with the Appropriations Act because so few acres will be impacted and the larger purposes for the acquisition will continue to be met. Further, the conveyance documents for each of the acquisitions in Alternative 3 did not include any express prohibitions against encumbrances or reference any Appropriation Acts.

Therefore, due to the small amount of acreage potentially encumbered within the ROW corridor under Alternative 3, the encumbered lands will continue to fulfill wildlife habitat purposes in the NCA and the ROW is not inconsistent with LWCF.

1.2.3 Council on Environmental Quality regulations regarding supplemental analysis

The Council on Environmental Quality (CEQ) regulations at 40 CFR 1502.9(c)^{2,3} state that “Agencies shall prepare supplements to either draft or final environmental impact statements if...there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” During the 2020 fire season, four wildfires burned partially or fully within Reserve Zone 3 near UDOT’s proposed alignment for the Northern Corridor ROW (Alternative 3). The four wildfires within Reserve Zone 3 occurred after publication of the Draft Environmental Impact Statement and Draft Resource Management Plan Amendments (DEIS/Draft RMPA) on June 12, 2020.

During the public comment period for the DEIS/Draft RMPA, the agencies received several public comments requesting that the project be paused until additional data could be collected and a supplemental EIS could be completed. These commenters suggested that three 2020 wildfires were significant new circumstances and the impacts of the wildfires on the Mojave desert tortoise and its habitat warranted further analysis and an additional public process. The commenters requested that the BLM assess and examine the full ecological impacts of the wildfires, including species mortality and impacts to native vegetation, and that the BLM adopt Emergency Stabilization/Burned Area Emergency Response Plans and Burned Area Rehabilitation Plans. In Chapter 3 and Appendix O of the FEIS/Proposed RMPA, the agencies addressed these comments and explained why supplemental analysis of the impacts from the first three wildfires was unnecessary.

Prior to publication of the FEIS/Proposed RMPA, the BLM and FWS considered several factors to determine if the areas that burned in the three wildfires that occurred in July and October 2020 warranted preparation of a supplemental EIS. The agencies considered the amount and quality of affected desert tortoise habitat, potential impacts to the Mojave desert tortoise population, and local fire history. The review confirmed that wildfire has become a common occurrence on this landscape. After reviewing the scope, nature, and intensity of the impacts of the 2020 wildfires and the relevance of these changes to the Federal actions under consideration, it was determined that the 2020 wildfires do not represent a significant new circumstance or information that would

² The regulations at 40 CFR 1500-1508 and 1515-1518 were updated through a Final Rule that took effect on September 14, 2020 (85 Fed. Reg. 43304). Since this project was already underway at the effective date of the new regulations, it will continue to follow the previous regulations as permitted by 40 CFR 1506.13. All citations in this document will reference the previous regulations and provide a footnote citation to the new regulations, where applicable.

³ 40 CFR 1502.9(d) as of September 14, 2020.

warrant preparation of a supplemental Draft EIS. The affected environment and environmental consequences sections were updated in the FEIS/Proposed RMPA to add the 2020 data to the fire history and disclose the resulting impacts to vegetation, wildlife, Endangered Species Act Section 6 land acquisition grants, visual resources, cultural resources, recreation, and fire and fuels management.

On November 6, 2020, after the FEIS/Proposed RMPA was submitted for publication, the Snow Canyon Fire ignited and burned a total of 799 acres, including 145 acres of suitable desert tortoise habitat within Reserve Zone 3. Since the wildfire began after the FEIS/Proposed RMPA was submitted for publication, this ROD addresses whether its impacts require supplemental NEPA analysis. The 145 acres of suitable desert tortoise habitat that burned in the Snow Canyon Fire represent 0.05% of the approximately 29,269 acres of suitable desert tortoise habitat that occurs within Reserve Zone 3. Kernel density data was also developed to support the analysis in the BLM's Biological Assessment and the model estimated low desert tortoise density for the habitat that was impacted by the Snow Canyon Fire. The model's results estimated that no desert tortoises were directly impacted, although there may have been indirect effects to additional desert tortoises located outside the fire perimeter due to habitat loss and fragmentation.

The FEIS/Proposed RMPA, in Section 3.22.1, acknowledges that although large-scale or frequent wildfires are not part of the natural fire regime of the Mojave Desert, warmer annual temperatures, prolonged droughts punctuated by years of above-average fall-winter precipitation, and the proliferation of invasive annual grasses are fueling an annual burn-reburn wildfire cycle in the Red Cliffs NCA, the Reserve, and other portions of the Mojave Desert. Some of these areas have burned repeatedly—two, three, or even four times during the past 20 years. Map 3.22-1 in the FEIS/Proposed RMPA demonstrates this increasing trend and shows that approximately 622 acres (77.8%) of the Snow Canyon Fire occurred within previously burned areas.

Since wildfires have become a regular feature of the landscape in this area, the BLM continues to conduct emergency stabilization and rehabilitation whenever possible with each new incident. The 2020 wildfires are no exception. The total funding requested to implement Emergency Stabilization and Rehabilitation Plans exceeds \$2 million, with an additional \$400,000 requested to repair damaged facilities or fund other measures to support the emergency stabilization efforts (e.g., fencing repair to prevent unauthorized off-road motorized use). If these funds are provided, a portion of them will be applied to the lands burned by the Snow Canyon Fire as well as the earlier three wildfires.

Although the exact location and size of future wildfires cannot be predicted, the DEIS/Draft RMPA clearly stated the local fire history since 1976, contributing factors, and resulting impacts of the current burn-reburn fire regime that has developed in this area and the potential for future wildfires. Additional information relating to three of the four 2020 wildfires occurring in Reserve Zone 3 was included in the FEIS/Proposed RMPA. The Snow Canyon Fire is a continuation of the existing burn-reburn pattern and the wildfire's resulting impacts were consistent with the descriptions added to the FEIS/Proposed RMPA for the first three 2020 wildfires. Therefore, the impacts from the Snow Canyon Fire do not represent a significant new circumstance or information for the consideration of the ROW or RMP amendments and no supplementation to the current analysis is necessary.

Further, although the four 2020 wildfires covered more acreage than most previous years, wildfires have become a common occurrence on this landscape, and the four 2020 wildfires primarily burned within previously burned habitat. The growing wildfire trend and its impacts are

well-known issues and they were previously identified and/or analyzed in multiple documents over several years including the Red Cliffs NCA RMP, Biological Report for the Upper Virgin River Recovery Unit Population of Mojave Desert Tortoise, DEIS/Draft RMPA, FEIS/Proposed RMPA, and Biological Opinion for this project. Due to this well-documented trend, the FWS's management of desert tortoise and its habitat has shifted to anticipate wildfires as part of the baseline condition in this area. This is acknowledged in the Biological Report where it states that "it is highly probable that Red Cliffs Desert Reserve, Zone 3 will have a large wildfire again." This supporting documentation shows that the agencies were fully aware of the likelihood as a matter of "when" the next wildfire would happen as opposed to "if" one would occur as they prepared the DEIS/Draft RMPA and FEIS/Proposed RMPA. Therefore, the Snow Canyon Fire does not trigger a need for supplemental NEPA analysis.

2 Red Cliffs National Conservation Area Resource Management Plan Amendments

2.1 Purpose and Need

The 2016 Red Cliffs NCA RMP established a ROW avoidance area that could accommodate a Northern Corridor alignment or other utility developments in the NCA under specific restrictions as outlined in the RMP. An avoidance area is an area identified through resource management planning to be avoided, but that may be available for ROW location with special stipulations.

In 2018, the BLM received a ROW application from UDOT that seeks a ROW through the NCA, but is larger than the current ROW avoidance area can accommodate and, thus, cannot be granted without also amending the Red Cliffs NCA RMP. The BLM considered the Red Cliffs NCA RMP amendments to allow for consideration of the ROW application.

2.2 Decision

After considering public comments and protests, best available scientific and technical information, and the results of consultation and coordination with other federal and state agencies, tribal, state, and local governments, and other stakeholders, this Decision adopts Alternative B as the Approved Red Cliffs NCA RMP Amendments, which are restated as management actions in the attached Approved RMP Amendments for the Red Cliffs NCA RMP. The amendments were prepared under the authorities of OPLMA; FLPMA; in accordance with 43 CFR, Part 1600, that address the BLM land use planning process; as well as all other applicable federal laws, regulations, and agency policies. An EIS was prepared for these RMP amendments, in compliance with NEPA.

As previously discussed in section 1.2, the Approved RMP Amendments satisfy the legislative requirements in Section 1974 of OPLMA because they further the scenic, recreation, and educational purposes of the NCA and accommodate a northern transportation route. The Approved RMP Amendments also satisfies the legislative requirement in Section 1977 of OPLMA because they create management prescriptions that allow the BLM to identify and consider more than one northern transportation route in a forthcoming Washington County travel and transportation management plan. The Approved Red Cliffs NCA RMP Amendments were described in the FEIS/Proposed RMPA that was issued for review during the November 13, 2020 to December 13, 2020 protest period and all decisions in the Approved RMP Amendments are land use planning decisions that could be protested during that same period.

As explained in Section 1.2 Statutory Background and 3.4 Management Considerations and Rationale for the Decision, this Decision complies with both the Omnibus Public Land Management Act of 2009 and the Land and Water Conservation Fund Act.

2.3 Alternatives Analyzed

This section describes the three alternatives considered in detail for the Red Cliffs NCA RMP Amendments (including the No Action Alternative). The alternatives are described in additional detail in Table 2.3-1 of the FEIS/Proposed RMPA. Amendments to the Red Cliffs NCA RMP would be necessary for any of the Northern Corridor action alternatives that would cross areas identified as avoidance areas for new ROWs in the 2016 Red Cliffs NCA RMP (BLM 2016). As described in Section 2.6 of the FEIS/Proposed RMPA, the BLM developed two action alternatives for the Red Cliffs NCA RMP Amendments that could be applied to Northern Corridor alternatives that are located within the avoidance areas established in the 2016 Red Cliffs NCA RMP.

2.3.1 Red Cliffs NCA RMP Amendment Alternative A (No Action)

The No Action Alternative represents current management of the Red Cliffs NCA. Under this alternative, no amendments would be approved for the Red Cliffs NCA RMP.

2.3.2 Red Cliffs NCA RMP Amendment Alternative B

Red Cliffs NCA RMP Amendment Alternative B would allow for a one-time exception to LAR-13 Criteria E for the issuance of a Title V ROW within the existing ROW Avoidance Area for the Northern Corridor project, amend VRM-07 to manage the Northern Corridor ROW as BLM Visual Resource Management (VRM) Class IV, and amend REC-05 to manage the 600-foot-wide area around the selected route for the Northern Corridor as part of the Rural Recreation Management Zone.

2.3.3 Red Cliffs NCA RMP Amendment Alternative C

Red Cliffs NCA RMP Amendment Alternative C would be similar to Alternative B except a new aboveground and buried utility ROW corridor would be established around the selected route for the Northern Corridor, allowing for additional utility development along the alignment in the future. Amendments to VRM-07 and REC-05 would be the same as Alternative B.

2.3.4 Environmentally Preferred Alternative

Regulations under 40 CFR 1505.2(b)⁴ require that, in cases where an EIS has been prepared, the ROD must identify all alternatives that were considered, “specifying the alternative or alternatives considered environmentally preferable.” The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101 the NEPA, which states that “it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.” Within the FEIS, the BLM identified the range of impacts anticipated from each of the alternatives

⁴ 40 CFR 1505.2(a)(2) as of September 14, 2020.

based on relevant factors including ecological, social, economic, and technical considerations. Of the alternatives considered in the EIS, Alternative B meets the BLM's requirement to address all practicable means to avoid or minimize environmental harm and is therefore considered the environmentally preferable alternative.

2.4 Management Considerations and Rationale for the Decision

In reaching this Decision, and with the aid of the FEIS/Proposed RMPA and the input provided by the public and various stakeholders throughout the development of the EIS, the Secretary considered and weighed several important factors.

A principal consideration was the need to implement the Congressional directives in OPLMA, which includes Section 1974 that established the Red Cliffs NCA “to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area; and to protect each species that is– (A) located in the National Conservation Area; and (B) listed as a threatened or endangered species on the list of threatened species or the list of endangered species published under section 4(c)(1) of the Endangered Species Act of 1973 (16 U.S.C. 1533(c)(1)).” Additionally, OPLMA also states that the “Secretary shall only allow uses of the National Conservation Area that the Secretary determines would further a purpose” for which the NCA was designated.

The FEIS/Proposed RMPA, in Table 3.18-1, identifies the corresponding resource sections where potential impacts are disclosed for each of the purposes for which the NCA was designated. The FEIS/Proposed RMPA is transparent regarding anticipated adverse impacts potentially resulting from the construction of a highway across the NCA, as well as the expectation that at least one of the purposes of the NCA would be furthered by Alternative B.

The location of the new roadway will allow the public to experience views of the interior of the NCA beyond what is currently only available along Cottonwood Springs Road and a handful of existing unpaved trails. The construction of a new 4.5-mile paved hike and bike path along the full length of the ROW will provide recreational access opportunities in an area of the NCA where they do not currently exist. Accessibility for users who are physically unable to use unpaved trails will be enhanced through the availability of the paved hike and bike path and new scenic driving opportunities. Both the recreational and scenic purposes of the NCA would be furthered through these aspects of the project. Additionally, the educational purpose of the NCA will be furthered through the installation of at least eight waypoints along the new hike and bike path with interpretive displays promoting public education and understanding of the purposes for which the Red Cliffs NCA was designated.

Alternative B provides only a one-time exception from the ROW Avoidance Area criteria required under the current Red Cliffs NCA RMP. All future development will continue to comply with the strict limitations that are currently in place.

This Decision also acknowledges the long collaborative history of the BLM working closely with State of Utah, Washington County, Dixie Metropolitan Planning Organization, and multiple local governments. For over a decade, transportation planning forecasts have estimated the need to improve future east-west travel within St. George and the surrounding communities. Congress also supported this collaborative problem-solving approach through the directive in Section 1977 of OPLMA, which states “the Secretary shall, in consultation with appropriate Federal agencies, State, tribal, and local governmental entities (including the County and St. George City, Utah),

and the public, identify 1 or more alternatives for a northern transportation route in the County.” As shown in Map 1 in Appendix A, the only land managed by the BLM north of St. George in Washington County is located within the Red Cliffs NCA. Federal, state, and local entities came together in good faith to identify potential impacts and develop appropriate mitigation to strike a balance between the needs of the growing communities in Washington County with the need to protect, conserve, and enhance the purposes of the Red Cliffs NCA.

Through this Decision, the amendments will guide the BLM’s management and conservation of Mojave desert tortoise habitat and other resources located within the Red Cliffs NCA. This Decision reflects the BLM’s support for local communities while ensuring, in partnership with the FWS, that habitat located on public land is managed to avoid jeopardizing the continued existence of a listed species and the BLM’s actions will not result in the destruction or adverse modification of designated critical habitat.

2.5 Mitigation Measures

All practicable measures to avoid and/or minimize environmental harm are encompassed in the measures included in the Red Cliffs NCA RMP Amendments, within the BLM’s authority under the designating language for the Red Cliffs NCA as defined in OPLMA Section 1974 of Title I, Subtitle O. Mitigation measures associated with the Northern Corridor ROW grant, as identified in Section 3.5 of this ROD, are sufficient to “conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area, and to protect each species that is located in the National Conservation Area, and listed as a threatened or endangered species on the list of threatened species or the list of endangered species published under section 4(c)(1) of the Endangered Species Act of 1973 (16 U.S.C. 1533(c)(1))” (OPLMA Sec 1974(a)) while also providing management that would “only allow uses of the National Conservation Area that the Secretary determines would further a purpose” of the NCA. OPLMA Sec 1974(e)(2).

3 Northern Corridor Highway Right-of-Way

3.1 Purpose and Need

UDOT applied for a ROW to construct a multi-lane, divided highway on BLM-administered lands within the Red Cliffs NCA and the overlapping Red Cliffs Desert Reserve with the objective of reducing congestion, increasing capacity, and improving east-west mobility on arterial and interstate roadways between SR 18 and I-15 at milepost 13. The BLM is required to respond to UDOT’s application for a ROW grant under Title V of FLPMA, BLM’s ROW regulations, 43 CFR part 2800, and other applicable Federal laws. In the FEIS/Proposed RMPA, the BLM considered the potential impacts of the proposed ROW (Alternative 3: UDOT Application alignment, as described in Chapter 2 of the FEIS/Proposed RMPA) and reasonable alternatives.

Under OPLMA Subtitle O, Section 1977, the BLM is required to identify a Northern Corridor as part of a subsequent transportation management planning process. In 2016, as part of developing the current Red Cliffs NCA RMP, the BLM considered an alternative that included a Northern Corridor in the NCA. However, at that time, the BLM did not have a specific ROW application to consider as part of that planning process. Instead, the BLM relied on several conceptual alignments from the Dixie Metropolitan Planning Organization. The conceptual alignments represented Washington County’s recommendations as a cooperating agency in the development

of the 2016 RMP. While the BLM eventually selected a different alternative that did not include a corridor, the selected alternative did create an avoidance area that could accommodate a Northern Corridor alignment in the NCA. Under the 2016 RMP, an avoidance area is an area identified through resource management planning to be avoided, but that may be available for ROW location with special stipulations.

The BLM has now received a specific ROW application from UDOT. The ROW application is designed to address the growing population and transportation needs in Washington County. However, the application seeks a ROW in the NCA that is larger than the current avoidance area can accommodate and, thus, cannot be fully considered without also amending the Red Cliffs NCA RMP.

Fully evaluating UDOT's ROW application and potential amendments to the Red Cliffs NCA RMP will also further the Department of the Interior's policy goals, as stated in the Strategic Plan for Fiscal Years 2018-2022, to "enhance conservation stewardship whereby all levels of government and private landowners work cooperatively together in an atmosphere of mutual respect to achieve shared natural resource management goals across landscapes" and to "[develop] and [maintain] strong partnerships with State, local, and private stakeholders in shared conservation stewardship." UDOT is seeking to meet the transportation demands of Washington County's anticipated continued growth through 2050 and Washington County is also seeking a renewed Incidental Take Permit in order to meet the needs of its increasing population. Washington County's current transportation infrastructure may not accommodate the County's projected growth, and it is trying to balance that future growth with the statutory and regulatory provisions governing the Red Cliffs NCA and larger Reserve, and the protected wildlife that resides on those lands.

3.2 Decision

After extensive environmental analysis of the Project and alternatives, consideration of public comments, consultation, and applicable pertinent federal laws and policies, this Decision adopts Alternative 3, the UDOT Application alignment, and approves the issuance of the FLPMA Title V ROW grant to UDOT (UTU-93620) for an up to 500-foot-wide, 30-year ROW on lands administered by the BLM as described in Section 2.2 in the FEIS/Proposed RMPA, the Plan of Development included as Appendix C of this Record of Decision (ROD), and including all mitigation measures listed in Section 3.5 and Appendix D of this ROD. The ROW can only be issued across Federal fee-lands, as shown in Map 2 in Appendix A of this ROD.

After a thorough review of the analysis, this Decision affirms that all practicable means to avoid, minimize, and mitigate for unavoidable impacts of the route selected for the Project, have been considered in the FEIS (and adopted as part of this Decision) and as further refined in the Plan of Development (Appendix C). Specifically, and limited to Federal lands administered by the BLM, this Decision approves the issuance of a grant authorizing the construction, operation, maintenance and potential decommissioning of a transportation ROW, which will be eligible for renewal. The ROW will be up to 500 feet in width, approximately 1.9 miles long and will encumber approximately 122 total acres of BLM-administered land, as shown in Map 2 in Appendix A of this ROD. The term of the ROW will be 30 years with the right of renewal, consistent with Title V of the FLPMA (43 U.S.C. 1764(b)).

The approved ROW grant includes terms and conditions based on the FEIS, the Biological Opinion, the mitigation measures listed in Section 3.5 of this ROD, and other applicable federal rules and regulations listed Appendix C of the FEIS/Proposed RMPA. Upon approval of the ROW

grant, UDOT will not receive authorization to construct and operate the roadway until it meets the requirements specified in this ROD. This ROD requires UDOT to prepare a final Plan of Development that includes final engineering and design drawings before the BLM will issue a Notice to Proceed (NTP) to the holder. Other NTP requirements are detailed in Section 3.5 and Appendix D of this ROD and also enjoin the holder from operating within the ROW until those NTP requirements are met. Once the BLM verifies that requirements have been met and issues the NTP, UDOT will be authorized to construct and operate the roadway project and all ancillary facilities.

As explained in Section 1.2 Statutory Background and 2.4 Management Considerations and Rationale for the Decision, this Decision complies with both the Omnibus Public Land Management Act of 2009 and the Land and Water Conservation Fund Act.

3.3 Alternatives Analyzed

This section describes the six alternatives considered in detail for the Northern Corridor (including the No Action Alternative). The alternatives are shown on Map 2.2-1 (FEIS Appendix B) and described in additional detail in the Northern Corridor Highway Alternatives Development Technical Report (FEIS Appendix J; Jacobs 2020b) in the FEIS/Proposed RMPA. For the alternatives that would include a new highway across BLM-administered lands, the BLM's action would be the issuance of a ROW grant to UDOT for the construction, operation, and maintenance of the Northern Corridor across BLM-administered lands, as further described in Sections 2.2.2 through 2.2.4 of the FEIS/Proposed RMPA. It is assumed the ROW grant would be issued for a 30-year term and eligible for renewal at that point.

Additional alternatives that were considered, but eliminated from detailed analysis, are listed in Section 2.7.1 of the FEIS/Proposed RMPA.

3.3.1 Northern Corridor: No Action Alternative

Under the No Action Alternative, the BLM would deny UDOT's application for a ROW grant across public lands in the Red Cliffs NCA for the Northern Corridor. The alternative reflects all the roadway and transit improvements from the applicable local, regional, and statewide transportation plans that would be completed by 2050, absent the Northern Corridor. It provides a baseline against which the other Northern Corridor alternatives will be compared based on traffic performance.

3.3.2 Northern Corridor: T-Bone Mesa Alignment

The BLM would issue a ROW grant to UDOT across public lands in the Red Cliffs NCA for the Northern Corridor on the T-Bone Mesa Alignment (Map 2.2-1). This alignment would connect Green Spring Drive on the east to Red Hills Parkway on the west just north of the Pioneer Hills trailhead parking area. Under this alternative, the Northern Corridor would skirt the southern edge of T-Bone Mesa. The Northern Corridor would be approximately 4.2 miles long, approximately 2.2 miles of which would be across BLM-administered lands.

3.3.3 Northern Corridor: UDOT Application Alignment

The BLM would issue a ROW grant to UDOT across public lands in the Red Cliffs NCA for the Northern Corridor for the alignment included in UDOT's ROW application (Map 2.2-1). This alignment would connect Green Spring Drive on the east to Red Hills Parkway on the west just

north of the Pioneer Hills trailhead parking area. Under this alternative, the Northern Corridor would be approximately 4.5 miles long, approximately 1.9 miles of which would be across BLM-administered lands.

3.3.4 Northern Corridor: Southern Alignment

The BLM would issue a ROW grant to UDOT across public lands in the Red Cliffs NCA for the Northern Corridor on the Southern Alignment (Map 2.2-1). Under this alternative, the Northern Corridor would nearly skirt the southern border of the NCA, connecting Green Spring Drive on the east to Red Hills Parkway on the west just south of, and slightly encroaching onto, the Pioneer Hills trailhead parking area. The Northern Corridor would be approximately 5.5 miles long, approximately 1.5 miles of which would be across BLM-administered lands.

3.3.5 Red Hills Parkway Expressway

The Red Hills Parkway Expressway Alternative proposes changes to Red Hills Parkway instead of developing a new road across BLM-administered lands within the NCA (Map 2.2-1). This alternative assumes that the BLM would not issue UDOT a ROW grant across the Red Cliffs NCA for the Northern Corridor. Rather, the BLM would need to grant necessary ROW amendments to the City of St. George's existing FLPMA Title V ROW for the Red Hills Parkway. This alternative would convert Red Hills Parkway into a grade-separated expressway between I-15 and Bluff Street. Improvements would include new east-to-north and south-to-west connections to I-15 to connect Red Hills Parkway directly to I-15, including an additional lane in each direction extending most of the length between 200 East and 900 East. The alternative would also convert the existing at-grade signalized intersections at 200 East (Skyline Drive) and 1000 East to grade-separated interchanges with necessary modifications to the mainline roadway to accommodate the new interchanges. New flyover ramps would be constructed to connect Red Hills Parkway to I-15.

The intersections at 900 East and Industrial Road would be closed or converted to right-in-right-out movements only because of their proximity to the 1000 East interchange and the I-15 flyover ramps. The intersection at Highland Drive would be closed. Existing driveways along the existing roadway to public and private properties would either be closed or converted to right-in-right-out movements only; all left turns in and out would be prohibited.

Additional widening of Red Hills Parkway at various locations between 200 East and 900 East would be required to add exclusive turning lanes for access to individual properties or public use areas where feasible. Section 3.26 details these areas requiring widening and lists the partial and full acquisitions and changes in access that would be required to accommodate the widening. Fencing with tortoise mesh exists along the entire length of the Red Hills Parkway; Section 3.5 describes any areas for the roadway widening that would fall outside the tortoise fencing. The existing pedestrian trail along Red Hills Parkway would be relocated in various locations between 200 East and 900 East to accommodate improvements, including lengthening of the existing pedestrian tunnel under Red Hills Parkway in the Pioneer Park area. The widening would also require approximately 0.2 acres of additional encumbrance of Federal LWCF-acquired lands and approximately 0.9 acres of encumbrance of State LWCF-acquired lands. The speed limit for the expressway would be 45 to 50 miles per hour.

3.3.6 St. George Boulevard/100 South One-way Couplet

The One-way Couplet Alternative proposes changes to existing St. George Boulevard and 100 South instead of a new road across BLM-administered lands within the NCA (Map 2.2-1). This

alternative assumes that the BLM would not issue UDOT a ROW grant across the Red Cliffs NCA for the Northern Corridor. Rather, the alternative would include modifications to St. George Boulevard and 100 South to respond to future transportation demands in Washington County. The two roadways would be converted into a one-way couplet system between I-15 and Bluff Street, wherein St. George Boulevard would only accommodate westbound traffic and 100 South would only accommodate eastbound traffic. St. George Boulevard would be converted from its existing two lanes in each direction (with a raised center median and turn pockets) to three westbound lanes. Modifications to the cross streets between I-15 and Bluff Street would disallow eastbound left and right turns from the cross streets. Similarly, 100 South would be converted from its existing one lane in each direction (with a center-turn lane), to three eastbound lanes. Modifications to the intersections at cross streets between I-15 and Bluff Street would disallow westbound left and right turns from the cross streets. There may also be other minor reconstructions to storm drain and utility systems that would be required to safely convert these streets to one-way operations.

On St. George Boulevard, the raised and landscaped medians and irrigation systems would be removed and the median lighting would be replaced or relocated to the sides of the road. In addition, the Diverging Diamond Interchange at I-15/St. George Boulevard would be reconfigured to a more conventional diamond intersection configuration. On 100 South, the center two-way-left-turn median and shoulders would be reconfigured.

In addition, the existing interchange with I-15 at St. George Boulevard would be reconfigured and combined with a new interchange at 100 South to provide a split interchange system between these two roadways connected by one-way ramps. Southbound interstate traffic would exit at St. George Boulevard and enter from 100 South. Similarly, northbound interstate traffic would exit at 100 South and enter from St. George Boulevard. Speed limits would be 35 miles per hour along St. George Boulevard and 30 to 35 miles per hour along 100 South, depending on location.

3.3.7 Environmentally Preferable Alternative

Regulations under 40 CFR 1505.2(b)⁵ require that, in cases where an EIS has been prepared, the ROD must identify all alternatives that were considered, “specifying the alternative or alternatives considered environmentally preferable.” The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101, which states that “it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.” Within the FEIS, the BLM identified the range of impacts anticipated from each of the alternatives based on relevant factors including ecological, social, economic, and technical considerations. Of the action alternatives considered in the EIS within the jurisdiction of the BLM, Alternative 4, the Southern alignment, meets the BLM’s requirement to address all practicable means to avoid or minimize environmental harm and is therefore considered the environmentally preferable alternative.

⁵ 40 CFR 1505.2(a)(2) as of September 14, 2020.

The Southern Alignment minimizes the impacts to public lands within the NCA. The Southern Alignment is the alternative within the NCA that is located closest to the southern boundary, and would only bisect 990 acres (approximately 1.6%) of the NCA and Reserve located within or south of the corridor. Additionally, selecting the Southern Alignment would trigger the changed circumstance in the Amended HCP and establish Reserve Zone 6, which would expand the existing Reserve by approximately 6,813 acres, or nearly 11%. Reserve Zone 6 represents a large and contiguous block of habitat in Washington County outside the current Reserve that would protect the largest known sub-population of tortoises that would otherwise be subject to take under Washington County's ITP. Alternative 5, the Red Hills Parkway Expressway, would have less impacts to the ecological resources and other purposes for which the NCA was designated, but would not trigger the establishment of Reserve Zone 6 in a satellite area that represents a natural refuge for the Mojave desert tortoise as protection from potential future threats within the existing Reserve, including disease and wildfires. Alternative 5 would also have much greater socioeconomic impacts to private property along the corridor than the other action alternatives.

3.4 Management Considerations and Rationale for the Decision

In selecting Alternative 3, the UDOT Application Alignment, and with the aid of the FEIS/Proposed RMPA and the input provided by the public and various stakeholders throughout the development of the EIS, the Secretary considered the applicable statutes and weighed other important factors.

As previously discussed in section 1.2, a principal consideration was the need to implement and balance the Congressional directives in OPLMA, which includes two mandates pertaining specifically to the BLM. First, Section 1974 established the Red Cliffs NCA “to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area; and to protect each species that is— (A) located in the National Conservation Area; and (B) listed as a threatened or endangered species on the list of threatened species or the list of endangered species published under section 4(c)(1) of the Endangered Species Act of 1973 (16 U.S.C. 1533(c)(1)).” Additionally, OPLMA also states that the “Secretary shall only allow uses of the National Conservation Area that the Secretary determines would further a purpose” for which the NCA was designated.

Section 1977 of OPLMA states that “the Secretary shall, in consultation with appropriate Federal agencies, State, tribal, and local governmental entities (including the County and St. George City, Utah), and the public, identify 1 or more alternatives for a northern transportation route in the County.” As shown in Map 1 in Appendix A, the only land managed by the BLM north of St. George in Washington County is located within the Red Cliffs NCA.

Through the process documented in the FEIS/Proposed RMPA, the BLM worked closely with the FWS, State of Utah, Washington County, City of St. George, cooperating agencies, and the public to identify multiple alternative northern transportation routes and refine them through additional measures to conserve, protect, and, in some cases, enhance the purposes of the NCA.

This Decision recognizes that the project area is located within the Reserve, which was established in 1996 through a partnership between Washington County, the FWS, BLM, and others in connection with the FWS's approval of the 1995 HCP for the threatened Mojave desert tortoise. As a joint lead agency for preparation of the EIS, the FWS is a key partner in the BLM's consideration of the Northern Corridor ROW application approved by this Decision. As a result of selecting an alignment that crosses the existing Reserve, the Northern Corridor is a changed

circumstance, as outlined in Section 9.1.1 of the Amended HCP, will be implemented to expand the Reserve to include Zone 6. The Biological Opinion acknowledges the benefits of establishing the 6,813-acre Reserve Zone 6, in combination with other measures in the Amended HCP and Plan of Development, as a conservation measure to compensate for the direct loss of up to 275 acres of Mojave desert tortoise habitat within the Northern Corridor ROW, and offset take (i.e., disturbance and harassment, continued roadkills) of tortoise due to construction and operation of the proposed Northern Corridor highway in Reserve Zone 3. Reserve Zone 6 represents a large and contiguous block of habitat in Washington County outside the current Reserve and will protect the largest known sub-population of tortoises that would otherwise be subject to take under Washington County's ITP where they are located on non-Federal lands within Reserve Zone 6.

The designation of Reserve Zone 6 will provide conservation benefits to the Mojave desert tortoise. These benefits are the result of the commitments outlined in the Amended HCP, including additional funding to support personnel, law enforcement, community education and outreach, boundary fencing, development protocols, and monitoring and adaptive management planning. The highest level of conservation uplift and the most benefit to the tortoise would occur on 3,338 acres of SITLA and other non-Federal lands that would be acquired by the BLM or another conservation organization where currently there are few protections in place. As recognized in the Biological Report for the Upper Virgin River Recovery Unit Population of Mojave Desert Tortoise prepared by the FWS, protecting additional habitat outside the existing Reserve will benefit the Upper Virgin River Recovery Unit by creating a natural refuge from disease and wildfire, and preserving genetic and behavioral representation through habitat corridors connecting analytical units and recovery units.

As stated in Section 5.2.4 of the Biological Opinion issued by the FWS for the ROW and amendments to the RMPs, the creation of Reserve Zone 6 will result in the permanent protection of 6,813 acres, including the BLM's commitment to acquire and manage SITLA and private lands in Reserve Zone 6. The protection of existing BLM-administered lands to the Reserve and the anticipated acquisition and protection of SITLA and private lands will promote population persistence within Reserve Zone 6 and with other areas of contiguous habitat, particularly if corridors for movement and connectivity on these lands can be maintained. This overall intactness should support the potential for recovery of the desert tortoise in the UVRU and range-wide. Additionally, Reserve Zone 6 represents a nearly 11% increase in the area covered by the current 62,000-acre Reserve to offset the less than 2.6% of the Reserve that would be encumbered or fragmented by the Northern Corridor ROW. The adverse effects associated with the fragmented area south of the ROW will be further reduced by the under-road passages that UDOT will incorporate into the final design of the roadway to enhance the permeability of the corridor for Mojave desert tortoise and other wildlife species.

This Decision also addresses the directive in OPLMA to limit uses in the NCA to only those that further a purpose for which the NCA was designated. The BLM carefully considered the purposes of the NCA through documentation in the FEIS/Proposed RMPA, which acknowledged potential adverse impacts to some of them. However, the location of the new roadway will further other purposes for which the NCA was established and the BLM is tasked with protecting, conserving, and enhancing. The new roadway will allow the public to experience views of the NCA beyond what is currently available in limited areas such as along Cottonwood Springs Road and a handful of existing unpaved trails. The construction of a new 4.5-mile paved hike and bike path along the full length of the ROW will provide recreational access opportunities in an area of the NCA where they do not currently exist. Accessibility for users who are physically unable to use unpaved trails will be enhanced through the availability of the paved hike and bike path and new scenic driving

opportunities. Both the recreational and scenic purposes of the NCA will be furthered through these aspects of the project. Additionally, the educational purpose of the NCA will be furthered through the installation of at least eight waypoints along the new hike and bike path with interpretive displays promoting public education and understanding of the purposes for which the Red Cliffs NCA was designated.

This Decision acknowledges the concerns regarding potential impacts to lands acquired under the Land and Water Conservation Fund (LWCF) Act. As documented in the FEIS/Proposed RMPA, all of the action alternatives would encumber LWCF-acquired fee parcels in addition to the existing encumbrance of the current footprint of Red Hills Parkway. Alternative 3 minimizes the encumbrances to LWCF-acquired parcels by avoiding the majority of parcels that were acquired within the NCA. Alternative 3 will encumber less than four acres, and UDOT included a commitment in the Plan of Development to make reasonable efforts to comply with any specific requirements applicable to impacted LWCF-acquired parcels.

Finally, this Decision weighs the varying socioeconomic impacts of the alternatives, including traffic efficiency and impacts to private property. The applicant's primary objective for seeking a ROW is to reduce congestion, increase capacity, and improve east-west mobility in northern Washington County on arterial and interstate roadways between SR 18 and I-15 at milepost 13. This objective is met to varying degrees among the alternatives. Likewise, the alternatives result in varying degrees of impacts to private property, ranging from encumbrance of currently undeveloped parcels to requiring complete relocation of existing businesses. Alternative 3 balances these two important considerations by supporting substantial improved capacity and congestion reduction while crossing only undeveloped private parcels. While Alternative 4, the Southern alignment, may be considered slightly more environmentally preferable, it does not provide comparable traffic efficiency and would be more visible and audible from many existing residences due to its southerly location near the NCA boundary.

In implementing Alternative 3, the UDOT Application alignment, the Secretary, acting through the BLM, will comply with applicable federal, state, and local laws, regulations, and executive orders (see Appendix C of the FEIS/Proposed RMPA for a summary). The Secretary, acting through the BLM, will continue to consult with regulatory agencies and tribal governments, as appropriate, to ensure that all legal requirements are met.

3.5 Design Features and Mitigation Measures

As part of the ROW grant, the BLM requires the application of avoidance, minimization, and mitigation measures to reduce the environmental impacts of the project and meet resource management goals and objectives outlined in OPLMA and the Red Cliffs NCA RMP. Two types of measures have been applied, design features and mitigation measures. Design features include measures UDOT will implement as standard practice of construction, operation, or maintenance as well as applicant-committed measures to address potential impacts of the project. These design features include measures in UDOT's Plan of Development as well as best management practices outlined in the Red Cliffs NCA RMP. Mitigation measures are those measures that could reduce or avoid adverse impacts and have not been incorporated into the proposed action or an alternative. Appendix D of this ROD provides the full list of design features and mitigation measures that will be included in the ROW grant, including all measures that must be completed before the BLM will issue a NTP with construction.

All practicable measures to avoid and/or minimize environmental harm are encompassed in the measures summarized below and listed in more detail in Appendix D of this ROD. In addition to

the design features included in UDOT's Plan of Development (Appendix C), the BLM identified other mitigation measures that will allow the agency to both meet the legislative purposes of the NCA and further some of those purposes.

3.5.1 Design Features of the Proposed Action

The Plan of Development in Appendix C of this ROD contains a list of the design features of the proposed action for environmental protection and applicable best management practices identified in the Red Cliffs NCA RMP, which have also been included in Appendix D as terms and conditions of the ROW grant. These environmental design features are applied to all lands, regardless of jurisdiction or ownership, where appropriate.

3.5.2 Mitigation Measures and Terms and Conditions

The Secretary, through the BLM, used the analysis contained in the FEIS/Proposed RMPA to evaluate the potential need for mitigation measures, terms and conditions, or NTP requirements. These mitigation measures, terms and conditions, and NTP requirements were developed in response to potential environmental impacts identified in the analysis contained in the FEIS or to address standard BLM practice for ROWs and would be in addition to the applicant-committed design features. Additionally, the State of Utah offered to partner with the BLM and others to commit funding and personnel to implement habitat improvement projects that would help offset the impacts of the ROW within the Reserve.

- Completion of Final Plan of Development: In order to obtain a NTP to allow the initiation of construction, UDOT shall submit a Final Plan of Development to the BLM. The Final Plan of Development may be informed by pedestrian resource surveys and will identify the site-specific ROW needs and disturbance areas, include maps of all proposed facilities, site-specific construction actions, temporary work areas, and any other facilities required for the project. The Final Plan of Development will also identify the site-specific application of design features and mitigation measures identified in this ROD. UDOT will not begin construction until the Final Plan of Development is approved by the agency.
- Lands acquired with ESA Section 6 funding: Prior to construction, the FWS will make a determination of the value of all lands that were acquired with ESA Section 6 funding and will no longer serve their intended purpose due to the encumbrance of the approved ROW. The State of Utah shall compensate the FWS in the form of the transfer of an undivided pro-rate share of real property, replacement with real property of equal value that meets the intended long-term conservation goals, and/or repayment of the grant funds at fair market value. Compensation would be completed using non-federal dollars and the conditions of compensation are subject to negotiation between the FWS and the State of Utah.
- Off-site Habitat Restoration: The BLM, FWS, and Utah's Watershed Restoration Initiative, and other stakeholders, will establish a partnership focused on enhancing the condition and resilience of the Zone 3 sub-population of the Mojave desert tortoise by improving habitat conditions and/or protecting habitat from future wildfires in areas away from the proposed Northern Corridor. Building upon their well-established cooperative relationship, the partners will secure funding, collaboratively design and prioritize projects, and share resources, to implement habitat restoration at a level beyond what would have been achieved without the Northern Corridor, ultimately benefitting the

Mojave desert tortoise within the NCA. Acres and locations of treatments may vary from year to year based on availability of funding, new survey data, changes in conditions (e.g., wildfires), and other factors that will guide the partners to apply resources where they will achieve the most substantial benefits for the species. The partners will work toward restoring habitat every year, regardless of larger restoration projects that occur as a response to wildfires, with a target total acreage of approximately 2,600 acres (10.5 square kilometers) of successfully restored habitat over the 25-year term of the Amended HCP.

The BLM will continue to coordinate and cooperate with Utah's Watershed Restoration Initiative to support their efforts to seek \$525,000 in state funding to supplement the BLM's efforts both within areas that burned in 2020 and in other areas that may limit the spread of future fires. Washington County is seeking funding to support this effort, as well; the dollar amount has not yet been determined. As an immediate response to the Turkey Farm Road and Cottonwood Trail fires that occurred in 2020, the BLM will conduct emergency stabilization efforts within the burned areas with an investment totaling approximately \$2,187,000 million, dependent on budget allocations. Additionally, the BLM has already requested approximately \$400,000 in Federal restoration funding that would repair damaged facilities or fund other measures to support the emergency stabilization efforts (e.g., fencing repair to prevent unauthorized off-road motorized use). Projects will be consistent with the Red Cliffs NCA RMP and may include treatments and methods included in that plan, with subsequent site-specific environmental analysis as appropriate. This may include limitations on types of methods but will also include consideration of other habitats for threatened and endangered species of flora and fauna.

A complete list of the measures that will be required as part of the ROW grant, including all standard stipulations, terms and conditions, and mitigation measures, has been included in Appendix D of this ROD. Additional measures that were proposed as design features in UDOT's Plan of Development are included in Appendix C.

4 St. George Field Office Resource Management Plan Amendments

4.1 Purpose and Need

Washington County submitted an Amended HCP to the FWS that would expand the Red Cliffs Desert Reserve by approximately 6,813 acres to include a new sixth zone with the issuance of a ROW crossing the existing Reserve. The purpose of the St. George Field Office RMP Amendments is to change management prescriptions for approximately 3,471 acres of public lands in Reserve Zone 6 to offset impacts of the Northern Corridor ROW within the Red Cliffs NCA and the Reserve. The need for these amendments is to allow the BLM to amend measures to support Washington County's Amended HCP and the associated HCP Implementation Agreement.

4.2 Decision

After considering public comments and protests, best available scientific and technical information, and the results of consultation and coordination with other federal and state agencies, tribal, state, and local governments, this Decision adopts Alternative B as the Approved St.

George Field Office RMP Amendments, which are restated as management actions in the attached Approved RMP Amendments for the St. George Field Office RMP. The amendments were prepared under the authorities of FLPMA; in accordance with the regulations in 43 CFR Part 1600, that address the BLM land use planning process; as well as all other applicable federal laws, regulations, and agency policies. An EIS was prepared for these RMP amendments, in compliance with NEPA.

The Approved St. George Field Office RMP Amendments were described in the FEIS/Proposed RMPA that was issued for review during the November 13, 2020 to December 13, 2020 protest period. The FEIS/Proposed RMPA indicated the decisions in the RMP Amendments that are land use planning decisions that could be protested during that same period.

4.3 Alternatives Analyzed

The BLM is a signatory to the HCP Implementation Agreement. If the FWS approves Washington County's Amended HCP and, since this ROD approves the Northern Corridor ROW that crosses the existing Reserve, then the changed circumstance described in the Amended HCP is triggered, which coincides with the BLM's amendments to the existing St. George Field Office RMP to align the management of the BLM-administered lands within the Reserve Zone 6 to support the management described in the Amended HCP. The BLM developed the alternatives summarized below, which are described in more detail in Table 2.5-1 of the FEIS/Proposed RMPA.

In addition to the planning-level and implementation-level actions described, future implementation-level actions may be required to fully implement the management of the Reserve Zone 6 as described in the Amended HCP. The BLM would work with Washington County, UDOT, SITLA, and other HCP Partners to complete necessary implementation-level actions in accordance with the Amended HCP. Additional NEPA analysis may be necessary for the BLM to implement some actions.

4.3.1 St. George Field Office RMP Amendment Alternative A (No Action)

The No Action Alternative represents current management of the BLM-administered lands within Reserve Zone 6. Under this alternative, no amendments would be approved for the St. George Field Office RMP.

4.3.2 St. George Field Office RMP Amendment Alternative B

St. George Field Office RMP Amendment Alternative B provides the greatest level of protection for the Mojave desert tortoise when compared to the other alternatives. Future development of minerals and rights-of-way would be limited or prohibited. Land currently managed by the BLM would be retained and all non-Federal lands would be targeted for acquisition. Recreational uses, including target shooting, dispersed camping, competitive motorized and equestrian events, and other activities would be prohibited. The overall mileage of motorized and non-motorized trails permitted within the area would be reduced.

4.3.3 St. George Field Office RMP Amendment Alternative C

St. George Field Office RMP Amendment Alternative C is similar to Alternative B as it provides for enhanced protection for the Mojave desert tortoise, but to a lesser extent than Alternative B for some management actions. Future development of minerals and rights-of-way may be permitted under strict limitations. Many recreational uses, including target shooting and dispersed

camping, would be allowed with additional restrictions. Federal lands would be retained and non-Federal lands would be targeted for acquisition. The overall mileage of motorized and non-motorized trails permitted within the area would be reduced.

4.3.4 Environmentally Preferred Alternative

Regulations under 40 CFR 1505.2(b)⁶ require that, in cases where an EIS has been prepared, the ROD must identify all alternatives that were considered, “specifying the alternative or alternatives considered environmentally preferable.” The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101 the NEPA, which states that “it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.” . Within the FEIS, the BLM identified the range of impacts anticipated from each of the alternatives based on relevant factors including ecological, social, economic, and technical considerations. Of the alternatives considered in the EIS, Alternative B meets the BLM’s requirement to address all practicable means to avoid or minimize environmental harm and is therefore considered the environmentally preferable alternative.

4.4 Management Considerations and Rationale for the Decision

In reaching this Decision, and with the aid of the FEIS/Proposed RMPA and the input provided by the public and various stakeholders throughout the development of the EIS, the Secretary considered and weighed several important factors.

A principal consideration is that the St. George Field Office is governed by principles of multiple use and sustained yield except as provided by other law. The BLM’s objective in this planning process was to balance protection of the public land resources, specifically including habitat for the Mojave desert tortoise, with its obligation to manage public lands for multiple uses. Reserve Zone 6 is an area with high public visitation and the BLM management supports sustainable public use and enjoyment of its lands and resources. The BLM is also responsible for preparing plan amendments that comply with applicable legal requirements and that reflect both local and national interests.

The existing five zones of the Reserve are the result of a successful Federal, state, and local partnership established in 1996 through the FWS approval of the 1995 HCP, which expired in 2016. The approval and implementation of the Amended HCP carries forward this collaborative approach to benefit the communities within the county for another 25 years. The Approved St. George Field Office RMP Amendments are a key element to the overall conservation strategy in the Amended HCP, which includes a changed circumstance for the Northern Corridor by enhancing management and protections for the largest known sub-population of tortoises that may otherwise be subject to take under the incidental take permit. As stated in Section 5.2.4 of the Biological Opinion issued by the FWS for the ROW and amendments to the RMPs, the creation of Reserve Zone 6 will result in the permanent protection of 6,813 acres, including the BLM’s commitment in the St. George Field Office RMP Amendments to acquire and manage

⁶ 40 CFR 1505.2(a)(2) as of September 14, 2020.

SITLA and private lands in Reserve Zone 6. The protection of existing BLM-administered lands to the Reserve and the anticipated acquisition and protection of SITLA and private lands will promote population persistence within Reserve Zone 6 and with other areas of contiguous habitat, particularly if corridors for movement and connectivity on these lands can be maintained. This overall intactness should support the potential for recovery of the desert tortoise in the UVRU and range-wide.

This Decision recognizes the need to manage public lands in Reserve Zone 6 to improve and sustain properly functioning resource conditions while considering the current and future needs of the neighboring communities. Alternative B establishes strict limitations on future development of the public lands, including ROWs and minerals, to limit habitat loss and disturbance associated with construction or extraction activities. Additionally, recreational uses will be more strictly managed and the future route network will be limited to a maximum of 39 miles on public lands. The area will no longer be available for dispersed camping and recreational target shooting to further preserve intact habitat areas from potential impacts associated with these activities such as noise, human activity, expanded areas of ground disturbance, human-caused wildfires, and litter that degrades habitat and subsidizes predators of the Mojave desert tortoise. In partnership with Washington County, the State of Utah, and the public, the BLM will undertake subsequent planning processes for designating specific routes and planning for the wide variety of compatible recreational uses that will continue to occur in the area while enhancing protections for Mojave desert tortoise habitat.

Even with the current level of recreational use in the area, Reserve Zone 6 currently supports the largest known sub-population of tortoises that would otherwise be subject to take under Washington County's ITP. The RMP Amendments in Alternative B will provide long term conservation benefits to support the likelihood of the survival and recovery of the Mojave desert tortoise in the wild.

4.5 Mitigation Measures

All practicable measures to avoid and/or minimize environmental harm are encompassed in the measures included in the St. George Field Office RMP Amendments, within the BLM's mission to provide for the management of public lands under the principles of multiple use and sustained yield. Measures were identified sufficient to "provide food and habitat for...wildlife...; and that will provide for outdoor recreation and human occupancy and use" (FLPMA Sec 102(a)(8)).

5 Public Involvement, Consultation, and Coordination

5.1 Public Involvement

The scoping period began with the publication of the Notice of Intent in the Federal Register on December 5, 2019, and extended through January 6, 2020. During the scoping period, the BLM and FWS sought public comments to identify issues to be addressed in the Draft Environmental Impact Statement and Draft Resource Management Plan Amendments (DEIS/Draft RMPA). A public scoping meeting was held on December 17, 2019, at the Dixie Convention Center in St. George. In total, 17,258 submissions were received from the public during the scoping period.

Information about scoping meetings, comments received, comment analysis, and issue development can be found in the Northern Corridor – Highway Right-of-Way with Associated

Issuance of an Incidental Take Permit and Resource Management Plan Amendments: Scoping Report (April 2020).

The BLM and FWS published the Notice of Availability (NOA) of the DEIS/Draft RMPA in the Federal Register on June 12, 2020. The publication of the NOA began a 90-day public comment period that ended on September 10, 2020. Comments on the DEIS/Draft RMPA were accepted by the BLM and FWS using U.S. Postal Service mail and email and at BLM offices during the comment period.

In July, midway through the public comment period, the BLM and FWS hosted two online public meetings to provide an overview of the project and respond to questions from the public. The BLM notified the public of these meetings via the project website and a news release. The online meetings were held on July 16 and 21, 2020. The materials presented at each meeting can be viewed the BLM's ePlanning website.

The BLM and FWS published the NOA for the FEIS/Proposed RMPA in the Federal Register on November 13, 2020, which initiated a 30-day public protest period for the Proposed RMPA and a 30-day availability period for the FEIS. Although the availability period is not a formal comment period, the BLM and FWS received 23 submissions providing input. These comments were generally similar to and consistent with the comments received during the development of the FEIS/Proposed RMPA. Some comment submissions were substantive and provided specific input, including concerns regarding specific impacts, preference for various ROW alternatives, and perceived deficiencies of the FEIS/Proposed RMPA. The comments were considered to determine if they have merit, such as if they identify significant new circumstances or information relevant to environmental concerns and bear upon the proposed action consistent with 40 CFR 1502.9(c)(1)(ii)⁷. The BLM considered the comments prior to executing this ROD and they have been added to the administrative record for the project. No new issues were raised in the comments that weren't already addressed in the FEIS/Proposed RMPA.

5.2 Protest Resolution

The BLM's planning regulations at 43 CFR 1610.5-2 allow any person who participated in the planning process and has an interest that may be adversely affected by the BLM's planning decisions to protest proposed planning decisions within 30 days of when the Notice of Availability for the FEIS/Proposed RMPA was published on November 13, 2020.

After the close of the protest period on December 14, 2020, the 18 protest submissions timely filed during the 30-day protest period were reviewed for valid protest issues pursuant to 43 CFR 1610.5-2. In accordance with 43 CFR 1610.5- 2(a), 16 of these letters were dismissed either because the commenter did not have standing or because the letter did not contain valid protests. The remaining two protest letters were valid and contained protest issues that required a response from the BLM. These protest issues were analyzed and responded to as part of the protest resolution process. However, the Secretary of the Interior dismissed certain protest comments in these remaining two letters because they were related to the issuance of the right-of-way, which is an implementation decision. As described further in the Protest Report and reflected elsewhere in this ROD, the BLM's decision to amend the 2016 Red Cliffs NCA RMP is a planning decision, but does not compel the issuance of the ROW. Therefore, any comments related to that implementation decision were dismissed.

⁷ 40 CFR 1502.9(d)(1)(ii) as of September 14, 2020.

The Secretary of the Interior concluded that the agency followed all applicable laws, regulations, and policies and considered all relevant resource information and public input in developing the FEIS/Proposed RMPA. Protests were resolved without making significant changes to the FEIS/Proposed RMPA. The Secretary's decisions on public protests are summarized in the Protest Resolution Report for the FEIS/Proposed RMPA, which is available on the BLM Protest Resolution Reports website: <https://on.doi.gov/2GSPXKX>. The decision of the Secretary is the final decision of the Department of the Interior.

5.3 Consultation and Coordination

5.3.1 Cooperating Agencies

Federal regulations direct the BLM and FWS to invite eligible Federal agencies, State and local governments, and Federally recognized American Indian Tribes to participate as cooperating agencies when developing an EIS. The groups listed in Table 1 were invited to participate as cooperating agencies in the preparation of the DEIS/Draft RMPA.

The BLM and FWS communicated regularly throughout the process with the cooperating agencies to review development of alternatives, public comments, and the analysis contained in the DEIS/Draft RMPA and FEIS/Proposed RMPA. This process included cooperating agency workshops, meetings, and conference calls completed on January 28, April 10, April 29, and September 15, 2020. During these workshops, the BLM and FWS worked with the cooperating agencies to review the following:

- Issues raised during scoping.
- Alternatives developed for consideration in the DEIS/Draft RMPA.
- Preliminary portions of the DEIS/Draft RMPA.
- Public comments on the DEIS/Draft RMPA.
- Preliminary portions of the FEIS/Proposed RMPA.

Table 1. Invited Cooperating Agencies

Agencies Invited to be Cooperating Agencies	Accepted (Yes/No)
U.S. Army Corps of Engineers	No
State of Utah – Public Lands Policy Coordinating Office	Yes
Washington City	Yes
Dixie Metropolitan Planning Organization	Yes
City of St. George	Yes
City of Ivins	Yes
Santa Clara City	Yes
City of Hurricane	Yes

5.3.2 Governor's Consistency Review

The BLM's planning regulations require that BLM RMPs be "consistent with officially approved or adopted resource-related plans, and the policies and procedures contained therein, of other Federal agencies, State and local governments, and Native American tribes, so long as the guidance and resource management plans also are consistent with the purposes, policies, and programs of Federal laws and regulations applicable to public lands" (43 CFR 1610.3-2(a)). In accordance with the regulations, the BLM was aware of and gave consideration to State, local,

and tribal plans and provided for State, local, and tribal involvement throughout the development of the RMP Amendments. The BLM found that the Proposed RMP Amendments are generally consistent with the State and local plans and identified any potential inconsistencies in Appendix H of the FEIS/Proposed RMPA.

The Governor's Consistency Review for both the Red Cliffs NCA and St. George Field Office Approved RMP Amendments was initiated with the publication of the FEIS/Proposed RMPA on November 13, 2020. The Governor responded with a letter on November 24, 2020, that stated "throughout the process of developing a broad range of alternatives to meet the transportation needs of Washington County, the BLM has worked diligently with State and local government to ensure the BLM Plan is consistent with the State's Plan...The UDOT Alternative is most consistent with the long-term growth needs for Washington County, the State's Long-term Unified Transportation Plan, the local plans and policies of Washington County, the many local governments within Washington County, and the Congressional intent of the 2009 Omnibus Public Lands Bill." No specific inconsistencies were identified and no changes were made to the RMP Amendments as a result.

5.3.3 Native American Tribal Consultation

Federal law requires the BLM and FWS to consult with American Indian Tribes during the planning and NEPA process. In December 2019, the BLM and FWS initiated government-to-government consultations with 14 American Indian Tribes and Bands that claim affiliation to southwestern Utah, providing a detailed description of the project and requesting information about sacred sites or places of traditional cultural importance. On December 30, 2019, the Hopi Tribe responded to this initial consultation, stating concerns that the proposed Northern Corridor would adversely impact cultural and natural resources that are significant to the Tribe. The BLM presented information on the proposed Northern Corridor highway and the two RMP amendments at the February 10, 2020, Tribal Council meeting of the Paiute Indian Tribe of Utah. The BLM sent additional information regarding the proposed undertakings to the 14 Tribes and Bands on June 1, 2020. The Navajo Nation's Heritage and History Preservation Department responded via emails on June 12, 2020 and June 15, 2020 indicating that there were no Navajo traditional cultural properties within the Area of Potential Effect for the project. The BLM sent the cultural resources survey report to the Hopi Tribe on August 18, 2020 and they responded in a letter dated October 5, 2020 supporting the No Action alternative.

American Indian Tribes Invited to Participate in Government-to-Government Consultation:

- Cedar Band of Paiutes
- Kanosh Band of Paiutes
- Paiute Indian Tribe of Utah
- Chemehuevi Indian Tribe
- Koosharem Band of Paiutes
- Pueblo of Zuni
- The Hopi Tribe
- Las Vegas Paiute Tribe
- San Juan Southern Paiute Tribe
- Indian Peaks Band of Paiutes
- Moapa Band of Paiute Indians
- Shivwits Band of Paiutes
- Kaibab Band of Paiute Indians
- Navajo Nation

5.3.4 National Historic Preservation Act Section 106 Consultation

The issuance of a ROW and amendments to the RMPs by the BLM are Federal undertakings, which triggers Section 106 of the National Historic Preservation Act (NHPA). Section 106, through

its implementing regulations (36 CFR 800), defines Federal undertakings as any project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. The regulations require Federal agencies to consider the effects of their undertakings that have the potential to impact historic properties including any district, site, building, structure, or object that is listed on or eligible for listing on the National Register of Historic Places and provide the State Historic Preservation Officer (SHPO), affected Tribes, and other consulting parties an opportunity to comment.

The BLM and FWS notified the public that they would coordinate their public consultation obligations under the NHPA (54 U.S.C. 306108) through this NEPA process, as provided for in 36 CFR 800.2(d)(3) as a component of the Notice of Intent to prepare an EIS (84 Federal Register 66692-66694). The BLM independently initiated the Section 106 process by establishing the undertakings (pursuant to 36 CFR 800.3.a), identifying and consulting with interested parties, identifying points in the process to seek input from the public, and notifying the public of proposed actions.

Because four of the Northern Corridor ROW alternatives involved lands owned either by SITLA or the Utah Division of Wildlife Resources, the BLM consulted with representatives of both State agencies. They agreed to have the BLM serve as the lead agency for consultations to satisfy the requirements of Section 106 of the NHPA and State agency compliance requirements under Utah Code Annotated 9-8-404. The BLM identified other interested parties for this Section 106 process.

The BLM consulted independently with the Utah SHPO and American Indian Tribes regarding efforts to identify cultural resources and evaluate them for eligibility for the National Register of Historic Places (36 CFR 800.4), and assess effects of the project on historic properties by applying the criteria of adverse effect (36 CFR 800.5). The BLM received concurrence from the Utah SHPO regarding the finding of an “adverse effect” for the ROW on October 5, 2020 and the finding of “no adverse effect” for the RMP amendments on December 10, 2020. The BLM will continue consultation to identify processes to resolve any adverse effects to historic properties (36 CFR 800.6), including development of an archaeological treatment plan when potential adverse effects have been determined. American Indian Tribes and other consulting parties would have the opportunity to participate in the development of a Memorandum of Agreement that would address the resolution of adverse effects to historic properties, based on the implementation of approved treatments, prior to the BLM’s issuance of a Notice to Proceed to UDOT for construction.

5.3.5 Endangered Species Act Section 7 Consultation

Section 7(a)(2) of the ESA requires that each Federal agency ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. If an action agency determines a proposed action may affect listed species or designated critical habitat, consultation between that agency and the FWS is required under section 7 of the ESA. The ROW application and both RMP amendments occur within Mojave desert tortoise habitat. Section 3.5 of the FEIS/Proposed RMPA and the BLM’s biological assessment, which was submitted to the FWS on September 23, 2020, document the expected impacts to the species and habitat, including designated critical habitat.

The BLM has completed the formal consultation with the FWS under section 7 of the ESA regarding the potential impacts of the BLM's Federal actions for the ROW application and potential RMP amendments. The FWS issued their biological opinion on January 12, 2021.

6 Availability of the Approved RMPs

Copies of the ROD and Approved RMPs may be obtained by viewing or downloading the document from the project ePlanning website located at <https://eplanning.blm.gov/eplanning-ui/project/1502103/510>.

Hard copies of the ROD and Approved RMPs are also available by request from the following locations:

- BLM Color Country District Office, 176 DL Sargent Drive, Cedar City, UT 84721
- BLM St. George Field Office, 345 E Riverside Dr, St. George, UT 84790

**Approved Resource Management Plan Amendments
for the
Red Cliffs National Conservation Area**

Prepared by:
U.S. Department of the Interior
Bureau of Land Management
Utah State Office

This page intentionally left blank.

1 Introduction

Congress established the Red Cliffs NCA in Washington County when, on March 30, 2009, President Barack Obama signed OPLMA into law. Section 1974 of Title I, Subtitle O designated the NCA and directed the Secretary of the Interior (Secretary), through BLM, to develop a comprehensive plan for the long-term management of the NCA. This same legislation also directed the BLM to take actions and make land use allocations on public lands in Washington County that required the St. George Field Office Record of Decision and Resource Management Plan (RMP approved in 1999, amended in 2001) (BLM 1999) to be amended.

Section 1974(a) identifies the following Congressionally-defined purposes for the Red Cliffs NCA:

To conserve, protect, and enhance for the benefit and enjoyment of present and future generations the ecological, scenic, wildlife, recreational, cultural, historical, natural, educational, and scientific resources of the National Conservation Area; and To protect each species that is located in the National Conservation Area; and listed as a threatened or endangered species on the list of threatened species or the list of endangered species published under...the Endangered Species Act of 1973. (OPLMA Section 1974 (a))

Land use planning goals, objectives, and management decisions approved in the RMP for the Red Cliffs NCA and any amendments must be consistent with the designated purposes, authorized uses, and other direction in OPLMA that relates to this NCA. Regarding authorized uses, OPLMA at Section 1974(e)(2) specified that “the Secretary shall only allow uses of the National Conservation Area that the Secretary determines would further a purpose” for which the NCA was designated.

The Approved RMP Amendments amend the Red Cliffs NCA RMP to address the modifications to management actions related to Visual Resource Management, Recreation and Visitor Service, and Lands and Realty, as presented in the Proposed RMP Amendments and analyzed in the FEIS (BLM 2020).

2 Purpose and Need

Under OPLMA Subtitle O, Section 1977, the BLM is required to develop a comprehensive travel management plan for the land managed by the BLM in Washington County and, in doing so, to “identify one or more alternatives for a northern transportation route” in the county. In 2016, as part of developing the current Red Cliffs NCA RMP, BLM considered an alternative that included a Northern Corridor in the NCA. However, at that time, the BLM did not have a specific ROW application to consider as part of that planning process. Instead, the BLM relied on several conceptual alignments from the Dixie Metropolitan Planning Organization that were based on Washington County’s, a cooperating agency in developing that RMP, recommendations. While the BLM eventually selected a different alternative that did not include a corridor, the selected alternative did create an avoidance area that could accommodate a Northern Corridor alignment in the NCA. Under the 2016 RMP, an avoidance area is an area identified through resource management planning to be avoided but that may be available for ROW location with special stipulations.

The BLM has now received a specific ROW application from UDOT. The ROW application is designed to address the growing population and transportation needs in Washington County.

However, the application seeks a ROW in the NCA that is larger than the current avoidance area can accommodate and, thus, cannot be granted without also amending the Red Cliffs NCA RMP.

Responding to UDOT's ROW application, including consideration of RMP amendments, also furthers the Department of the Interior's policy goals, as stated in the Strategic Plan for Fiscal Years 2018-2022, to "enhance conservation stewardship whereby all levels of government and private landowners work cooperatively together in an atmosphere of mutual respect to achieve shared natural resource management goals across landscapes" and to "[develop] and [maintain] strong partnerships with State, local, and private stakeholders in shared conservation stewardship." UDOT is seeking to meet the transportation demands of Washington County's anticipated continued growth through 2050 and Washington County is also seeking a renewed ITP in order to meet the needs of its increasing population. Washington County's current transportation infrastructure may not accommodate the County's projected growth, and it is trying to balance that future growth with the statutory and regulatory provisions governing the Red Cliffs NCA and larger Reserve, and the protected wildlife that resides on those lands.

Consideration of the ROW application supports the agency's fulfillment of OPLMA's direction at § 1977 to "develop a comprehensive travel management plan for the land managed by the Bureau of Land Management in the County" that will "identify 1 or more alternatives for a northern transportation route in the County" and to "ensure that the travel management plan contains a map that depicts the trail." The FEIS/Proposed RMPA that resulted from UDOT's ROW application allowed for the consideration of multiple ROW alignments, amendments to the avoidance area criteria governing new ROWs within the Red Cliffs NCA, and will support inclusion of the selected alignment in the forthcoming travel management plan.

3 Planning Area

The Red Cliffs NCA is comprised of approximately 45,000 acres of BLM-administered surface acres in southcentral Washington County (Map 1). Within the boundaries of the NCA are state and private lands. Management goals, objectives, and actions approved in the RMP apply only to the BLM-administered public lands of the NCA.

4 Scoping/Issues

When deciding which issues to address related to the purpose and need, the BLM considers points of disagreement, debate, or dispute regarding an anticipated outcome from a proposed action. Issues are based on anticipated environmental impacts; as such, they can help shape the proposal and alternatives.

The BLM used internal, agency and public scoping to identify issues to consider in the environmental analysis. Table 1.5-1 in the FEIS/Proposed RMPA presents the primary issues identified during scoping that are within the scope of the analysis. Additional detail about the scoping process, scoping comments received, and issues identified during scoping is available in the Northern Corridor – Highway Right-of-Way with Issuance of an Incidental Take Permit and Resource Management Plan Amendments Scoping Report (Horrocks Engineers 2020a) on the BLM's ePlanning website.

5 Consideration of Other Plans

At Section 202(b)(9), FLPMA directs the BLM to involve state, tribal, and local government officials in the land use planning process and consider the provisions of approved or adopted state, tribal, and local plans that are relevant to BLM planning areas. The Cooperating Agencies (State of Utah, Dixie Metropolitan Planning Organization, City of St. George, Washington City, City of Ivins, Santa Clara City, and City of Hurricane) provided input throughout the planning process. The BLM attempts to resolve inconsistencies between federal and non-federal government plans, in the development of land use decisions for public lands, to the extent that those plans are consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands and the purposes of FLPMA. As part of this planning effort, the BLM reviewed all applicable plans related to the project area and documented any potential inconsistencies in Appendix H of the FEIS.

6 Management Decisions

Existing management actions from the Red Cliffs NCA RMP will be replaced with the text listed below. The acreage totals listed below are estimations based on geospatial analysis and include land tenure adjustments made since 2016. The BLM is aware of potential discrepancies between the acreage in the 2016 Red Cliffs NCA RMP and the acreages listed below. The BLM continuously works to correct such discrepancies through rectification of geographic information system (GIS) data and will issue future maintenance actions as needed.

6.1 Visual Resource Management

VRM-7: Manage the NCA as follows:

VRM Class I: 19,989 acres

VRM Class II: 18,525 acres

VRM Class III: 6,084 acres

VRM Class IV: 259 acres

(Map 4)

6.2 Recreation and Visitor Services

REC-5: Manage the RMZs as follows:

Rural Zone: 1,361 acres

Frontcountry Zone: 15,451 acres

Backcountry Zone: 8,709 acres

Primitive Zone: 19,989 acres

(Map 5)

6.3 Lands and Realty

LAR-13: Designate ROW Avoidance and Exclusion areas and retain an existing ROW corridor as follows (Map 8):

Exclusion areas: (areas that are not available for location of ROWs under any conditions, including all designated wilderness within the NCA): 38,472 acres

Avoidance areas: 6,367 acres

While considering a new proposed ROW application the BLM will:

- a) consider options for routing or siting the ROW outside of the NCA;
- b) ensure consistency of the ROW with the established purpose of the NCA, as identified in OPLMA;
- c) ensure that new ROWs share, parallel, or adjoin existing ROWs;
- d) apply special stipulations and mitigation measures within avoidance areas consistent with VRM objectives and the purpose of the NCA;
- e) authorize new ROWs only when the project-specific NEPA analysis indicates that the construction and operation of the facility would not result in the take of federally-listed species; the adverse modification of designated critical habitats; or adverse effects to NRHP-listed or eligible properties, and the following criteria are met:
 - 1) construction could be accomplished through methods that minimize new surface disturbances and resource impacts;
 - 2) new ROW access roads would not be required for construction, operation, and maintenance;
 - 3) existing ROW access roads would not be permanently widened or upgraded for construction, operation, and maintenance; temporary enlargements or modifications to existing access routes needed during construction would be rehabilitated immediately after construction is completed; and
 - 4) construction, operations, and maintenance would not require off-road travel by motorized vehicles.
- f) allow for a one-time exception to the criteria in item e) above to authorize the issuance of a Title V ROW for the Northern Corridor project.

Designated ROW Corridor: 20 acres

Retain the existing corridor along SR-18 through the NCA (150 feet either side of centerline of highway) to minimize adverse environmental impacts and the proliferation of separate rights-of-way.

7 Public Involvement, Consultation, and Coordination

The public involvement, consultation, and coordination processes conducted for the Approved RMPA are described in Chapter 4 of the FEIS/Proposed RMPA. This section summarizes those efforts and updates consultation and protest activities that occurred following publication of the FEIS.

7.1 Public Involvement

Public involvement on this planning effort is described in Section 4.1 of the FEIS/Proposed RMPA. To summarize, public involvement began on December 5, 2019 when the NOI to prepare an EIS

was published in the Federal Register, initiating the public scoping period. A public scoping meeting was held on December 17, 2019 in St. George, Utah.

On June 12, 2020, the Notice of Availability (NOA) for the DEIS/Draft RMPA was published in the Federal Register, initiating a 90-day public comment period. Online public meetings were held on July 16 and 21, 2020. Comments received on the DEIS/Draft RMPA and BLM's responses are summarized in Appendix O of the FEIS/Proposed RMPA.

On November 13, 2020, the NOA for the FEIS/Proposed RMPA was published in the Federal Register initiating a 30-day protest period and up to 60-day Governor's Consistency review period. The BLM received 18 protest letters.

7.2 Consultation and Coordination

7.2.1 Cooperating Agencies

The BLM worked with numerous agencies throughout the preparation of this Approved RMP Amendments. The BLM outreach efforts and collaboration with cooperating agencies are described in Chapter 4, Section 4.2.4 of the FEIS/Proposed RMPA.

The BLM extended invitations to or received requests from eight Federal, state, regional, and local entities to participate as cooperating agencies. Of these, seven agencies participated in some or all of the following activities: scoping comments, input on preliminary drafts, comments on the DEIS/Draft RMPA, review of the FEIS/Proposed RMPA, and/or participation in briefings, meetings, or work sessions.

7.2.2 Governor's Consistency Review

FLPMA and its implementing regulations require that RMPs be "consistent with officially approved or adopted resource-related plans, and the policies and procedures contained therein, of other Federal agencies, State and local governments, and Indian tribes, so long as the guidance and resource management plans also are consistent with the purposes, policies, and programs of Federal laws and regulations applicable to public lands." (43 CFR 1610.3-2(a)) In accordance with this direction, the BLM was aware of and gave consideration to State, local, and tribal plans and provided for their involvement throughout the development of the Approved RMP Amendments. Appendix H in the FEIS/Proposed RMPA identifies areas where the alternatives may be inconsistent with the state, local, and tribal plans.

The Governor's Consistency Review for the Approved Red Cliffs NCA RMP Amendments was initiated with the publication of the FEIS/Proposed RMPA on November 13, 2020. The Governor responded with a letter on November 24, 2020, that stated "throughout the process of developing a broad range of alternatives to meet the transportation needs of Washington County, the BLM has worked diligently with State and local government to ensure the BLM Plan is consistent with the State's Plan...The UDOT Alternative is most consistent with the long-term growth needs for Washington County, the State's Long-term Unified Transportation Plan, the local plans and policies of Washington County, the many local governments within Washington County, and the Congressional intent of the 2009 Omnibus Public Lands Bill." No specific inconsistencies were identified and no changes were made to the RMP Amendments as a result.

7.2.3 Native American Consultation

Federal law requires the BLM to consult with American Indian Tribes during the planning and NEPA process. In December 2019, the BLM and FWS initiated government-to-government consultations with 14 American Indian Tribes and Bands that claim affiliation to southwestern Utah, providing a detailed description of the project and requesting information about sacred sites or places of traditional cultural importance. The only response was received from the Hopi Tribe, stating concerns that the proposed Northern Corridor would adversely impact cultural and natural resources that are significant to the Tribe. The BLM presented project information at the Tribal Council meeting of the Paiute Indian Tribe of Utah on February 10, 2020 and continued to reach out to potentially affected tribes throughout the rest of the process. The BLM sent additional information regarding the proposed undertakings to the 14 Tribes and Bands on June 1, 2020. The Navajo Nation's Heritage and History Preservation Department responded via emails on June 12, 2020 and June 15, 2020 indicating that there were no Navajo traditional cultural properties within the Area of Potential Effect for the project. The BLM sent the cultural resources survey report to the Hopi Tribe on August 18, 2020 and they responded in a letter dated October 5, 2020 supporting the No Action alternative.

7.2.4 National Historic Preservation Act Section 106 Consultation

The amendments to the Red Cliffs NCA RMP are a Federal undertaking and are therefore subject to Section 106 of the National Historic Preservation Act (NHPA). Section 106, through its implementing regulations (36 CFR 800), defines Federal undertakings as any project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. The regulations require Federal agencies to consider the effects of their undertakings that have the potential to impact historic properties including any district, site, building, structure, or object that is listed on or eligible for listing on the National Register of Historic Places and provide the SHPO, affected Tribes, and other consulting parties an opportunity to comment.

The BLM and FWS notified the public that they would coordinate their public consultation obligations under the NHPA (54 U.S.C. 306108) through this NEPA process, as provided for in 36 CFR 800.2(d)(3) as a component of the Notice of Intent to prepare an EIS (84 Federal Register 66692-66694). The BLM independently initiated the Section 106 process by establishing the undertakings (pursuant to 36 CFR 800.3.a), identifying and consulting with interested parties, identifying points in the process to seek input from the public, and notifying the public of proposed actions.

Because four of the Northern Corridor ROW alternatives involved lands owned either by SITLA or the Utah Division of Wildlife Resources, the BLM consulted with representatives of both State agencies. They have agreed to have the BLM serve as the lead agency for consultations to satisfy the requirements of Section 106 of the NHPA and State agency compliance requirements under Utah Code Annotated 9-8-404. The BLM identified other interested parties for this Section 106 process.

The BLM consulted independently with the Utah SHPO and American Indian Tribes regarding efforts to identify cultural resources and evaluate them for eligibility for the National Register of Historic Places (36 CFR 800.4), and assess effects of the project on historic properties by applying the criteria of adverse effect (36 CFR 800.5). The BLM received concurrence from the Utah SHPO

regarding the finding of “no adverse effect” for the undertaking related to the Red Cliffs NCA RMP amendments on December 10, 2020.

7.2.5 Endangered Species Act Section 7 Consultation

Section 7(a)(2) of the ESA requires that each Federal agency ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. If an action agency determines a proposed action may affect listed species or designated critical habitat, consultation between that agency and the FWS is required under section 7 of the ESA.

The BLM has completed formal consultation with the FWS under section 7 of the ESA regarding the potential impacts of the BLM’s Federal actions for the Red Cliffs RMP Amendments, which occur within Mojave desert tortoise habitat. Section 3.5 of the FEIS/Proposed RMPA and the BLM’s biological assessment, which was submitted to the FWS on September 23, 2020, document the expected impacts from this action to the species and habitat, including designated critical habitat. The FWS issued their biological opinion on January 12, 2021.

8 Monitoring the Plan

BLM planning regulations (43 CFR 1610.4-9) require the monitoring of RMPs on a continual basis with a formal evaluation done at periodic intervals. The BLM will continue to adhere to the process outlined in Section 8.0 Approved RMP Monitoring and Evaluation in the Red Cliffs NCA Record of Decision and Approved RMP (2016).

**Approved Resource Management Plan Amendments
for the
St. George Field Office**

Prepared by:
U.S. Department of the Interior
Bureau of Land Management
Utah State Office

This page intentionally left blank.

1 Introduction

Washington County submitted an application for an Incidental Take Permit (ITP) by the FWS that would authorize take of the Mojave desert tortoise, incidental to Covered Activities (e.g., residential and commercial activities) in Washington County, Utah, and implementation of the Amended HCP, in accordance with the statutory and regulatory requirements of the ESA.

The County, working with FWS, identified several changed circumstances that may occur over the ITP term and the responsive actions required of the County to address each changed circumstance. FWS regulations define changed circumstances as “changes in circumstances affecting a species or geographic area covered by a conservation plan or agreement that can reasonably be anticipated by plan or agreement developers and the Service [FWS] and that can be planned for (e.g., the listing of new species, or a fire or other natural catastrophic event in areas prone to such events)” (50 CFR §17.3).

One of the changed circumstances accommodates the possibility of an approved Northern Corridor that would be constructed across Reserve Zone 3. This changed circumstance triggers upon BLM approval of a ROW for the Northern Corridor across Zone 3 and FWS issuance of a Biological Opinion to the BLM that addresses incidental take of Mojave desert tortoise associated with the Northern Corridor.

In response to this changed circumstance, the County and the HCP Partners would establish a new Reserve Zone 6 in the vicinity of the former Bloomington incidental take area located to the west of Interstate 15 and south of the Santa Clara River. The new Reserve Zone 6 would include approximately 6,813 acres of primarily SITLA-owned or BLM-administered lands. The BLM-administered lands within Zone 6 are managed under the St. George Field Office RMP. In addition, the County would provide other actions conditional upon the changed circumstance (e.g., funding allocations for outreach in the permit area). The conservation measures outlined in the Amended HCP are not consistent with current management of the public lands within Reserve Zone 6.

2 Purpose and Need

The purpose of the St. George Field Office RMP Amendments is to allow for possible management changes for approximately 3,471 acres in Reserve Zone 6 to offset impacts for a ROW granted within the Red Cliffs NCA and the Reserve. The need for these amendments is to allow the BLM to modify management actions to support Washington County’s Amended HCP and the associated HCP Implementation Agreement.

3 Planning Area

The planning area for the Approved RMP Amendments includes the area within Reserve Zone 6 (Map 3). State lands and private property also occur within the planning area. Management goals, objectives, actions, and implementation decisions included in this Approved RMP Amendments apply only to BLM-administered public lands in the planning area. Any non-federal lands that may be acquired within the planning area in the future would be managed in conformance with RMP decisions included in this Approved RMP Amendments.

4 Scoping/Issues

When deciding which issues to address related to the purpose and need, the BLM considers points of disagreement, debate, or dispute regarding an anticipated outcome from a proposed action. Issues are based on anticipated environmental impacts; as such, they can help shape the proposal and alternatives.

The BLM used internal, agency and public scoping to identify issues to consider in the environmental analysis. Table 1.5-1 in the FEIS/Proposed RMPA presents the primary issues identified during scoping that are within the scope of the analysis. Additional detail about the scoping process, scoping comments received, and issues identified during scoping is available in the Northern Corridor – Highway Right-of-Way with Issuance of an Incidental Take Permit and Resource Management Plan Amendments Scoping Report (Horrocks Engineers 2020a) on the BLM's ePlanning website.

5 Consideration of Other Plans

At Section 202(b)(9), FLPMA directs the BLM to involve state, tribal, and local government officials in the land use planning process and consider the provisions of approved or adopted state, tribal, and local plans that are relevant to BLM planning areas. The Cooperating Agencies (State of Utah, Dixie Metropolitan Planning Organization, City of St. George, Washington City, City of Ivins, Santa Clara City, and City of Hurricane) were provided opportunities to provide input throughout the planning process. The BLM attempts to resolve inconsistencies between federal and non-federal government plans, in the development of land use decisions for public lands, to the extent that those plans are consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands and the purposes of FLPMA. As part of this planning effort, the BLM reviewed all applicable plans related to the project area and documented any potential inconsistencies in Appendix H of the FEIS.

6 Management Decisions

Existing management actions from the St. George Field Office RMP will be replaced and/or new management actions will be established with the text listed below. The acreage totals listed below are estimations based on geospatial analysis and include updated designations and land tenure adjustments made since 1999, including removal of the Red Cliffs and Beaver Dam Wash NCAs from the St. George Field Office RMP planning area. The BLM is aware of potential discrepancies between the acreage in the 1999 St. George Field Office RMP and the acreages listed below. The BLM continuously works to correct such discrepancies through rectification of geographic information system (GIS) data and will issue future maintenance actions as needed.

6.1 Lands and Realty

LD-05: Over the life of the Plan, it is expected that BLM may acquire up to 24,058 acres of land within Washington County. Nearly all of these acres will result from BLM's fulfilling its commitment to acquire available state and private lands within the Reserve established by the Washington County Habitat Conservation Plan (HCP) and to fulfill existing statewide exchange agreements with the Utah School and Institutional Trust Land Administration to remove trust inholdings from within federally reserved areas. A pool of 5,861 acres of non-federal lands, which may meet the criteria listed in LD-02, is shown on Map 2.1 for potential acquisition as opportunities arise to help

meet objectives for resource management described elsewhere in this Plan. Unless otherwise designated through the acquisition process, any future non-federal lands acquisitions will be managed in conformance with RMP decisions for adjacent public lands.

LD-06: Over the life of the Plan, it is expected that up to 10,560 acres of public lands may be transferred out of public ownership in Washington County. Most of these transfers will occur as a result of land exchanges needed to complete acquisition of state and private lands within the Red Cliffs Desert Reserve or to support the statewide inholdings exchange with the Utah School and Institutional Trust Lands Administration. No lands located within the Red Cliffs Desert Reserve Zone 6 will be transferred out of public ownership. Generally, public lands within the designated transfer areas shown on Map 2.1 constitute a pool of lands which may be transferred through sale, exchange, or lease and conveyance under the Recreation and Public Purposes Act or other applicable authority. Lands not contained in this pool may be transferred (other than under land sale authority) if subsequent analysis determines that such transfer will meet the land transfer criteria established above.

LD-19: Rights-of-way avoidance areas, totaling 209,879 acres, are depicted in Table 2-3 and on Map 2.3. New rights-of-way will be granted in these areas only when feasible alternative routes or designated corridors are not available. Measures to reduce impacts to affected resources will be applied based on site-specific analysis. Rights-of-way exclusion areas, totaling 138,558 acres, are also depicted in Table 2-3 and on Map 2.3. New rights-of-way will be granted in these areas only when required by law or federal court action.

TABLE 2-3 • Rights-of-Way Avoidance and Exclusion Areas (Subject to Designated Corridors)

	TOTAL ACRES
AVOIDANCE AREAS OHV Closed Areas OHV Designated Roads & Trails Areas Proposed ACECs Riparian Areas Smithsonian Butte National Back Country Byway (1/2 mile on each side) River segments with a tentative classification of Wild, proposed as suitable for Congressional NWSRS designation T&E and Candidate Species Habitat VRM Class I and II areas Watershed Protection Areas (Curly and Frog Hollows)	209,879
EXCLUSION AREAS Wilderness Areas Red Cliffs Desert Reserve Zone 6	138,558

LD-20: Proposed withdrawals from mining location, totaling 11,823 acres, are depicted in Table 2-4 and on Map 2.4. Withdrawals and land classifications that become obsolete will be recommended for revocation or termination.

TABLE 2-4 • Proposed Withdrawals From Mining Location

	TOTAL ACRES
Warner Ridge/Fort Pearce ACEC (4,281 acres) Red Bluff ACEC (6,168 acres) Dinosaur Trackway (40 acres)	11,823

Baker Dam Recreation Area (270 acres)
 Red Cliffs Recreation Area (120 acres outside of Red Cliffs Desert Reserve)
 Red Cliffs Desert Reserve Zone 6 (1,126 acres outside Red Bluff ACEC)

6.2 Energy and Mineral Resources

MI-01: Designate 206,564 acres open to leasing subject to Standard Stipulations (Category 1), 152,569 acres open to leasing with Special Stipulations (Category 2), 14,984 acres open to fluid mineral leasing subject to No Surface Occupancy (NSO) Stipulations (Category 3), and 256,249 acres closed (Category 4) to fluid mineral leasing. Specific areas are outlined in Table 2.5 and depicted on Map 2.5.

TABLE 2-5 • Fluid Mineral Leasing Categories

CATEGORY	ACRES
Open with Standard Stipulation (Category 1)	206,564
Open with Special Stipulations (Category 2)	152,569
Upper Beaver Dam Wash ACEC	
Santa Clara River-Gunlock ACEC	
Severe Erosion Soils	
Curly Hollow and Frog Hollow Watersheds	
Navajo Aquifer (High Recharge Area)	
Municipal Watersheds	
Crucial Deer Winter Habitat and Elk Calving Areas	
Mexican Spotted Owl Habitat	
Desert Tortoise Critical Habitat Outside of ACECs	
T&E Plant Habitat Outside of ACECs	
Candidate Plant Species Habitat Outside of ACECs	
Power Site and FERC Withdrawals	
	14,984
Open with No Surface Occupancy Stipulations (Category 3)	
OHV Closed Areas	
River Segments with a tentative classification of Wild, proposed as suitable for Congressional NWSRS designation	
Riparian Zones	
Red Bluff ACEC (outside Red Cliffs Desert Reserve Zone 6)	
Warner Ridge/Fort Pearce ACEC	
Canaan Mountain ACEC	
Beaver Dam Wash ACEC	
Lower Virgin River ACEC	
Santa Clara River-Land Hill ACEC	
Red Mountain ACEC	
Red Cliffs and Baker Dam Recreation Areas	
Smithsonian Butte National Backcountry Byway (within 1/2 mile radius)	
Administrative Withdrawals	
Public Water Reserves	
Recreation and Public Purpose Act Leases	
	256,249
Closed to Fluid Mineral Leasing (Category 4)	
Wilderness Areas	
Lands within Incorporated City Boundaries	
Red Cliffs Desert Reserve Zone 6	

MI-06: Exploration, drilling, and production will be subject to the operation and reclamation standards contained in Appendix 1 for surface disturbing activities. Red Cliffs Desert Reserve Zone 6 will be closed to fluid mineral exploration, including seismic exploration activities.

MI-07: Public lands in Washington County will remain available to mining location under the General Mining Act of 1872 and applicable regulations on 501,429 acres. Map 2.6 depicts mineral areas that will remain open (361,891 acres), open with restrictions (92,859 acres), and open with a plan of operation (46,679 acres). Restricted areas are those lands where mining locations are subject to special requirements of law and regulation as a result of powersite withdrawals, public water reserves, and split-estate created under the Stockraising Homestead Act.

MI-09: New withdrawals from mining location are recommended on 11,823 acres to protect developed recreation sites, lands, and critical resources within the Red Cliffs Desert Reserve, the Dinosaur Trackway, the Fort Pearce Historic Site, and critical habitats for threatened and endangered plant species in the Red Bluff and Warner Ridge/Fort Pearce Areas of Critical Environmental Concern (ACECs). Withdrawals will be put into place only after approval by the Secretary of the Interior, and in some specific instances, review by both houses of Congress.

MI-16: A total of 278,938 acres of land will remain open for mineral materials sales on a case by-case basis, subject to additional environmental review. Areas to be closed to mineral materials sales are depicted in Table 2-6 and on Map 2.7 and total 204,845 acres. Additional site-specific restrictions will be placed on mineral materials sales in crucial big game habitats, split-estate lands, administrative withdrawals, powersite classifications, and leases issued under the Recreation and Public Purposes Act. Such restrictions cover 66,821 acres.

TABLE 2-6 • Mineral Materials Sales Designations

	ACRES
Open	278,938
Restricted	66,821
Crucial Mule Deer Winter Habitat	
Elk Calving Areas	
Split Estate Lands	
Powersite Classifications	
Administrative Withdrawals	
Recreation and Public Purpose Act Leases	
Closed	204,845
Red Cliffs Desert Reserve Zone 6	
All ACECs (exclusive of the cinder pit on Little Creek Mountain ACEC)	
Baker Dam and Red Cliff Recreation Areas	
OHV Closed Areas (See Table 2-10)	
Threatened and Endangered Plant and Animal Species Habitat	
Candidate Plant and Animal Species Habitat	
Riparian Areas	
River segments with a tentative classification of Wild, proposed as suitable for Congressional NWSRS designation	
Municipal Watersheds	
Navajo Sandstone Aquifer (High Recharge Area)	
Beaver Dam Mountains Wilderness Area	
Public Water Reserves	

6.3 Fish and Wildlife

Desert Tortoise

Objectives

BLM will work collaboratively with local, state, and federal partners to accomplish the goals and the objectives of the Washington County HCP and its implementation agreement, including the following items:

- a) Preservation and protection of the desert tortoise and its habitat so as to achieve full recovery of the tortoise as well as other listed or sensitive species found within the Upper Virgin River Recovery Unit.*
- b) Land uses and authorized activities are managed to conserve, protect, and restore habitats to meet the nutritional, metabolic (shade/cover), reproductive, and home range requirements of viable Mojave desert tortoise populations.*
- c) Ecologically intact areas of Mojave desert tortoise habitat are conserved and protected from fragmentation and loss of native vegetation communities through appropriate land use allocations and management actions across BLM programs.*
- d) Ecological integrity of damaged native vegetation communities is restored through appropriate revegetation methods and the control and eradication of noxious weeds and nonnative invasive species.*
- e) Land uses and authorized activities are managed so that habitats provide ecological diversity and connectivity to create genetic resilience for Mojave desert tortoise populations under changing climatic conditions.*
- f) Research is supported that increases the knowledge of Mojave desert tortoise life histories and population dynamics in Red Cliffs Desert Reserve Zone 6.*

FW-16: BLM will continue to implement the terms of the Washington County HCP and the Implementation Agreement. In accordance with those documents, the following action will be taken within Red Cliffs Desert Reserve Zone 6:

- a) BLM will seek to acquire, through exchange, purchase, or donation, state and private inholdings within Red Cliffs Desert Reserve Zone 6 to provide for consistent management. Acquisitions will occur on a "willing buyer-willing seller" basis. Lands so acquired will be managed in accordance with prescriptions planned for the remainder of the area.
- b) Allow the reintroduction, translocation, and population augmentation of special status species populations into current or historic habitats, in coordination with FWS, and UDWR, and local governments, subject to guidance provided by BLM's 6840 policy and by existing or future MOU, to assist recovery and delisting of threatened or endangered species and preclude the need to list other at-risk species.
- c) Do not authorize native seed harvesting for commercial purposes. Authorize hand method seed collection and the collection of native seedlings, plants, cuttings, and biological soil crust for scientific research and for restoration projects on public lands within Red Cliffs Desert Reserve Zone 6.

- d) In collaboration with the Utah DWR, Washington County, and other appropriate law enforcement agencies, BLM will implement public education and enforcement actions needed to accomplish the objectives of the Red Cliffs Desert Reserve.
- e) BLM will collaborate with the Utah DWR, the FWS, and other interested parties to monitor the status of desert tortoises and to conduct studies needed to accomplish HCP objectives. Such studies may lead to adjustments in Reserve management so as to promote recovery of the tortoise or any other listed or sensitive species in the Reserve.
- f) FWS protocol-level surveys will be conducted prior to construction for federally-listed plant species in order to identify occupied and potential habitat and develop protective measures. Surveys will take place when the plants can be positively identified, during the appropriate flowering periods. Surveys will be conducted by qualified field botanists/biologists who will provide documentation of their qualifications, experience, and knowledge of the species prior to starting work.

FW-21: Within Red Cliffs Desert Reserve Zone 6, collaborate with FWS, UDWR, and appropriate USDA agencies on predator control, if other management actions have not been successful in reducing documented predation levels that have been shown to be measurably impacting the recovery of viable populations of listed species. Require the development of target species-specific predator control plans supported by NEPA analyses that identify the purpose of and need for action, designate specific goals to be met, and evaluate the least invasive and most ecologically sensitive methods to accomplish those goals.

6.4 Livestock Grazing

GZ-10: Public lands within the following allotments or pastures are permanently closed to grazing for resource or administrative purposes:

- Rockville Allotment - administrative
- Highway Pasture/New Harmony Allotment - administrative
- Upper South Creek Allotment - resource/administrative
- Allotments within the Red Cliffs Desert Reserve Zone 6, including the Box Canyon Allotment and the Holding Pasture of the Curly Hollow Allotment - resource
- Fenced portion of the Woodbury Desert Study Area - resource

Administrative closures occur where poor land configuration, limited size, lack of access or water, or the cost of needed range developments make grazing authorizations impractical. Where such factors are determined to make grazing impractical on other pastures or splinter allotments, BLM will consider implementation of similar closures after appropriate analysis and public review.

6.5 Recreation

RC-05: Dispersed camping in undeveloped areas will be allowed in accordance with the public notice of December 14, 1992 (Federal Register, Vol. 57, No. 240, p. 59121), where the lands are not otherwise closed to such use. Red Cliffs Desert Reserve Zone 6 is closed to dispersed camping. To prevent degradation of natural resources and the use of public lands for unauthorized occupancy, dispersed camping by any person or group of persons will be limited to 14 days within a 30-mile radius in a 28-day period.

RC-17: BLM will consider development of the following management activities and opportunities on public lands. Actual implementation will not take place unless site specific planning is

completed and necessary partners and resources become available. Strategies and funding for permanent maintenance of proposed facilities will need to be in place before BLM may act on development plans.

- a) In collaboration with Washington County, SITLA, and the FWS, develop an implementation-level recreation area management plan for Red Cliffs Desert Reserve Zone 6 within 5 years of approval of the Washington County HCP or prior to construction of the proposed Northern Corridor, whichever occurs first. At a minimum, the implementation-level recreation area management plan would address the following:

Trails and Trail Amenities

- Supporting recreational amenities could include trailheads, information kiosks, ride-overs or stepovers, restrooms, and expanded parking.
- Additional measures to support compliance may include, but are not limited to, fencing along routes that are prone to social trailing or educational or directional signage.
- In conjunction with the comprehensive travel and transportation plan for the St. George Field Office, develop supporting recreational amenities for the network of routes that minimizes impacts to the Mojave desert tortoise and other Federally listed and candidate species and their habitats, while providing a quality recreation experience.

Rock climbing

- Identify areas where climbing could be authorized.
- Identify potential climbing restrictions such as group size limits or seasonal closures.
- Establish monitoring protocols to identify resource impacts.

Fencing

- Identify appropriate locations to construct a minimum of 5 miles of wildlife-friendly boundary fencing on BLM-administered lands to manage dispersed recreational usage and limit adverse impacts to habitat within Red Cliffs Desert Reserve Zone 6.
- Fences needed to control tortoise movements or to prevent vehicle or pedestrian traffic in protected areas will be installed, as needed, in accordance with HCP guidelines. In collaboration with user groups, access points will be provided to allow ingress and egress for authorized purposes and use of approved trails.

Adaptive Management

- Establish a monitoring protocol to identify changes related to recreational uses, habitat quantity, and quality for Mojave desert tortoise and impacts to other species including special status plants and biological soil crusts.
 - Develop a list of trigger points and responsive management actions to address observed conflicts between users and protection of natural resources.
- b) Camping facilities, special use areas, or water-based recreation opportunities may be developed in cooperation with state and local governments on or adjacent to proposed or existing reservoirs where it is determined that such are consistent with reservoir purposes and objectives for land use in the surrounding area.
- c) Bloomington Cave will be monitored periodically and appropriate guidelines implemented to provide for visitor safety and protection of cave resources.

- d) BLM will work collaboratively with local, state, and federal partners including BLM units in adjacent areas to develop interpretive displays with improved access along major tourist routes to increase public awareness and provide an enhanced recreation experience relating to significant historical and natural features. Such will include a partnership with the Vermillion Cliffs Highway initiative for northwest Arizona and southwest Utah.
- e) In collaboration with local communities, historical associations, and interested government agencies, BLM will assist in marking and signing portions of the Spanish Trail that cross public lands in Washington County.
- f) In collaboration with local communities, organizations, and volunteer groups, BLM will enter into cooperative agreements to establish collection boxes outside of regular fee areas to receive voluntary donations from members of the using public at selected special use areas and interpretive sites to be applied to the cost of maintenance and providing public information.
- g) Where developed recreation facilities are maintained or proposed, BLM will consider the use of concessionaire management to provide improved visitor services while minimizing the need for appropriated funds.

Red Cliffs Desert Reserve Zone 6 – Management Actions

RC-25: The discharge of firearms in Red Cliffs Desert Reserve Zone 6 is prohibited except in the act of hunting big game and upland game species by licensed hunters in accordance with current city and county ordinances, and state laws during prescribed seasons.

RC-26: Prohibit paintball activities of any kind.

RC-27: Do not authorize SRPs for competitive equestrian events in Red Cliffs Desert Reserve Zone 6.

RC-28: Do not authorize SRPs for competitive motorized events in Red Cliffs Desert Reserve Zone 6.

RC-29: Limit SRPs for motorized commercial and organized group recreation activities to roads and primitive roads authorized for use by the public.

RC-30: All pets must be on leash at all times within Red Cliffs Desert Reserve Zone 6.

Red Cliffs Desert Reserve Zone 6 – Implementation Decisions

RC-31: Prohibit campfires within Red Cliffs Desert Reserve Zone 6.

RC-32: Prohibit physical geocaches in Red Cliffs Desert Reserve Zone 6.

RC-33: Allow virtual geocaches in Red Cliffs Desert Reserve Zone 6, provided they are compliant with other zone restrictions. Written approval from the BLM Field Manager would be required prior to the public posting of any virtual geocache placement.

RC-34: Prohibit the take-off and landing of powered parachutes, ultralight aircraft, remote-controlled aircraft, and unmanned aerial vehicles in Red Cliffs Desert Reserve Zone 6.

RC-35: Require users to pack out all solid human and pet waste.

6.6 Comprehensive Travel and Transportation

Management Actions – Red Cliffs Desert Reserve Zone 6

CTT-12: Travel systems within Red Cliffs Desert Reserve Zone 6 will be managed with an emphasis on improving the sustainability of the travel network in a comprehensive manner to minimize impacts on Mojave desert tortoise, maintain visitor safety, and prevent unauthorized cross-country travel while meeting access needs. To do so, it may be necessary to improve portions of existing routes, close existing routes, or create new routes that meet user group needs, thereby reducing the potential for pioneering unauthorized routes. As directed in Omnibus Public Land Management Act of 2009 (OPLMA) (16 U.S.C. 460www; Public Law 111-11, Title 1, Subtitle O) Section 1977, the BLM would work with the FWS, SITLA, Washington County, and the public to ensure a cohesive transportation system in the area and would make specific route designations through the Washington County comprehensive travel and transportation management plan. The emphasis of the comprehensive travel and transportation management planning will be placed on having a neutral or positive effect on Mojave desert tortoise habitat.

CTT-13: In conjunction with the Washington County comprehensive travel and transportation management plan, develop a network of routes within Red Cliffs Desert Reserve Zone 6 that minimizes impacts to the Mojave desert tortoise and other Federally listed and candidate species and their habitats, while providing a quality recreation experience. Through the BLM's implementation-level comprehensive travel and transportation management plan, existing routes would be designated as open or closed and overall mileage of open routes would be limited to approximately 4 miles of motorized and 35 miles of non-motorized roads and trails.

6.7 Fire Management

FI-05: Manage Red Cliffs Desert Reserve Zone 6 as follows:

- a) Employ rapid and appropriate suppression responses to minimize fire size and duration in Red Cliffs Desert Reserve Zone 6.
- b) Conserve and protect unburned areas through appropriate fire suppression responses, while prioritizing firefighter and public safety and the protection of private property.
- c) Use Resource Advisors to guide suppression actions for all fires to help ensure that ecological systems and resource values are conserved and protected to the maximum extent possible.
- d) Evaluate the use of “backfiring” or heavy equipment as a fire suppression tactic in late successional shrublands on a case-by-case basis. Require BLM Field Manager approval prior to employing this tactic.
- e) Naturally ignited wildfires are not authorized to accomplish a resource objective as there are no fire-adapted vegetative communities present in which fire has historically played an important role in ecosystem function.
- f) Do not authorize the use of management-ignited (prescriptive) fire in any of the ecological systems for hazard fuel reduction or vegetation type conversions, as these are not fire-adapted communities in which fire has historically played an important role in ecosystem function.

7 Public Involvement, Consultation, and Coordination

The public involvement, consultation, and coordination processes conducted for the Approved RMP Amendments are described in Chapter 4 of the FEIS/Proposed RMPA. This section summarizes those efforts and updates consultation and protest activities that occurred following publication of the FEIS.

7.1 Public Involvement

Public involvement on this planning effort is described in Section 4.1 of the FEIS/Proposed RMPA. To summarize, public involvement began on December 5, 2019 when the Notice of Intent to prepare an EIS was published in the Federal Register, initiating the public scoping period. A public scoping meeting was held on December 17, 2019 in St. George, Utah.

On June 12, 2020, the Notice of Availability (NOA) for the DEIS/Draft RMPA was published in the Federal Register, initiating a 90-day public comment period. Online public meetings were held on July 16 and 21, 2020. Comments received on the DEIS/Draft RMPA, and the BLM's responses, are summarized in Appendix O of the FEIS/Proposed RMPA.

On November 13, 2020, the NOA for the FEIS/Proposed RMPA was published in the Federal Register initiating a 30-day protest period and up to 60-day Governor's Consistency review period. The BLM received 18 protest letters.

7.2 Consultation and Coordination

7.2.1 Cooperating Agencies

The BLM worked with numerous agencies throughout the preparation of this Approved RMP Amendments. The BLM outreach efforts and collaboration with cooperating agencies are described in Chapter 4, Section 4.2.4 of the FEIS/Proposed RMPA.

The BLM extended invitations to or received requests from eight Federal, state, regional, and local entities to participate as cooperating agencies. Of these, seven agencies participated in some or all of the following activities: scoping comments, input on preliminary drafts, comments on the DEIS/Draft RMPA, review of the FEIS/Proposed RMPA, and/or participation in briefings, meetings, or work sessions.

7.2.2 Governor's Consistency Review

The FLPMA and its implementing regulations require that RMPs be "consistent with officially approved or adopted resource-related plans, and the policies and procedures contained therein, of other Federal agencies, State and local governments, and Indian tribes, so long as the guidance and resource management plans also are consistent with the purposes, policies, and programs of Federal laws and regulations applicable to public lands." (43 CFR 1610.3-2(a)) In accordance with this direction, the BLM was aware of and gave consideration to State, local, and tribal plans and provided for their involvement throughout the development of the Approved RMP Amendments. Appendix H in the FEIS/Proposed RMPA identifies areas where the alternatives may be inconsistent with the state, local, and tribal plans.

The Governor's Consistency Review for the Approved Red Cliffs NCA RMP Amendments was initiated with the publication of the FEIS/Proposed RMPA on November 13, 2020. The Governor responded with a letter on November 24, 2020, that stated "throughout the process of developing

a broad range of alternatives to meet the transportation needs of Washington County, the BLM has worked diligently with State and local government to ensure the BLM Plan is consistent with the State's Plan...The UDOT Alternative is most consistent with the long-term growth needs for Washington County, the State's Long-term Unified Transportation Plan, the local plans and policies of Washington County, the many local governments within Washington County, and the Congressional intent of the 2009 Omnibus Public Lands Bill." No specific inconsistencies were identified and no changes were made to the RMP Amendments as a result.

7.2.3 Native American Consultation

Federal law requires the BLM to consult with American Indian Tribes during the planning and NEPA process. In December 2019, the BLM and FWS initiated government-to-government consultations with 14 American Indian Tribes and Bands that claim affiliation to southwestern Utah, providing a detailed description of the project and requesting information about sacred sites or places of traditional cultural importance. The only response was received from the Hopi Tribe, stating concerns that the proposed Northern Corridor would adversely impact cultural and natural resources that are significant to the Tribe. The BLM presented project information at the Tribal Council meeting of the Paiute Indian Tribe of Utah on February 10, 2020 and continued to reach out to potentially affected tribes throughout the rest of the process. The BLM sent additional information regarding the proposed undertakings to the 14 Tribes and Bands on June 1, 2020. The Navajo Nation's Heritage and History Preservation Department responded via emails on June 12, 2020 and June 15, 2020 indicating that there were no Navajo traditional cultural properties within the Area of Potential Effect for the project. The BLM sent the cultural resources survey report to the Hopi Tribe on August 18, 2020 and they responded in a letter dated October 5, 2020 supporting the No Action alternative.

7.2.4 National Historic Preservation Act Section 106 Consultation

The St. George Field Office RMP amendments are a Federal undertaking and therefore subject to Section 106 of the National Historic Preservation Act (NHPA). Section 106 through its implementing regulations (36 CFR 800) defines Federal undertakings as any project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency, those carried out with Federal financial assistance, and those requiring a Federal permit, license or approval. The regulations require Federal agencies to consider the effects of their undertakings that have the potential to impact historic properties including any district, site, building, structure, or object that is listed on or eligible for listing on the National Register for Historic Places and provide the SHPO, affected Tribes, and other consulting parties an opportunity to comment.

The BLM and FWS notified the public that they would coordinate their public consultation obligations under the NHPA (54 U.S.C. 306108) through this NEPA process, as provided for in 36 CFR 800.2(d)(3) as a component of the Notice of Intent to prepare an EIS (84 Federal Register 66692-66694). The BLM independently initiated the Section 106 process by establishing the undertakings (pursuant to 36 CFR 800.3.a), identifying and consulting with interested parties, identifying points in the process to seek input from the public, and notifying the public of proposed actions. The BLM identified interested parties for this Section 106 process.

The BLM consulted independently with the Utah SHPO and American Indian Tribes regarding efforts to identify cultural resources and evaluate them for eligibility for the National Register of Historic Places (36 CFR 800.4), and assess effects of the project on historic properties by applying

the criteria of adverse effect (36 CFR 800.5). The BLM received concurrence from the Utah SHPO regarding the finding of “no adverse effect” for the undertaking related to the SGFO RMP amendments on December 10, 2020. Through subsequent site-specific review, the BLM will conduct consultation to identify processes to resolve any adverse effects to historic properties (36 CFR 800.6) caused by the site-specific implementation of this planning-level undertaking.

7.2.5 Endangered Species Act Section 7 Consultation

Section 7(a)(2) of the ESA requires that each Federal agency ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. If an action agency determines a proposed action may affect listed species or designated critical habitat, consultation between that agency and the FWS is required under section 7 of the ESA.

The BLM has completed the formal consultation with the FWS under section 7 of the ESA regarding the potential impacts of the BLM’s Federal action for the St. George Field Office RMP amendments, which occur within Mojave desert tortoise habitat. Section 3.5 of the FEIS/Proposed RMPA and the BLM’s biological assessment, which was submitted to the FWS on September 23, 2020, document the expected impacts from this action to the species and habitat. The FWS issued their biological opinion on January 12, 2021.

8 Monitoring the Plan

BLM planning regulations (43 CFR 1610.4-9) require RMPs to be monitored on a continual basis with a formal evaluation done at periodic intervals. As the St. George Field Office RMP is implemented, the BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data or support new management techniques and scientific principles. To the extent that such new information or actions address issues covered in these Approved RMP Amendments, the BLM will integrate the data through a process called plan maintenance, or if needed plan amendments. These processes include the use of monitoring, which is the repeated measurement of activities and conditions over time with the implied purpose to use this information to adjust management, if necessary, to achieve or maintain resource objectives. CEQ regulations implementing NEPA state that agencies may provide for monitoring to ensure that their decisions are carried out and should do so in important cases. See 40 CFR 1505.2(c)⁸.

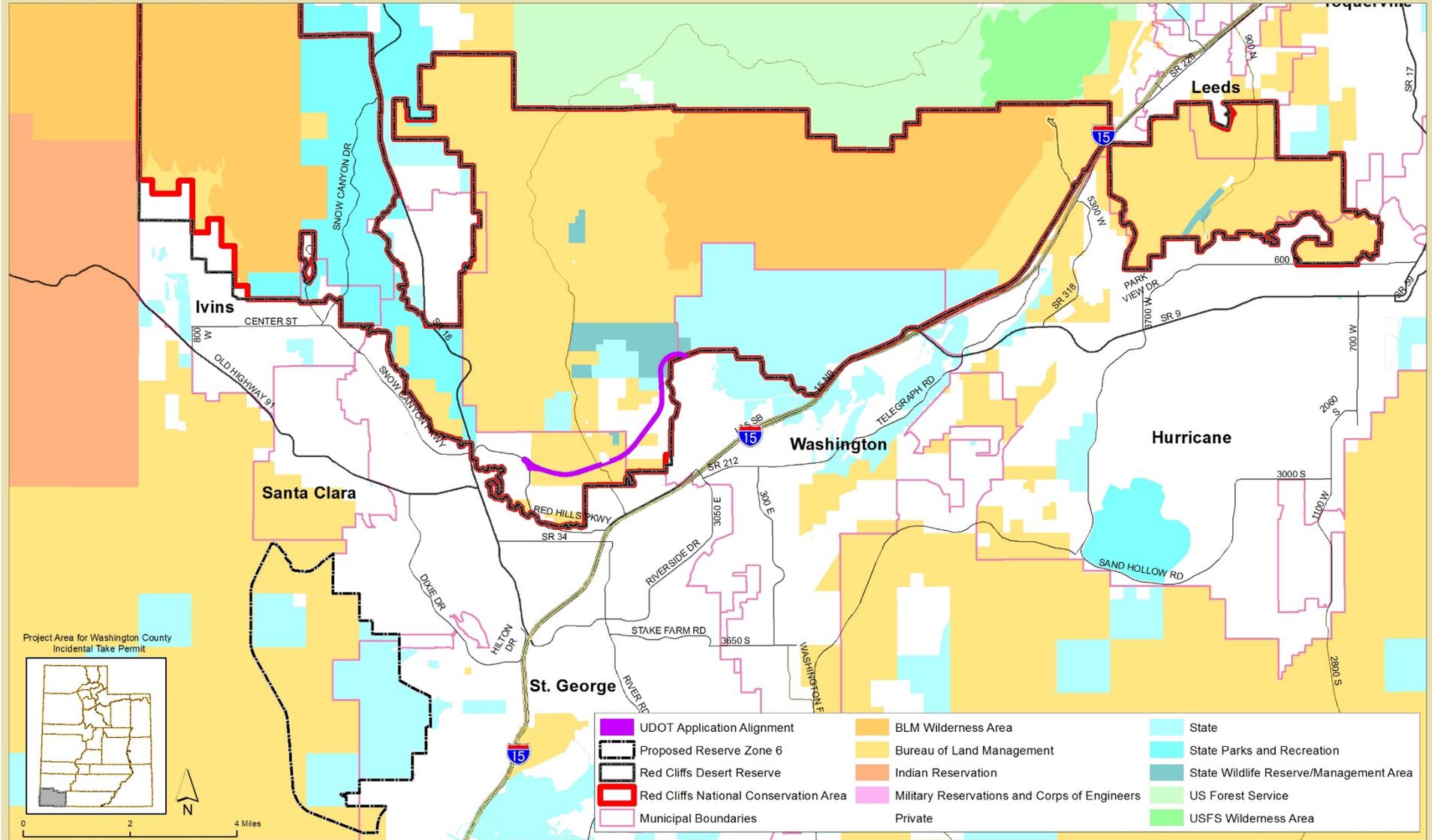
⁸ 40 CFR 1505.2(a)(3) as of September 14, 2020.

Appendix A: Maps

Project Location Map for the Northern Corridor Highway Right-of-Way and Amendments to the Red Cliffs National Conservation Area and St. George Field Office Resource Management Plans

St. George
Field Office
12/17/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.
This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.

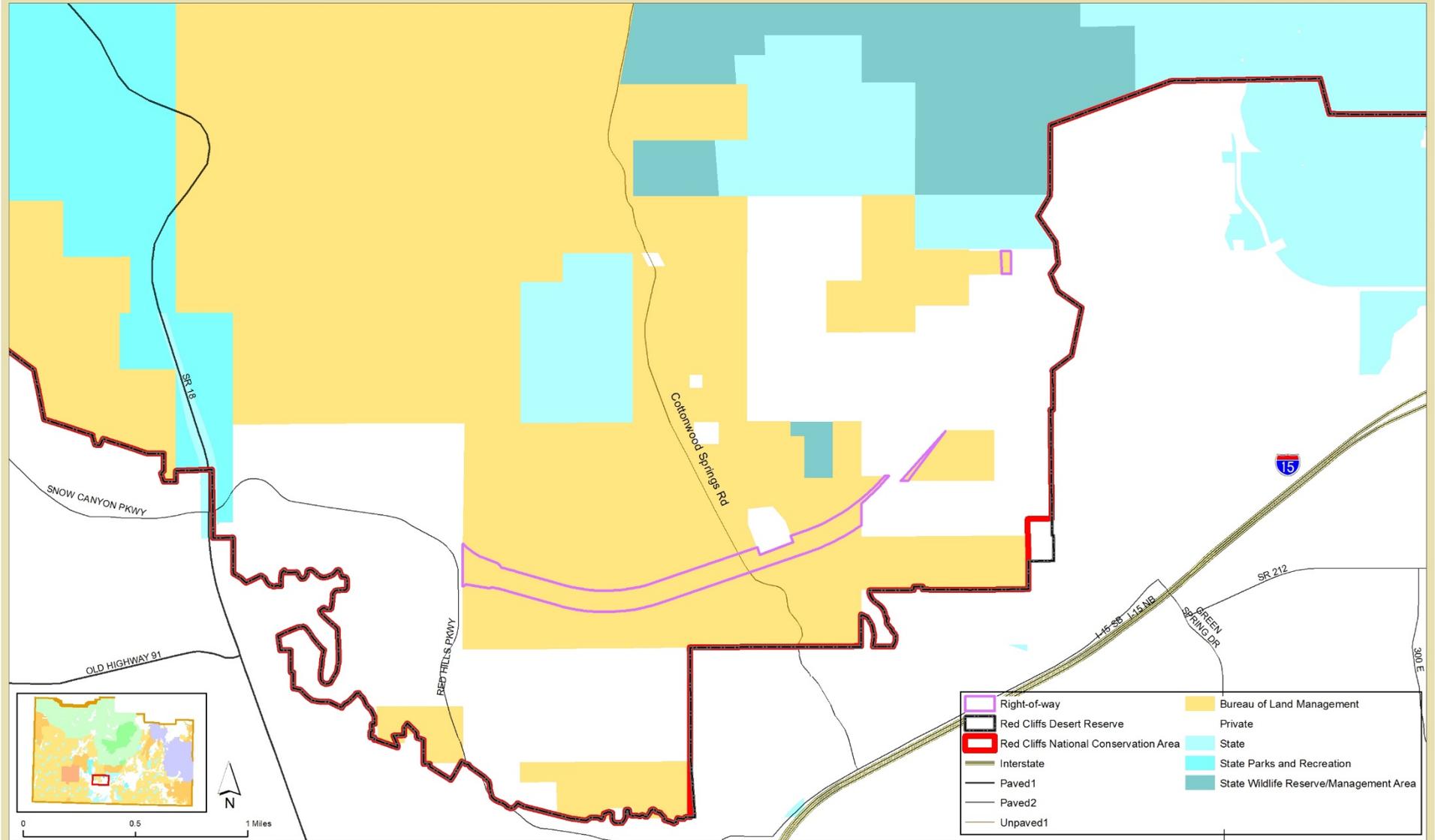


Map 1. Project Location Map

Northern Corridor Right-of-way

St. George
Field Office
12/17/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.
This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



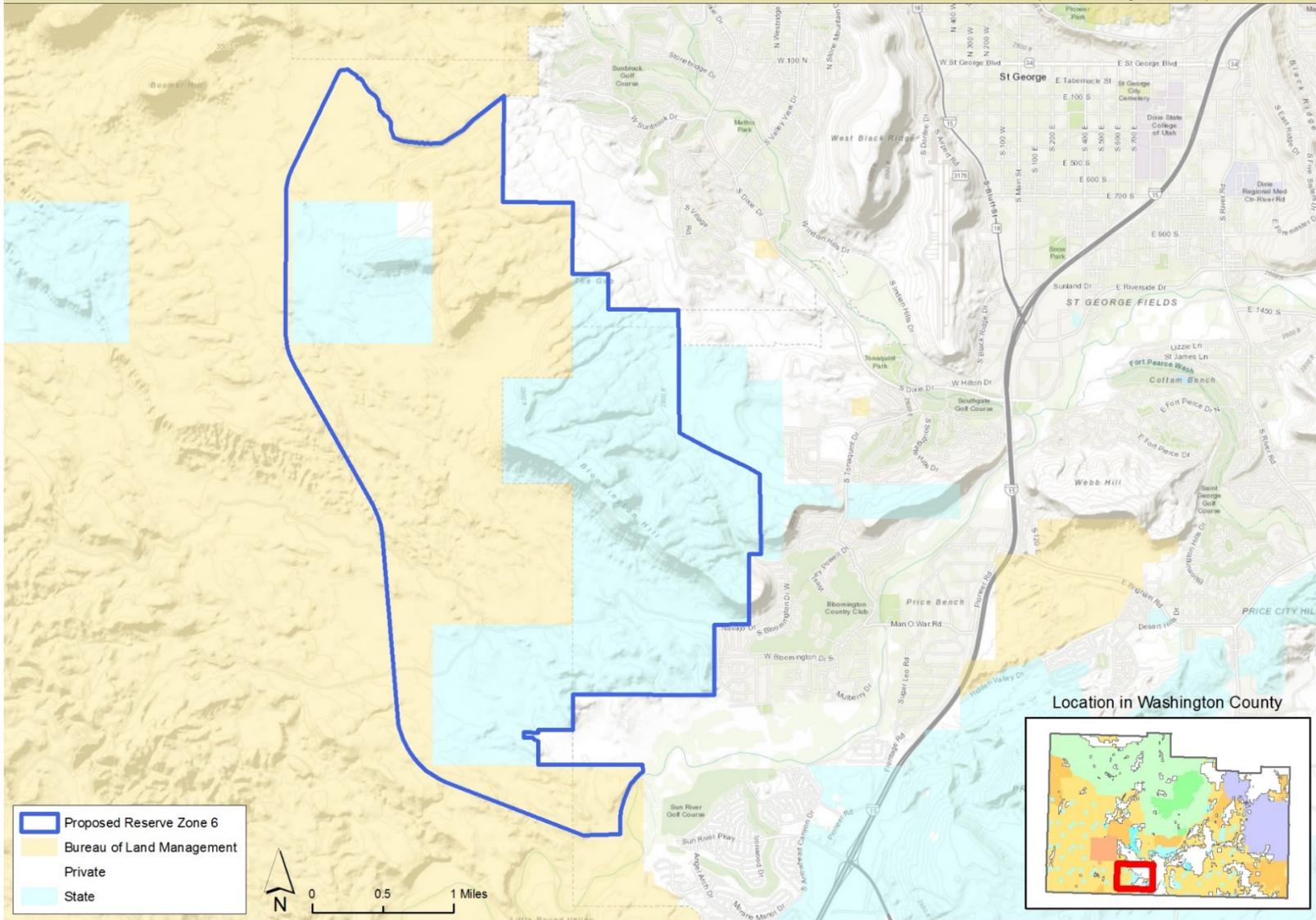
Map 2. Northern Corridor ROW

Proposed Red Cliffs Desert Reserve Zone 6

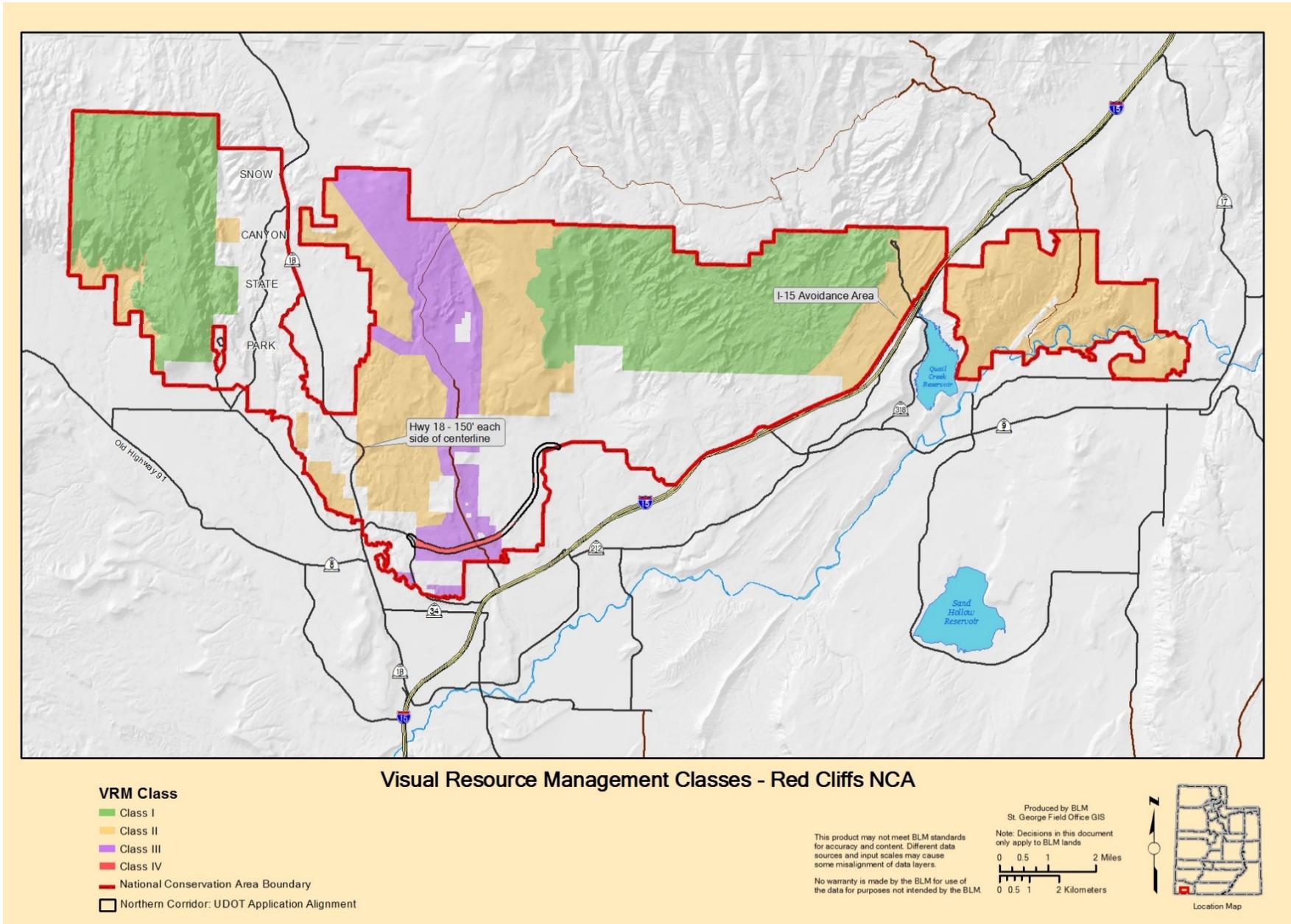
St. George Field Office 12/17/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

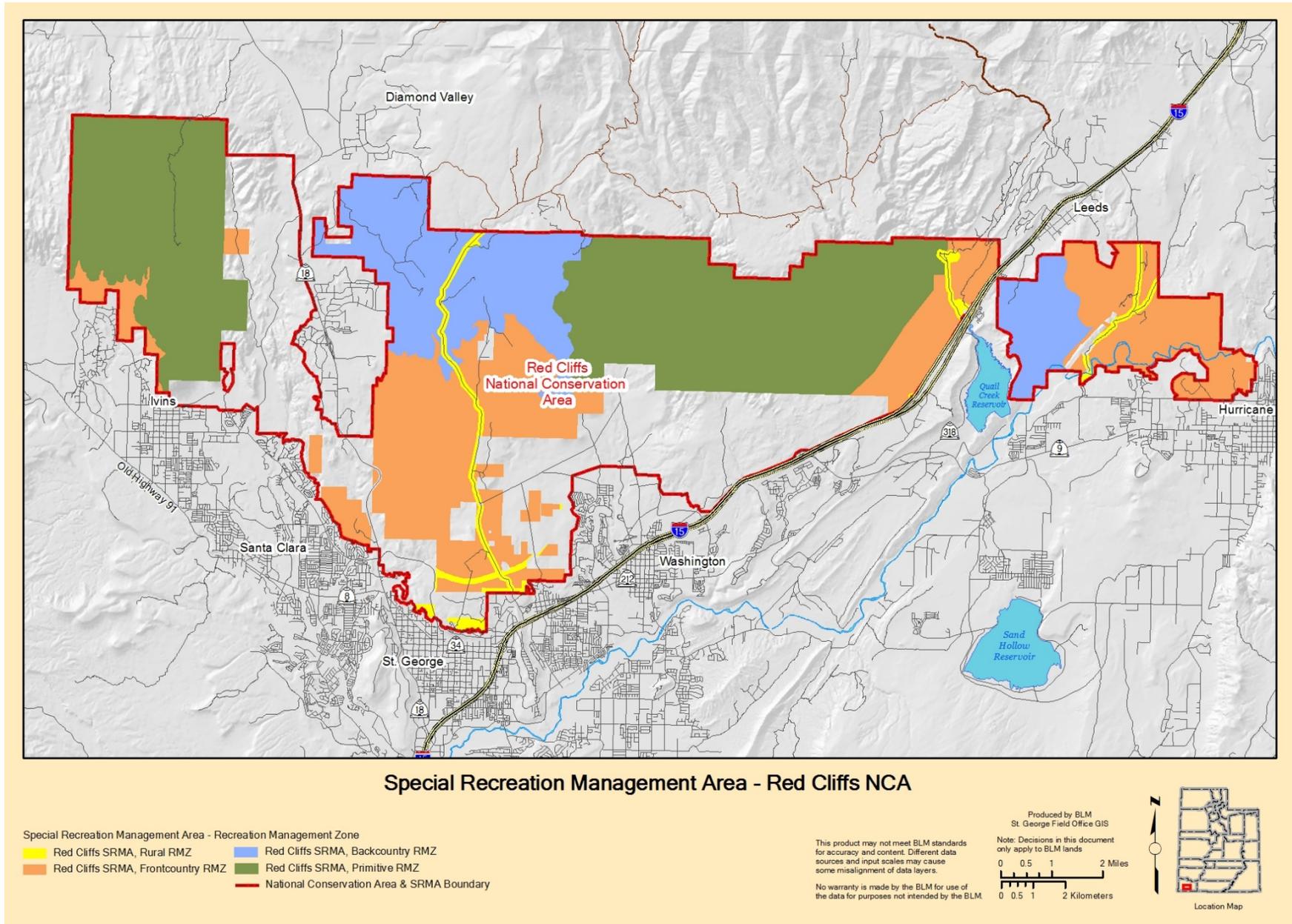
This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



Map 3. Red Cliffs Desert Reserve Zone 6



Map 4. Updated Red Cliffs NCA RMP Map 4: Visual Resource Management Classes – Red Cliffs NCA



Map 5. Updated Red Cliffs NCA RMP Map 5: Special Recreation Management Area – Red Cliffs NCA

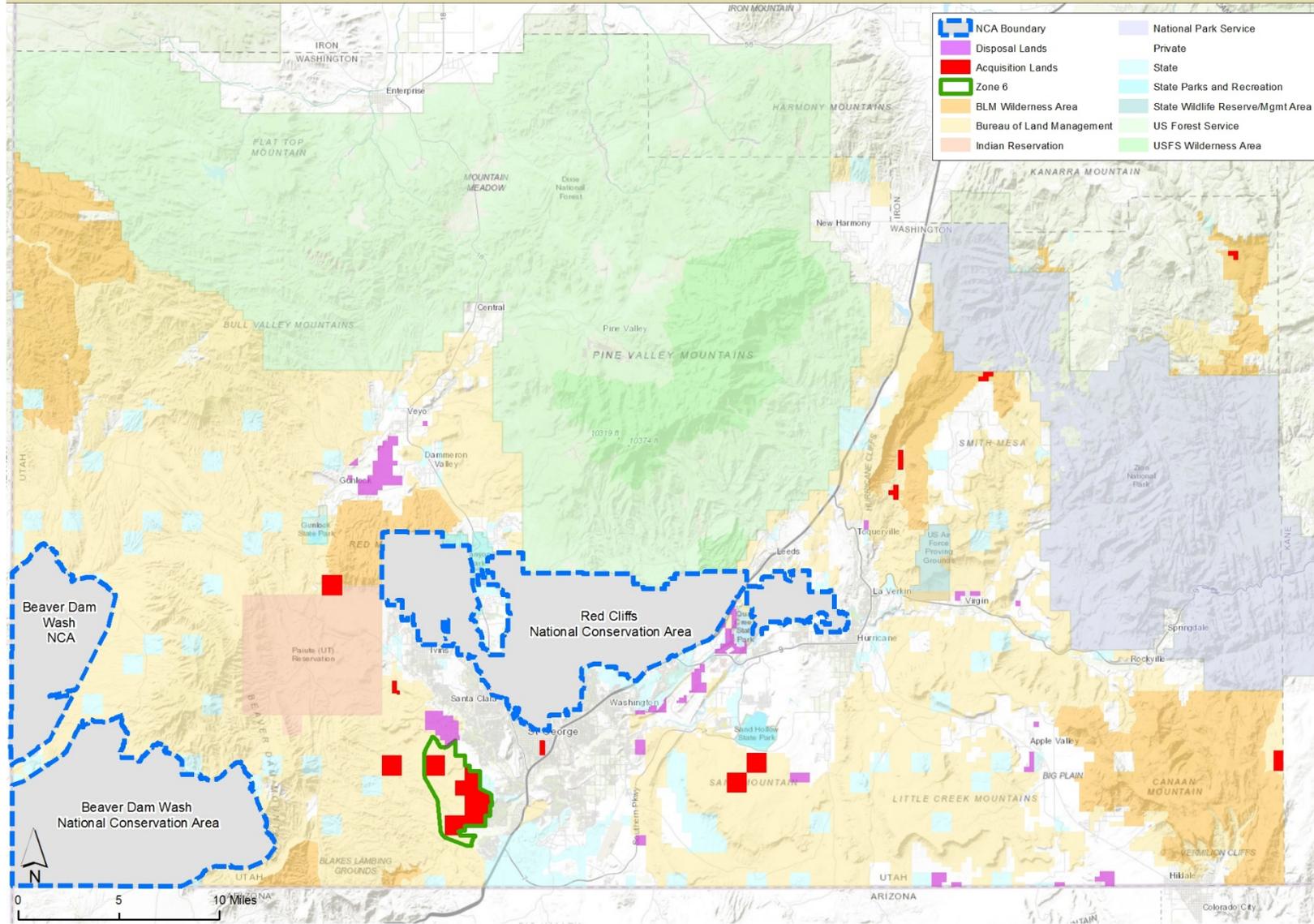
Potential Land Acquisition and Transfer

St. George Field Office 12/15/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.



This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



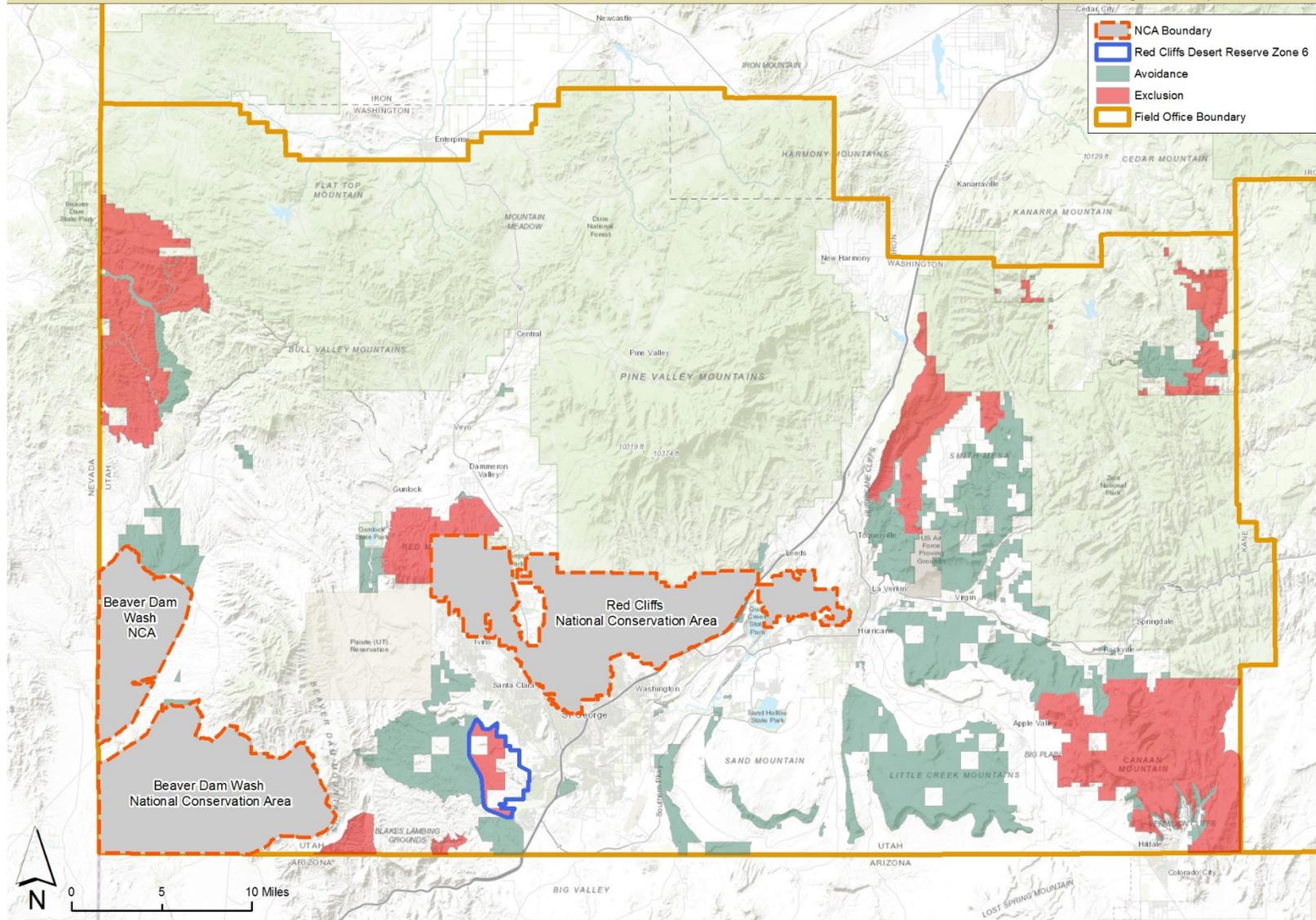
Map 6. Updated St. George Field Office RMP Map 2.1: Potential Land Acquisition and Transfer

Rights-of-Way Avoidance and Exclusion Areas

St. George Field Office 12/15/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.

This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



Map 7. Updated St. George Field Office RMP Map 2.3: Rights-of-Way Avoidance and Exclusion Areas

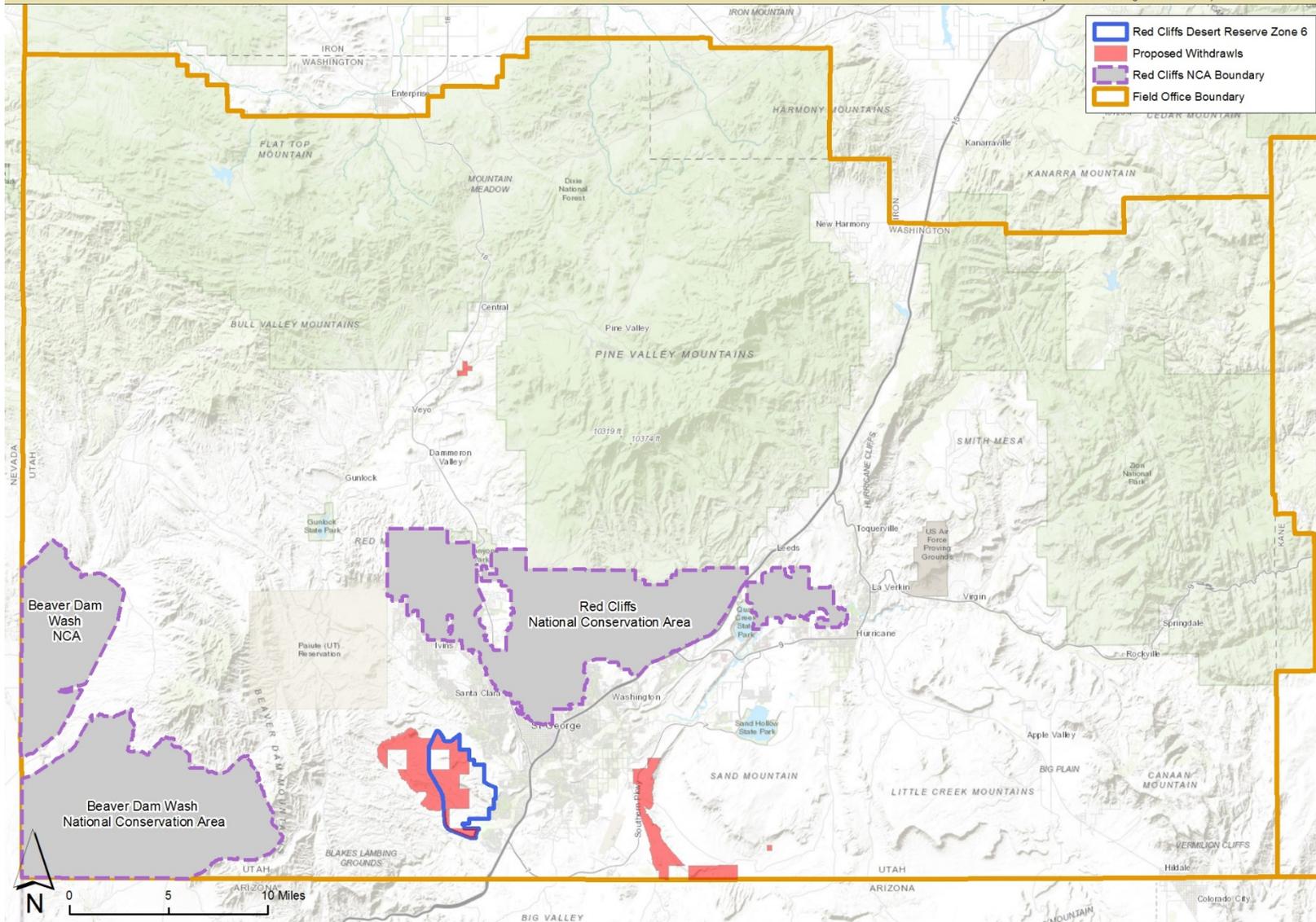
Proposed Withdrawals

St. George Field Office 12/17/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.



This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.

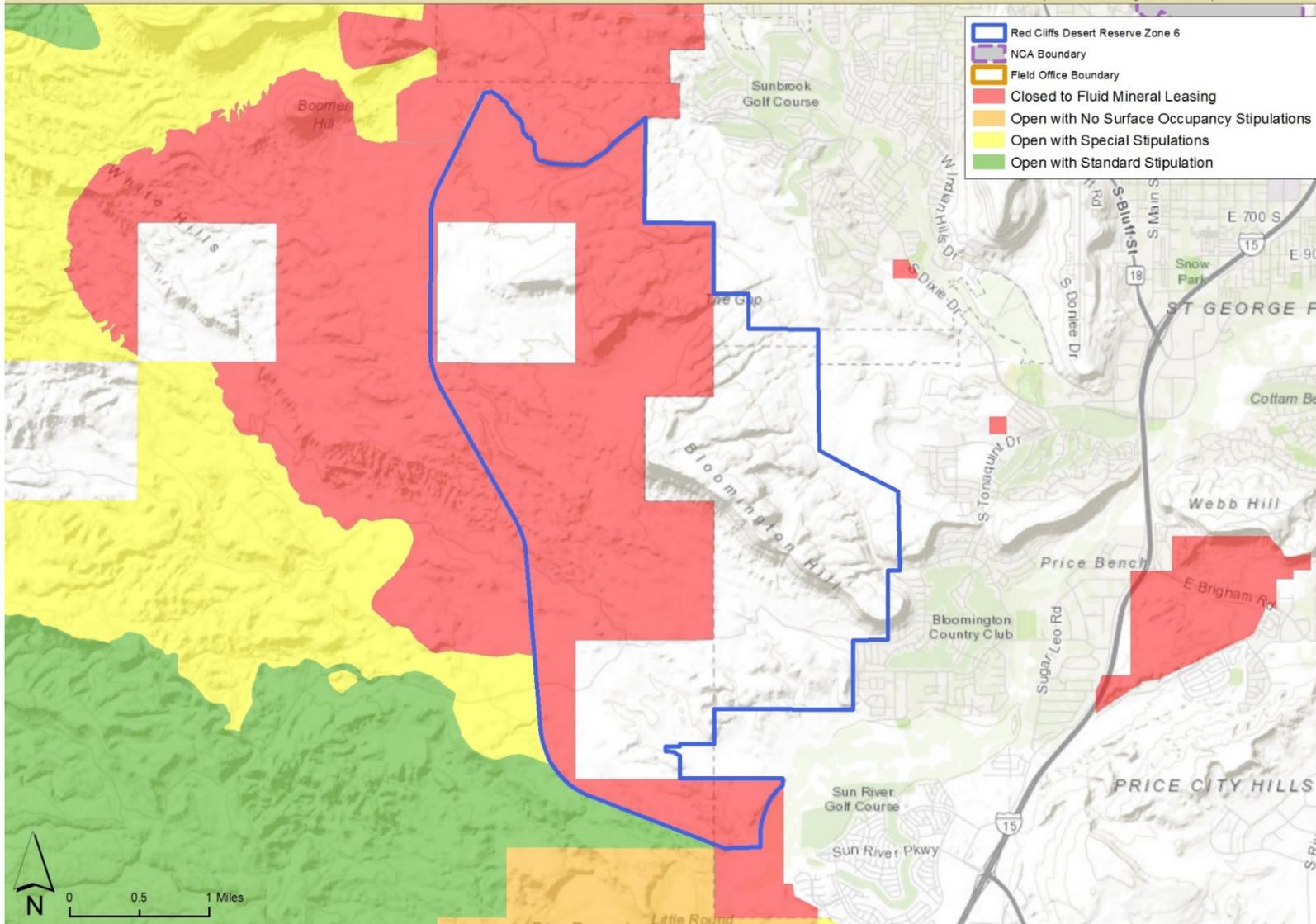


Map 8. Updated St. George Field Office RMP Map 2.4: Proposed Withdrawals

Fluid Mineral Management Categories

St. George Field Office 12/23/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.
 This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



Map 9. Updated portion of St. George Field Office RMP Map 2.5: Fluid Mineral Management Categories

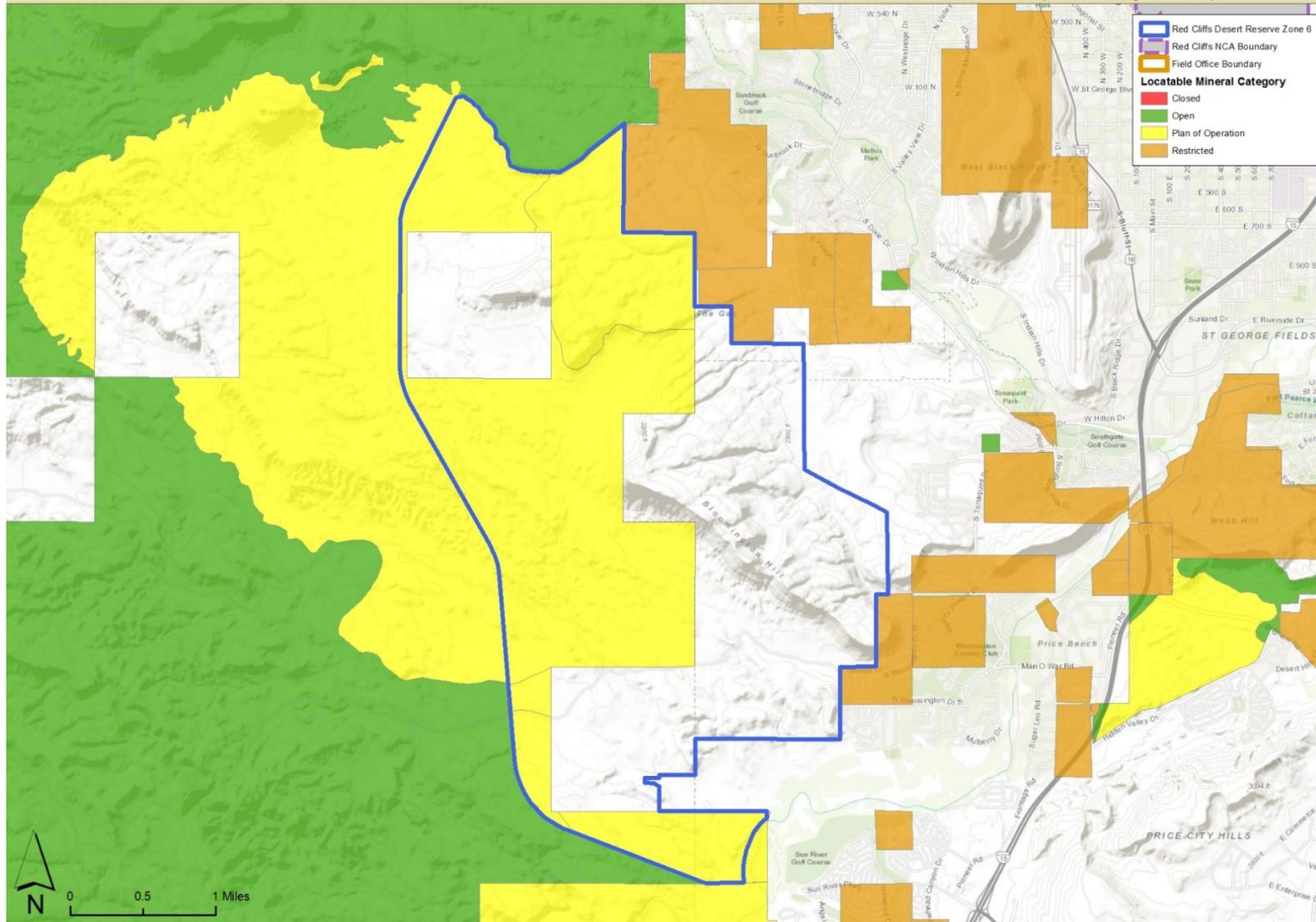
Locatable Minerals Management

St. George Field Office 12/30/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.



This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



Map 10. Updated portion of St. George Field Office RMP Map 2.6: Locatable Minerals Management

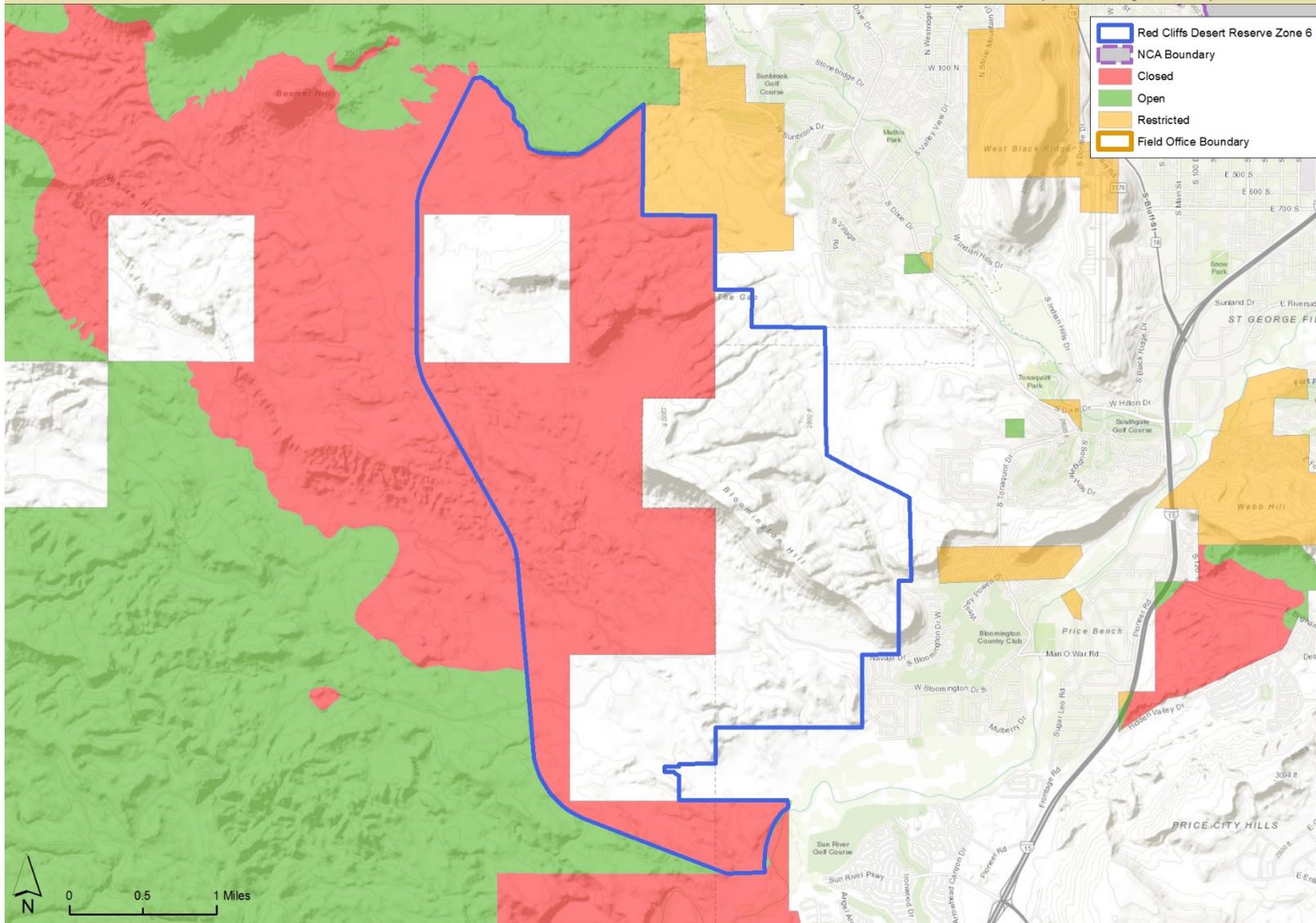
Mineral Materials Management

St. George Field Office 12/17/2020

No warranty is made by the BLM for use of the data for purposes not intended by the BLM.



This product may not meet BLM standards for accuracy and content. Different data sources and input scales may cause some misalignment of data layers.



Map 11. Updated portion of St. George Field Office RMP Map 2.7: Mineral Materials Management

Appendix B: Legal Descriptions

Legal Description for Northern Corridor ROW:

Salt Lake Meridian

T. 42 S., R. 14 W., sec. 31, Lots, 5, 6, 8, 11

T. 43 S., R. 14 W., sec. 06, Lot 1

T. 42 S., R. 15 W., sec. 36, SE $\frac{1}{4}$ SE $\frac{1}{4}$

Legal Description for Red Cliffs Desert Reserve Zone 6:

Salt Lake Meridian

T. 42 S., R. 16 W.,

sec. 28, lots 4, 6, 7, NE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$,

sec. 29, lots 2, 3, 6, 7, E $\frac{1}{2}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$,

sec. 33, All

T. 43 S., R. 16 W.,

sec. 4, lots 1, 2, 3, 4, S $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$,

sec. 5, lots 1, 2, 3, 4, S $\frac{1}{2}$ N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$,

sec. 8, N $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$,

sec. 9, All,

sec. 17, E $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$, NE $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$,

sec. 20, NE $\frac{1}{4}$ NE $\frac{1}{4}$,

sec. 21, N $\frac{1}{2}$ N $\frac{1}{2}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$,

Sec. 22, Lots 13, 14, 15, 18, 19, W $\frac{1}{2}$ NW $\frac{1}{4}$

Appendix C: Plan of Development

DRAFT PLAN OF DEVELOPMENT

Northern Corridor – Red Hills Parkway to Green Spring Drive Project

December 2020

Submitted to:



United States Department of the Interior
Bureau of Land Management
345 E Riverside Drive
St. George, Utah 84790

Submitted by:



Utah Department of Transportation
Region 4
210 W 800 S
Richfield, Utah 84701



Table of Contents

Acronyms and Abbreviations.....	iii
1 Overview	1
1.1 Process for Developing the Plan of Development.....	3
1.1.1 Preliminary Plan of Development.....	4
1.1.2 Draft Plan of Development.....	4
1.1.3 Final Plan of Development.....	5
2 Applicant’s Objectives	5
3 Northern Corridor Project Development Process	6
3.1 Pre-NEPA Phase	6
3.2 NEPA Phase.....	7
3.2.1 Conceptual Design/Alternative Development and Screening.....	7
3.2.2 Environmental Impacts and Mitigation	8
3.3 Final Design Phase	8
3.3.1 Plan-in-Hand Design	10
3.3.2 Plans, Specifications, and Estimates.....	10
3.4 Construction Phase	11
4 Project Description.....	11
4.1 Right-of-Way.....	12
4.2 Roadway Design.....	13
4.2.1 Engineering Standards.....	13
4.2.2 Bridges and Other Structures.....	18
4.2.3 Other Features Associated with Project.....	18
4.2.4 Temporary Use Areas	18
4.2.5 Additional Components.....	19
4.3 Permitting Requirements and Pre-Construction Surveys.....	19
4.3.1 Permits and Approvals.....	19
4.3.2 Pre-Construction Surveys.....	22
4.4 Project Construction	22
4.4.1 Construction Phasing.....	22
4.4.2 Construction Plan and Program.....	23



4.4.3 Construction Access..... 25

4.4.4 Safety Requirements..... 25

4.4.5 Environmental Compliance Requirements..... 25

4.4.6 Industrial Wastes and Toxic Substances..... 26

4.5 Stabilization and Rehabilitation..... 26

5 Operation and Maintenance..... 26

5.1 Road Maintenance Schedule and Minimum Maintenance 26

5.2 Stormwater Management..... 26

5.3 Control, Warning, and Directional Traffic Signs..... 27

5.4 Special Needs or Seasonal Conditions..... 27

5.5 Safety..... 27

5.6 Inspection, Maintenance, and Work Schedules 27

6 Mitigation of Environmental Concerns..... 27

6.1 Design Features of the Project for Environmental Protection..... 28

6.2 Mitigation Measures..... 28

7 Definitions..... 52

8 References..... 54

LIST OF TABLES

Table 1. Administrative Jurisdictions Crossed by the Project

Table 2. Permits, Reviews, Clearances, and Approvals that may be Required for the Project

Table 3. Design Features of the Project for Environmental Protection

LIST OF FIGURES

Figure 1. Northern Corridor Proposed Alignment

Figure 2. Anticipated Milestones and Phases in the BLM ROW Application, NEPA, and Final Design Processes

Figure 3. Northern Corridor Typical Section

APPENDICES

Appendix A. Legal Description of Right-of-Way and List of Landowners *[placeholder]*

Appendix B. Northern Corridor Proposed Right-of-Way Maps *[to be updated as POD is revised]*



ACRONYMS AND ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
BLM	Bureau of Land Management
BMP	best management practice
BO	biological opinion
CFR	Code of Federal Regulations
DAQ	[Utah] Division of Air Quality
DEQ	[Utah] Department of Environmental Quality
DMPO	Dixie Metropolitan Planning Organization
DWQ	[Utah] Division of Water Quality
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FCR	field contact representatives
FEMA	Federal Emergency Management Agency
ft	foot/feet
HCP	Habitat Conservation Plan
HECP	hydraulic erosion control products
I-15	Interstate 15
lb	pound(s)
LOS	level of service
LWCF	Land and Water Conservation Fund
mph	mile(s) per hour
MUTCD	Manual on Uniform Traffic Control Devices
NCA	National Conservation Area
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association



NOI	Notice of Intent
OSHA	Occupational Safety and Health Administration
POD	Plan of Development
PS&E	Plans, Specifications, and Estimates
RECP	Rolled Erosion Control Products
RMP	Resource Management Plan
ROW	right-of-way
SFHA	Special Flood Hazard Area
SR	State Route
STIP	Statewide Transportation Improvement Program
SWPPP	Stormwater Pollution Prevention Plan
UAC	Utah Administrative Code
UCGP	Utah Construction General Permit
UDOT	Utah Department of Transportation
UDWR	Utah Division of Wildlife Resources
UPDES	Utah Pollutant Discharge Elimination System
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
UT	Utah
WCHCP	Washington County Habitat Conservation Plan
yd ²	square yard



1 Overview

The Utah Department of Transportation (UDOT, or Applicant) proposes to construct the Northern Corridor roadway between Red Hills Parkway and Green Spring Drive (the Project), in Washington County, Utah (Figure 1). The Project would connect to the Washington Parkway at Green Spring Drive. The Northern Corridor (UDOT project number S-R499(324)) and Washington Parkway (Green Spring Drive to I-15) (UDOT project number F-R499(326)) are separate projects in the Statewide Transportation Improvement Program (STIP) (UDOT 2018a). The Washington Parkway project, sponsored by Washington City, is not part of this right-of-way (ROW) application. This ROW application applies to the above-described Project, which crosses federal lands administered by the Bureau of Land Management (BLM). A short segment of the Project is within the Washington City boundary and may require specific design considerations that may vary from the design outside of Washington City.

The proposed Project would be approximately 4.5 miles in length, depending on the final route selected. A ROW Application was initially filed with the BLM on September 18, 2018, for Transportation and Utility Systems and Facilities on Federal Lands (Standard Form 299). A project description, in the form of a Plan of Development (POD), is required by the BLM to process the application for a ROW pursuant to the regulations for issuing a ROW under Title V of the Federal Land Policy and Management Act at 43 Code of Federal Regulations (CFR) 2800. This POD describes the proposed facilities associated with the Project, including the design criteria, facility location, construction activities, project phasing, access, and other features. As described in this document, the POD will continue to be refined during the BLM's National Environmental Policy Act (NEPA) process as additional information becomes available regarding the Project. The Final POD would need to be approved by the BLM, and compliance with the POD would become a binding condition of a BLM ROW grant.

As described in this POD, the Project would be constructed in phases to address future travel demand and financial constraints. At full build-out, the roadway would be an approximately 4.5-mile-long, four-lane divided highway with two 12-foot-wide travel lanes in each direction. Other features would include a median, drainage swales, bicycle and pedestrian trails, and associated signage. The full roadway build-out may not be completed until 2050 or later, as determined by the Applicant.

The Project would require an intersection for connection to Red Hills Parkway as well as a new intersection at Cottonwood Spring Road (also known as Old Dump Road or Turkey Farm Road).

The Project is in the Dixie Metropolitan Planning Organization's (DMPO's) planning area, which covers the urbanized area of Washington County. The Project would cross lands managed by the BLM, Utah School and Institutional Trust Lands Administration, Washington County, the State of Utah, as well as private lands in Washington County, Utah. The BLM lands that would be crossed by the roadway are part of the Red Cliffs National Conservation Area. Appendix A provides the legal descriptions of those BLM lands that would be crossed by the Project. Appendix B contains maps of the proposed ROW.



Northern Corridor - Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

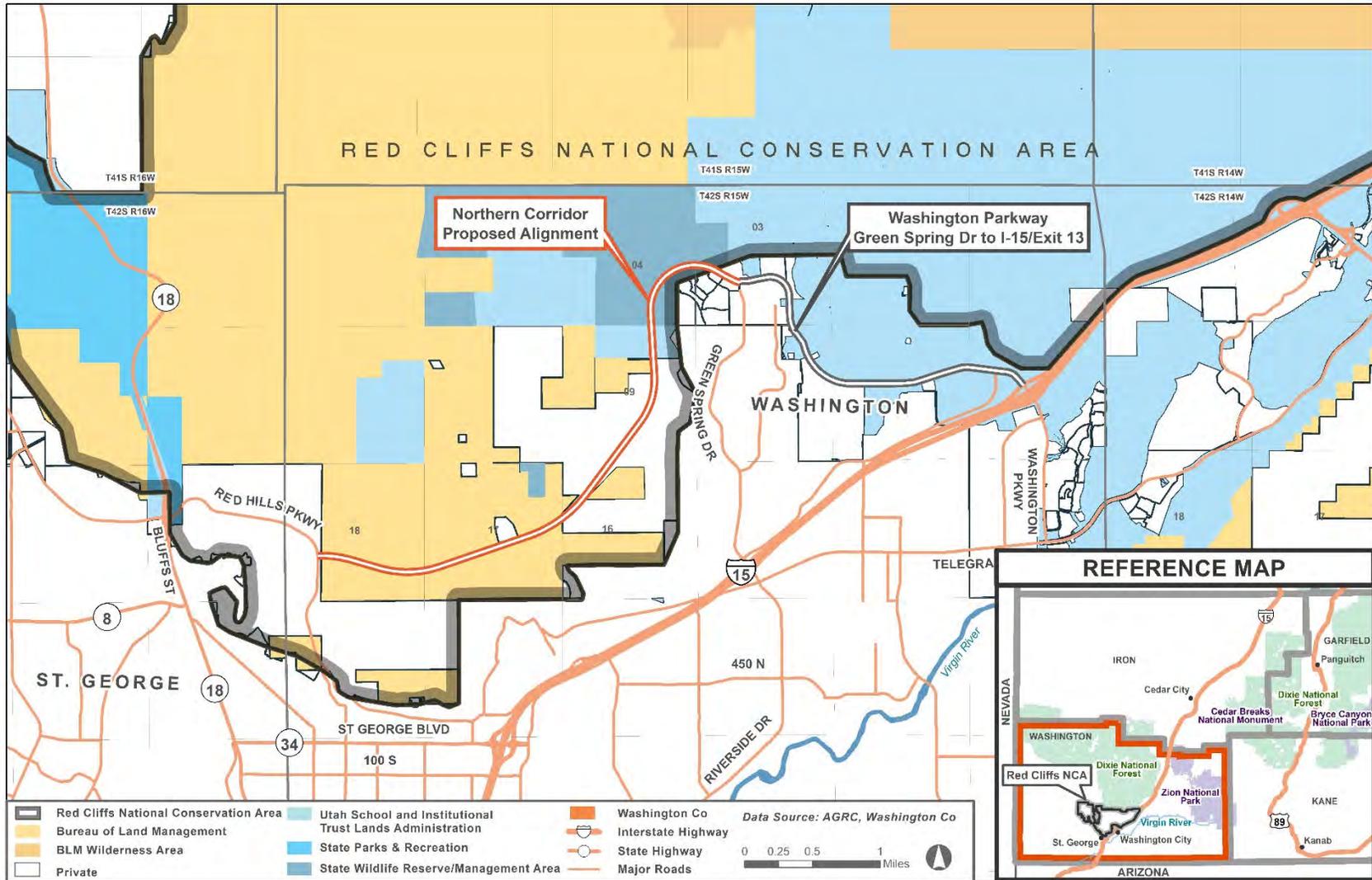


Figure 1. Northern Corridor Proposed Alignment



1.1 Process for Developing the Plan of Development

This POD uses bracketed text to identify placeholders for information that will be developed and included in future versions of the POD during the project development process, as described in this section.

[This description of the phased approach to developing the POD will be eliminated from the POD when the POD is being finalized to support final design and construction.]

The project development process and the POD development process are discussed under four broad phases throughout this POD: Pre-NEPA, NEPA, Final Design, and Construction. Interactions between BLM's ROW application and review process, the development of the POD, the NEPA process, and the Applicant's project development process are described in the context of these phases and what information would be available at various stages of each process.

Project development phases:

- **Pre-NEPA Phase:** Corresponds with all activities that occur before the initiation of public scoping for the NEPA document.
- **NEPA Phase:** Corresponds with all activities that occur between the initiation of public scoping for the NEPA document and the signing of a decision document by the appropriate agencies.
- **Final Design Phase:** Corresponds with completion of final design activities for the roadway alternative selected during the BLM NEPA process and associated preparation for advertising the Project for construction.
- **Construction Phase:** Corresponds to all activities that occur after the Project has been advertised for construction.

The POD for the Northern Corridor will be developed in a phased manner to meet the BLM's information needs for the completion of the BLM NEPA analysis and decision document, the issuance of a ROW grant, and the issuance of a Notice to Proceed with construction. This phased development of the POD is anticipated to result in the submittal of three or more versions of the POD to BLM to support various components of the ROW application review and processing. The documents that will be submitted to BLM are referenced in this document as the Preliminary POD, the Draft POD, and the Final POD. While these terms are not defined in BLM's regulations at 43 CFR 2800, they are being used to define the levels of content expected at each phase of the POD development. Multiple agency reviews may be associated with each POD development phase, as information is developed and incorporated into the document. Figure 2 depicts the various milestones in the development of the POD, the project development process, and BLM's ROW processing and associated NEPA process and how they are anticipated to align with the Pre-NEPA, NEPA, Final Design, and Construction phases of the Project.

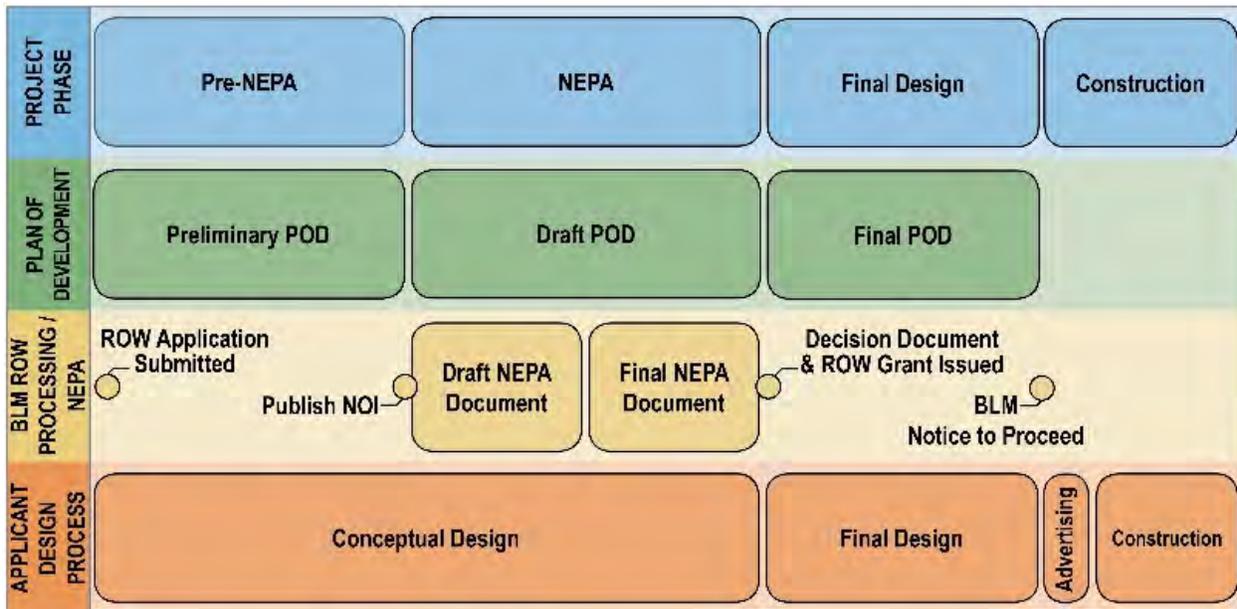


Figure 2. Anticipated Milestones and Phases in the BLM ROW Application, NEPA, and Design Processes

1.1.1 Preliminary Plan of Development

The Preliminary POD was developed to support the initial ROW application with the information available at that time and industry-standard design requirements and construction standards. The Preliminary POD also outlined the expected process and timeline for incorporating additional information into future versions of the POD. The Preliminary POD was developed from the following sources:

- **Development Standards for Washington Parkway from Red Hills Parkway to I-15 Exit 13 (UDOT 2018b)** were developed by UDOT to generally describe the size, type, and configuration of the road facility and to establish standards to which the Project would be designed and constructed in future stages.
- **Previous Work Completed by Washington County and UDOT to Evaluate the Northern Corridor:** Washington County, the City of St. George, the DMPO, and UDOT have engaged in various studies during the development of the Project. These studies include but are not limited to the 2012 *Washington Parkway Cost/Benefit Study* and the *Washington Parkway Study: Integration of East-West Transportation Needs with Conservation Objectives for Desert Tortoise in Washington County, Utah*.

1.1.2 Draft Plan of Development

This Draft POD was further developed by incorporating additional information about the Project developed during the NEPA phase of the Project (described in Section 3). The Draft POD was submitted to the BLM with the intent of providing the level of information required by the BLM



to complete the NEPA process. The information contained in the Draft POD informed the BLM's analysis in the NEPA document.

As described in Section 3, a conceptual design process was completed for each alternative analyzed in detail during the NEPA process to support the evaluation of areas that would be impacted and described the corresponding potential environmental effects. The Draft POD addresses the preferred alternative. All design and engineering activities completed during the Final Design phase of the Project after the NEPA decision is formalized would be required to be consistent with the engineering information contained in the Draft POD.

Additional information incorporated into the Draft POD includes:

- The Applicant's objectives for the Project.
- Additional information about the proposed roadway design criteria including geometry, ROW needs, and lands that may be affected by construction, operation, and maintenance of the Project.
- Additional information regarding design features and mitigation measures that would be implemented to reduce the potential environmental effects of the Project.
- Additional details regarding information included in the Preliminary POD.
- Conceptual design/geometry for the preferred alternative.

1.1.3 Final Plan of Development

The Final POD would be developed in collaboration with the BLM prior to the initiation of Construction. The Final POD would need to be approved by the BLM before the BLM issues a Notice to Proceed with construction. Compliance with the Final POD would be a binding condition of a BLM ROW grant, if a ROW is issued.

Information to be developed and included in the Final POD includes:

- Additional details regarding information included in the Draft POD.
- Design features and mitigation measures that would be identified in applicable agency decision documents that would be implemented to reduce the potential environmental effects of the Project. Design features and mitigation measures would be informed by surveys completed to support the NEPA analysis and compliance with other environmental laws and regulations.
- Design/geometry for the selected alternative.
- Final determination of ROW needs and disturbance areas, including maps of all proposed facilities, site-specific construction actions, temporary work areas, and any other facility required for the Project.

2 Applicant's Objectives

UDOT submitted a ROW application for construction, operation, and maintenance of a new highway with the objective of reducing congestion, increasing capacity, and improving east-west



mobility on arterial and interstate roadways between State Route 18 (SR 18) and Interstate 15 (I-15) at milepost 13. This objective is driven by the current and forecasted population growth within the county, which will continue to increase demand on the transportation network. Currently, the existing transportation network between SR 18 and I-15 is not adequate to meet future (2050) travel demand in the northeastern and northwestern areas of St. George based on traffic projections from the DMPO's regional travel demand model (DMPO 2019).

3 Northern Corridor Project Development Process

3.1 Pre-NEPA Phase

During the Pre-NEPA phase, conceptual design tasks were initiated and carried forward to progress the BLM ROW application/POD process, while relevant environmental resource data was compiled to prepare for the NEPA phase. The Pre-NEPA phase included the following elements:

1. Applicant/BLM Coordination
2. POD Development (Preliminary POD and Draft POD)
3. Preliminary Applicant and BLM Purpose and Need Development
4. Environmental Resource Identification
5. Conceptual Design/Roadway Alternative Development
6. Initial (Pre-NEPA) Scoping
7. Agency/Stakeholder Coordination

During the Pre-NEPA phase, the Applicant coordinated regularly with the BLM. This coordination occurred through regular meetings with the project team and agency representatives and monthly meetings between BLM and the project team. Additional meetings specific to the review and development of the POD, development of roadway alternatives, and ongoing coordination and additional topic-specific meetings were scheduled as needed.

The Applicant's objectives and supporting documentation was developed with input from the BLM and other agencies. The Applicant's objectives considered and incorporated traffic counts and projections for existing and future conditions to determine needed capacity improvements.

The ongoing task of identifying environmental resources that may be affected by the Project spanned the Pre-NEPA and NEPA phases. The Pre-NEPA phase included data gathering, surveys and fieldwork, and documentation for resources including biological, cultural, visual, and recreation resources to prepare for impact analysis in the NEPA phase. Coordination with the BLM during this task identified existing environmental resource data and sources and confirmed additional data needs to support the NEPA process and survey/documentation methods.

The conceptual design and roadway alternatives development process occurred hand in hand and extended into the NEPA phase. The roadway conceptual design completed in the Pre-NEPA phase was based on future traffic projections, regional transportation planning by the DMPO, stakeholder input, and highway design best practices as defined by the American Association of State Highway



and Transportation Officials' (AASHTO's) *A Policy on Geometric Design of Highways and Streets* (AASHTO Green Book).

Project-specific roadway design standards that describe the size, type, and configuration of the road facility were developed in draft form to establish standards to which a roadway project would be designed and constructed. Project-specific roadway design elements accounted for design standards from the AASHTO "A Policy on Geometric Design of Highways and Streets," commonly referred to as the AASHTO Green Book, and the Utah Manual on Uniform Traffic Control Devices (MUTCD) that include but are not limited to Average Daily Traffic, design vehicle, design speed, geometric controls, number of lanes, lane widths, and shoulder widths. These project-specific roadway design standards for the Northern Corridor were reviewed with the BLM prior to developing roadway alternatives in the Pre-NEPA process.

Throughout the Pre-NEPA phase, conceptual design was advanced as needed based on the project-specific roadway design standards. Conceptual design components addressed in the Pre-NEPA phase included: preliminary horizontal/vertical alignment, potential active transportation features (trail, bike paths, etc.), estimated ROW required to accommodate features, access management needs (e.g., pullouts, etc.), and maintenance and aesthetic requirements.

Conceptual design during the Pre-NEPA phase was an iterative process involving both the Applicant and the BLM. Those project details, including design features (environmental commitments), are described further in Sections 4 through 6 of this POD.

3.2 NEPA Phase

The NEPA process followed standard BLM environmental processes and requirements as described in the BLM NEPA Handbook (BLM 2008).

The conceptual design, alternative development, and environmental resource data compiled during the Pre-NEPA phase carried into the NEPA phase. The NEPA process included scoping; finalization of the BLM's purpose and need statement; identification of environmental resources; alternative development and screening; environmental impact assessment and development of appropriate mitigation; and public outreach and involvement, including a public meeting on the draft NEPA document and ongoing agency and stakeholder coordination.

Section 3.2.1 describes how the project design was developed during the NEPA process, and Section 3.2.2 describes how mitigation actions were developed to reduce the impacts on affected environmental resources through the NEPA process.

3.2.1 Conceptual Design/Alternative Development and Screening

Design was completed to an appropriate level to screen and analyze alternatives based on their ability to meet the purpose and need, engineering or physical constraints, and based upon their environmental impacts.



Concurrent with the NEPA document preparation, the design progressed to a level with enough confidence to identify a project footprint and complete the NEPA process. During conceptual design, the roadway was modeled using horizontal and vertical alignments for the roadway, ultimately leading to estimation of cut/fill limits and an approximate footprint of the roadway.

After the project moves into Final Design, the conceptual design will be confirmed and further refined. Items determined in the conceptual design include:

- Structure types
- Roadway design refinements
- Capacity analysis
- Drainage design refinements
- Structure hydraulics
- Aesthetics and landscape concepts
- Potential utility impacts

3.2.2 Environmental Impacts and Mitigation

Environmental commitments and mitigation were developed to address specific environmental impacts identified during the NEPA process and were discussed and reviewed with the BLM. Specific environmental commitments and mitigation were documented in the Final Environmental Impact Statement (EIS) and Draft POD and will be carried forward into the Final Design phase.

Specific environmental impacts and corresponding mitigation commitments identified during the NEPA phase are documented in the Draft POD and will be further refined and applied during final design and completion of the Final POD.

3.3 Final Design Phase

Activities in the Final Design phase would occur after completion of the NEPA process and signing of a decision document. All design completed during the Final Design phase would be required to conform with the decisions made during the NEPA process and all other relevant environmental regulatory processes and supported by the decision document and BLM ROW grant. The Final Design phase would respect all environmental commitments for avoidance and protection of sensitive areas and resources. All deliverables completed during the Final Design phase would be provided to BLM for review and comment. It is anticipated that BLM would not issue a Notice to Proceed for construction activities until BLM is satisfied that all design represented in the Final POD is consistent with the decision document.

Final design will follow a design progression process in stages with milestone submittals at the conclusion of each stage, allowing review to verify design progression and that design criteria and environmental commitments are being met. Typical stages of final design are listed and described below:

1. Plan-in-hand



2. Plans, Specifications, and Estimates
3. Construction Advertising

Final design typically indicates that design is being completed with the intent to advertise for construction rather than to advance concepts, evaluate alternatives, or determine impacts. The conceptual design and environmental commitments identified in the Pre-NEPA and NEPA phases will be carried forward as the starting point for the Final Design phase. The NEPA phase of the project will bring the project design to a roughly 30% design level. The Final Design will likely begin with a review of the 30% Design, additional environmental due diligence as applicable, and then progress from that point, with Plan-in-hand as the first design milestone submittal.

At the conclusion of each stage of Final Design, there will be a review meeting. Prior to the review meeting, the submittal for each stage is distributed to the project review team for solicitation of comments on the design and deliverable. The review team typically consists of the design team and discipline reviewers from the Applicant as well as relevant third parties to the project who have an interest in Final Design such as utility owners and local government representatives. Any comments on the submittal are compiled in a matrix and discussed at the review meeting or independently between reviewers and designers. Comments are resolved prior to the subsequent stage in order to move forward with design. Comments in the Final Design stage will focus on implementation and development of plans and specifications and implementation of commitments made in the previous phases of the project.

Factors such as availability of funding or traffic demand may lead to a phased approach to construction for the project. A phased approach to the Northern Corridor would likely be implemented by building a partial roadway section, including at least one lane in each direction, that would connect the proposed termini of the project. Future phases could then widen this roadway to add additional lanes as needed based on travel demand or available funding. Additional features such as trails and cross-street connections may be implemented in phases as well.

If a phased approach is used on the project, additional design processes will be implemented to ensure that the project is built for functionality in the current and future phases. The term “forward compatibility” describes a design approach that considers future phases and full project implementation throughout intermediate phases of a project in order to verify that future phases can be easily implemented and to minimize total project costs and tear-out of existing construction during future phases.

The forward-compatibility approach to design starts by creating a final full-design for the project. The current phase is then evaluated to see how it fits into the Final Design. As an example, drainage pipes may carry additional flow in future phases and will be constructed under pavement in the current phase. In this scenario, the pipes may be designed and sized for future phases even though flows will be lower in the current phase. This approach will prevent removal of pavement and additional pipe material in the future, even though larger pipes may



not be warranted in the current phase. A forward-compatible approach will also evaluate all roadway and structure geometry to verify that any pavement or structures can be easily widened in the future and still meet design standards.

3.3.1 Plan-in-Hand Design

The Plan-in-hand Design stage focuses on design progression and development of the initial set of project plans. The roadway model will be finalized, and plan sheets generated for each discipline. Generally, a preliminary plan sheet set is included for roadway, drainage, utilities, grading, maintenance of traffic, signals/lighting, and structures.

This stage also generally coincides with final identification of needs for ROW acquisition from private and state entities and the acquisition of these parcels. It is anticipated that ROW needs would be identified earlier during the conceptual design in the NEPA process, but final acquisition can occur later with more detail and certainty. All ROW acquisition must be complete in order to advertise the project for construction without limitations on the contractor.

Items typically determined at the Plan-in-hand Design stage include:

- ROW acquisition from state and private entities is complete or underway.
- Discipline designs are completed.
- Individual discipline plan sets are created (roadway, drainage, utilities, etc.).
- Utility relocation design is complete.
- Project is reviewed for constructability.

At completion of Plan-in-hand Design stage, a consultant may be hired for construction engineering management. The construction engineer begins attending review meetings for the project to provide input on constructability and potential contract issues during construction.

3.3.2 Plans, Specifications, and Estimates

The Plans, Specifications, and Estimates (PS&E) Design stage finalizes all designs based on comments received at the Plan-in-hand Design stage, and advances plan set development to include additional sheets and details as necessary to fully construct the project. Additional project documents including reports, special provisions, cost estimates, and summary sheets are created. This submittal should reflect a complete biddable package for construction advertisement; it is considered complete pending final comment resolution.

The design team reviews all commitments made during the NEPA process to ensure they are covered in specification language to meet all commitments made. Any additional specifications that are necessary on the project are created as project-specific specifications. These are unique specifications generated for the project to dictate special requirements or commitments made in the NEPA document. Any special commitments made during the NEPA process are drafted into project-specific specifications to ensure that construction matches the commitments made.



Standard drawings are plans used for construction of common design elements. These drawings are split into discipline-specific categories such as roadway work, drainage, striping, environmental controls, etc.

Items typically determined in the PS&E Design stage include:

- Plan-in-hand Design stage comments are resolved.
- ROW acquisition from private and state entities is complete.
- Structural design details are complete.
- Discipline designs are complete, and all necessary details are generated.
- Erosion and sediment control plan is generated.
- Quantities are generated.
- Utility design is finalized, and agreements are completed.
- Project specification book is compiled, and all necessary project-specific specifications are created.
- Engineer's Estimate is created.

Following the PS&E Design stage review, the final date for project construction advertisement is set. Any comments from the PS&E Design review are addressed and a final, 100% complete design package is prepared for project advertisement.

3.4 Construction Phase

During the Construction phase, UDOT selects a construction contractor, and the project is constructed with UDOT oversight as defined in the UDOT Project Manager Guide (UDOT 2013 [or most current edition]). The specific limitations on project construction methods or activities spelled out in the project specifications and project-specific specifications during the Final Design phase of the project become contractually binding requirements for the contractor to follow. To promote competitive construction bidding, construction means and methods, estimated types and number of equipment, material sources, and staging areas are typically left to the discretion of the selected contractor within the bounds of the project specifications developed during the NEPA and Final Design phases of the project.

A design consultant is often retained for design support during construction to resolve any design issues that arise during construction activities. A public involvement specialist is also assigned to the project to communicate with third parties and the public regarding construction activities, phasing, and any issues that may arise. They are also available to respond to questions from the public and coordinate between the contractor, the BLM, and the public on any issues.

4 Project Description

The Project design criteria are based upon a design speed of 55 miles per hour (mph; posted speed limit 50 mph); and roadside drainage would be accommodated through a combination of drainage swales and curb and gutter. The currently proposed typical section is shown in Figure 3 and discussed in more detail in Section 4.2.

4.1 Right-of-Way

The total width of the ROW would vary between 300 and 500 feet because of variations in the cut and fill slopes and construction requirements along the length of the proposed highway. These variations would be based on geotechnical analysis, terrain type (for example, rock or dirt), and further design to minimize impacts. Based on the conceptual engineering design using readily available topographical and design-related information completed to date, some areas requiring cut and fill slopes would extend beyond the standard 300-foot typical section, requiring a ROW up to 500 feet wide.

The approximate amount of ROW and length of various administrative jurisdictions crossed by the Project are shown in Table 1.

Table 1. Administrative Jurisdictions Crossed by the Project

Jurisdiction	Road Length (miles)	Temporary ROW (acres)	Permanent ROW (acres)	Total ROW (acres)
BLM	[to be determined]	[to be determined]	[to be determined]	[to be determined]
Utah School and Institutional Trust Lands Administration	[to be determined]	[to be determined]	[to be determined]	[to be determined]
Utah Division of Wildlife Resources State Wildlife Reserve/Management Area	[to be determined]	[to be determined]	[to be determined]	[to be determined]
Private	[to be determined]	[to be determined]	[to be determined]	[to be determined]
Total	[to be determined]	[to be determined]	[to be determined]	[to be determined]

Figure 1 shows the location of the proposed Northern Corridor ROW. The ROW requested from BLM is in the following sections:

- Salt Lake Meridian, Utah
- T. 42 S., R. 15 W.
- sec. 17, NE1/4, SE1/4, and SW1/4
- sec. 18, SE1/4, and SW1/4

UDOT has applied for a ROW grant from the BLM for the construction of the portions of the Project that cross BLM-administered lands. The requested permanent ROW across BLM-administered lands would be up to 500 feet wide and approximately 1.75 miles long. The Project's western terminus is roughly 1.3 miles east of the Bluff Street-Red Hills Parkway intersection in St. George, Utah; the eastern terminus is at Green Spring Drive in Washington City, Utah.



In certain areas, additional permanent ROW width may be required for access, structures, or other features. ROW needs would be confirmed through the conceptual design process and included in the Final POD. In addition to the permanent ROW, temporary ROWs may be necessary during construction for construction equipment staging, contractor access, or other needs. Temporary ROW needs would also be confirmed through the conceptual design process and included in the Final POD.

The Project will require acquisition of necessary lands (i.e., ROW) and construction easements from private landowners, Utah School and Institutional Trust Lands Administration, and the Utah Division of Wildlife Resources using a standard ROW acquisition process after a decision is issued on the NEPA document. Should BLM acquire certain non-federal lands crossed by the Northern Corridor prior to the completion of a decision document for the NEPA process, those lands would be included as part of an amended ROW application.

[The ROW description will be refined in the Final POD as more information becomes available from the conceptual design process. A full legal description as well as updated ROW physical requirements (widths, staging areas, structures, etc.) and temporary use areas, if necessary, will be included in the Final POD. If necessary, based on the information developed during the conceptual design process, the ROW application submitted to BLM may be amended to update the specific ROW needs of the Project. Maps of the proposed ROW and associated Project features would be included in the Final POD.]

4.2 Roadway Design

At full build-out, the roadway would be an approximately 4.5-mile-long, four-lane divided highway with two 12-foot-wide travel lanes in each direction. Other features associated with the roadway would include a raised island median, bicycle and pedestrian trail, signals, lighting, and associated signage. Drainage design would include a combination of swales and curb and gutter to capture drainage from the roadway. See Figure 3 for a typical section of the Project.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

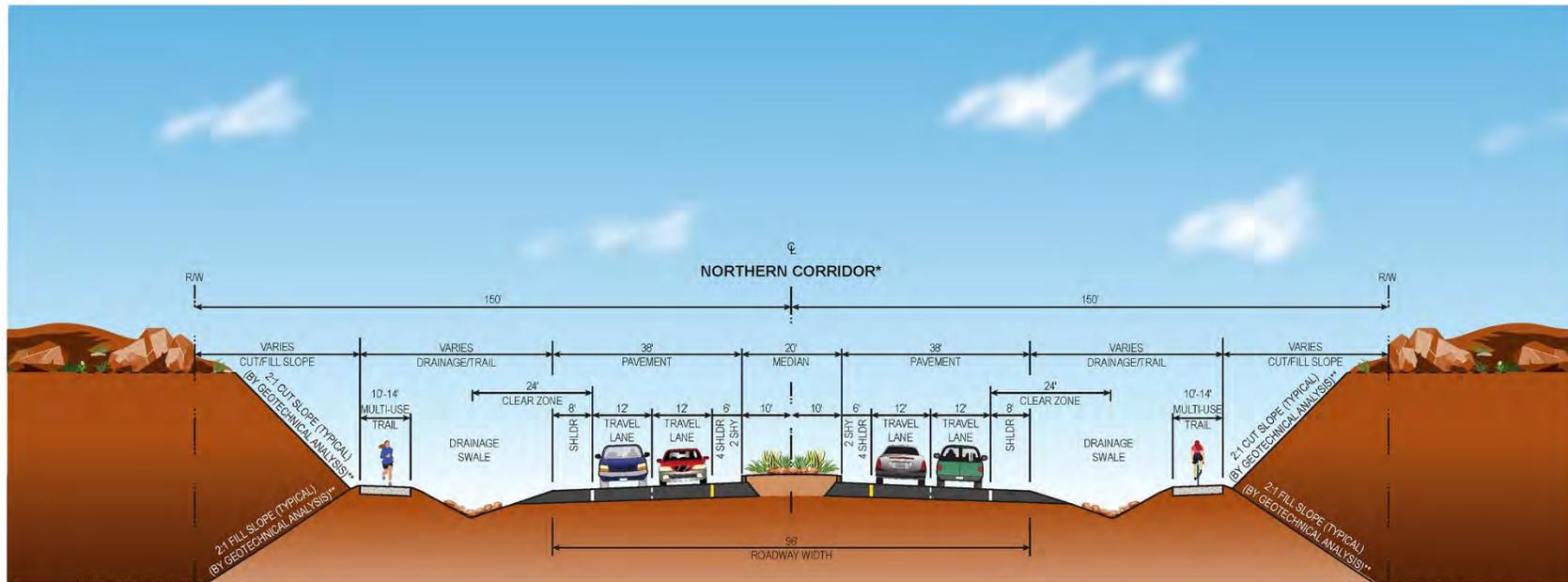
4.2.1 Engineering Standards

Local and/or UDOT standards, publications, and policies will be applicable to the Project as the roadway design process moves forward. These standards address design aspects such as roadway drainage, road and bridge design, geotechnical, utility coordination, geometric design, ROW operations, and advanced traffic management system design.



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development



NOTES:

*TOTAL ROW 300' – 500' DEPENDING ON SLOPE AND CONSTRUCTION REQUIREMENTS.

**THE FINAL SLOPE WILL BE BASED ON GEOTECHNICAL ANALYSIS, TERRAIN TYPE (E.G., ROCK OR DIRT), AND FURTHER DESIGN TO ACHIEVE A "BEST FIT" DESIGN THAT MINIMIZES IMPACTS AND BLENDS IN WITH THE NATURAL ENVIRONMENT.

Figure 3. Northern Corridor Typical Section



4.2.1.1 Design Speed

The Project would be designed for a 55-mph speed and posted with a 50-mph speed limit.

4.2.1.2 Horizontal Alignment

AASHTO criteria would govern the design of all horizontal elements based on the design speed. All horizontal curves will include adequate superelevation (i.e., cross slope) transition lengths. A maximum superelevation rate of 6.0 percent will be utilized for the roadway based on the 55-mph design speed. Superelevation design will be in accordance with AASHTO criteria (i.e., Method 5 for high-speed roadways). Adequate tangent between all reverse curves will be included.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.2.1.3 Vertical Alignment

AASHTO criteria will govern the design of all vertical elements based on the design speed. The minimum longitudinal grade is 0.5 percent and the maximum longitudinal grade is 6.0 percent.

[Additional information developed during preliminary engineering design would be included in Final POD.]

4.2.1.4 Road Surfacing Material

Pavement design will be based on 2050 traffic volumes and an AASHTO WB-67 vehicle design. The full pavement design will be provided for all construction elements at the time of construction. Pavement design will be approved by the UDOT. It is expected that the final surface course would be asphalt and not concrete.

[Additional information developed during preliminary engineering design would be included in Final POD.]

4.2.1.5 Cut and Fill

Excavation and placement of fill will be necessary within the ROW to construct the roadway base consistent with engineering standards and design criteria. Where fill is necessary, graded roadway fill slopes will have a maximum slope of 2:1 and a preferred slope of 3:1 or flatter. Final cut and fill slopes will be based on existing topography and geotechnical analysis. Retaining walls or other structures may be used if necessary to satisfy commitments made during the NEPA process.

[Additional information developed during preliminary engineering design would be included in the Final POD. Preliminary requirements for structures (preliminary locations and potential structures) such as retaining walls will also be determined for the Final POD. All anticipated cut and fill areas would be identified on the ROW maps included in Appendix B.]



4.2.1.6 Intersection Locations and Design

As described in Section 4.4.1, construction of the Project would be phased, with initial construction likely to address a two-lane facility (one lane in each direction).

All intersections on the Project would be at-grade, with the exception of the intersection with Red Hills Parkway, which may ultimately be grade-separated. The Red Hills Parkway intersection would initially be designed as an at-grade intersection with traffic signals and lighting. The intersection would later be converted to a grade-separated interchange with bridges, ramps, and lighting similar to a freeway interchange. The conversion to the interchange would occur by 2050, based on traffic levels and available funding. Because anticipated traffic volumes will be higher in future years in the east/west direction by a magnitude of 3 to 1, UDOT's design priority should be given to the Northern Corridor in the east/west direction to prepare for the ultimate grade-separated interchange configuration.

The only full access intersection between Red Hills Parkway and Green Spring Drive would be located at Cottonwood Spring Road (also known as Old Dump Road or Turkey Farm Road), which would be constructed as an at-grade intersection.

If proposed at a future date, additional intersections connecting to the roadway in the future would be considered based on the criteria described in Section 4.2.1.6.1 (Access Management).

For all intersections or approved access areas, acceleration and/or deceleration lanes would be required. Auxiliary or turn lanes at intersections and access points would be determined by a detailed traffic analysis. At a minimum, signalized intersections would be constructed with dedicated left and right turn lanes.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

Roadway Access Management

Access is defined by UDOT as “any driveway or other point of entry or exit such as a street, road, or highway that connects to the general street system” (UDOT 2013). The State of Utah rules for access management are found in the Utah Administrative Code (R930-6) and serve to provide for public safety and efficient highway operations. The Project will be designed as an urban arterial. These facilities move traffic across multiple communities or jurisdictions, typically connecting facilities of interstate or system importance and through urban areas that have significant potential for development or redevelopment.

“Full access” means that ingress and egress is provided at the point of access; it does not mean full movement (UDOT 2013). The full access location currently planned would be at Cottonwood Springs Road (also known as Old Dump Road and Turkey Farm Road). Other accesses may be permitted for recreational uses such as access to trailheads, if these facilities are proposed during the Project development or after it is constructed.



Management of public and pedestrian access to the ROW during construction is described in Table 3, under Safety, Fire Protection, and Emergency Preparedness. UDOT requires that a Traffic Control Plan be submitted by the contractor to provide for the safety of commuters, pedestrians, and construction personnel.

[Public and pedestrian access during operation of the roadway would be provided in a future version of the POD after being developed by UDOT and discussed with BLM.]

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.2.1.7 Traffic Signals

The appropriate type of access (unsignalized or signalized) on the Project will be determined by performing a traffic operations analysis at each location and conducting a traffic signal warrant analysis based on the expected opening day traffic volumes.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.2.1.8 Stormwater Drainage and Management

Drainage on a roadway project is broken into two categories: offsite flow and onsite flow. Offsite flow is flow from outside the project ROW that enters and/or crosses the ROW and is addressed in Section 4.2.2. Onsite flow is flow generated from paved surfaces or other areas inside the project ROW. Onsite flow is generally collected and conveyed within the ROW to limit increased runoff from paved surfaces and to provide water quality treatment before discharge back to natural water bodies.

The Project roadway drainage may be accommodated via an open system with roadside ditches/swales with water quality treatment methods that are approved by appropriate agencies. Within the Washington City limits, drainage will be a closed system with curb, gutter, catch basins, drop inlets, and underground piping. The design storm event will be as determined by the Applicant and the local agencies and adhere to applicable UDOT stormwater design standards.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.2.1.9 Communications and Power Supply

Communications infrastructure (e.g., roadway cameras and associated fiber) and power supply for roadway cameras, lighting, and traffic signals may be required within the ROW. The requirements for these appurtenances would be determined during roadway design. If required, power supply and fiber would be buried within the ROW.



[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.2.2 Bridges and Other Structures

Structures would be designed in accordance with applicable UDOT design standards. Bridges would match the full width of the approaching roadway.

Bridges and culverts would be designed such that offsite flow would be conveyed across the ROW to maintain flow patterns close to the existing conditions. Bridge and culvert designs would be developed based on a drainage analysis. The drainage analysis and bridge and culvert design would consider watershed characteristics, physical characteristics, hydrologic and meteorological data, existing and proposed land use in the project drainage area, permit requirements, floodplain limits, and environmental regulations. Bridge and/or culvert sizes may be expanded to serve multi-use purposes such as trail or wildlife crossings.

[Additional information developed during preliminary engineering design would be included in the Final POD. Preliminary requirements for structures (preliminary locations and potential structures) such as retaining walls will also be determined for Final POD. All anticipated bridges and structures would be identified on the ROW maps included in Appendix B.]

4.2.3 Other Features Associated with Project

A 10- to 14-foot-wide paved bike/pedestrian trail would be designed to the latest Americans with Disabilities Act, AASHTO, County, and local agency standards and constructed parallel to the Northern Corridor (see typical sections shown in Figures 3 and 4). The trail location may vary and may be on one or both sides of the roadway. Bicyclists will be able to travel along the corridor by using the trail system or sharing the roadway with vehicles in accordance with the law.

[Additional information regarding trails or other features associated with the Northern Corridor, if any, would be included in the Final POD.]

4.2.4 Temporary Use Areas

As described in Section 4.1, temporary ROWs on BLM-administered lands may be required to accommodate temporary construction activities, equipment storage or staging areas, and other activities (e.g., asphalt or concrete batch plant). The need for these temporary use areas would be identified during the conceptual design process and these areas would be included in the Final POD. Any temporary use areas not identified during the NEPA phase of the project and authorized in the decision document would require clearance and approval from the appropriate agencies. If any temporary use areas not authorized in the decision document are needed, the review and approval of these areas with the appropriate agencies would be obtained by the selected construction contractor.



[Temporary use areas, if necessary, will be included in the Final POD. If necessary, based on the information developed during the conceptual design process, UDOT may amend the ROW application submitted to BLM to update the specific ROW needs of the project. Maps of the proposed ROW and associated project features would be included in the Final POD.]

4.2.5 Additional Components

No additional components of the project are anticipated at this time. Additional components of the project that could be identified during the NEPA or conceptual design process could include material source areas, trailheads, parking areas, and information stations.

Any materials needed from outside the ROW to be used for road construction would be sourced per bid specifications by the selected contractor. No materials are anticipated to be sourced from BLM-administered lands. Excess materials sourced from the outside the ROW would not be left on BLM-administered lands without BLM approval.

[Additional components including trailheads, parking areas, and/or information stations, if any, would be identified in the Final POD.]

4.3 Permitting Requirements and Pre-Construction Surveys

4.3.1 Permits and Approvals

Non-federal land acquisitions would be required to complete the Northern Corridor. In addition to these non-federal ROW acquisitions, Table 2 lists permits, reviews, clearances, and approvals that may be required for the Northern Corridor.



Table 2. Permits, Reviews, Clearances, and Approvals that may be Required for the Project

Jurisdiction	Approvals	Granting Agency	Applicant	Application Timeline	Granting Timeline	Applicable Portion of Project
Federal Permits, Reviews and Approvals	Discharge permit under Section 404 of the Clean Water Act	U.S. Army Corps of Engineers	UDOT	After the final NEPA document	Prior to construction	Portions of roadway or structure in Waters of the U.S.
Federal Permits, Reviews and Approvals	Endangered Species Act compliance	U.S. Fish and Wildlife Service	BLM	Concurrent with the final NEPA document	Prior to construction	Desert tortoise habitat
Federal Permits, Reviews and Approvals	Compliance with Section 106 of the National Historic Preservation Act	Utah State Historic Preservation Office and Advisory Council on Historic Preservation	BLM	Concurrent with the NEPA document	Final NEPA document	Considerations of impact to historic properties; includes consultation between agencies and interested parties
State Permits, Reviews and Clearances	Water Quality certification under Section 401 of the Clean Water Act	Utah Division of Water Quality	UDOT	Concurrent with Section 404 permit	Concurrent with Section 404 permit	Required if the project could discharge fill into navigable waters and certification not included in Section 404 permit
State Permits, Reviews and Clearances	Utah Pollutant Discharge Elimination System Construction General Permit under Section 402 of the Clean Water Act	Utah Division of Water Quality	Contractor	Construction phase	Prior to construction	Stormwater quality during construction



Jurisdiction	Approvals	Granting Agency	Applicant	Application Timeline	Granting Timeline	Applicable Portion of Project
State Permits, Reviews and Clearances	Stream Alteration Permit	Utah Division of Water Rights	UDOT	After the final NEPA document	Prior to construction	Required if the project would alter the bed or banks of a natural stream
State Permits, Reviews and Clearances	Fugitive Dust Control Plan Permit	Utah Division of Air Quality	Contractor	Prior to construction	Construction phase	Required for all construction activities
Local Permits and Clearances	Floodplain development permit	Local jurisdictions	UDOT	Final design	Final design	Portions of roadway or structure in Federal Emergency Management Agency (FEMA) floodplain
Local Permits and Clearances	Construction-related permits and approvals such as archaeological clearance, fugitive dust control plan, and others that must be obtained by contractor	Various agencies	Contractor	Contractor	Before construction	Impacts associated with offsite activities such as construction staging areas, borrow areas, batch plant sites, etc.
Local Permits and Clearances	Noise permit	Washington County	UDOT	Construction phase	Construction phase	Night work in any areas
Local Permits and Clearances	Private lands acquisition	Private landowners	UDOT	Final design	Prior to construction	Private lands needed for ROW

[Table 2 would be refined throughout the development of the Final POD.]



4.3.2 Pre-Construction Surveys

4.3.2.1 Engineering Surveys

Once a preferred route is selected through the NEPA process, on-ground investigations would be completed to accurately locate the centerline of the ROW. The exact centerline would be determined to implement design criteria and satisfy the mitigation measures developed during the NEPA process. Before construction surveying begins, required permits to survey on public and state lands or right of entry for privately-owned land would be obtained. Construction survey work would consist of centerline location and ROW boundaries where necessary. Structure locations would be flagged and staked where needed.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.3.2.2 Environmental Surveys

Surveys for environmental resources would be completed during the Pre-NEPA and NEPA phases of the project to inform the development of the NEPA analysis and development of appropriate environmental design features and mitigation measures. Other pre-construction environmental surveys would be conducted as required based upon mitigation measures agreed to during the environmental process.

[Additional information developed during the Pre-NEPA and NEPA phases would be included in the Final POD.]

4.4 Project Construction

4.4.1 Construction Phasing

Factors such as availability of funding or traffic demand may lead to a phased approach to construction for the Project. A phased approach to the Northern Corridor may be implemented by building the roadway initially to provide one lane in each direction connecting the proposed termini of the project. Future phases could then widen this roadway to add the additional lanes based on travel demand and available funding. Features such as trails and cross-street connections may be implemented in phases as well. The phases would be constructed based upon the forward-compatible design as described in Section 4.2.

If a phased approach is used on the project, additional design processes will be implemented to ensure that the project is built for functionality in the current and future phases. The term “forward compatibility” is often used on phased projects to describe the design approach that considers future phases and full project implementation throughout intermediate phases of a project to verify that future phases can be easily implemented and to minimize total project costs and tear-out of existing construction during future phases. The forward-compatibility approach to design starts by creating a final full-design for the project. The current phase is then evaluated to see how it fits into the Final Design. As an example, drainage pipes may carry additional flow in future phases and will be constructed under pavement in the current phase. In



this scenario, the pipes may be designed and sized for future phases even though flows will be lower in the current phase. This approach will prevent removal of pavement and additional pipe material in the future, even though larger pipes may not be warranted in the current phase. A forward-compatible approach will also evaluate all roadway and structure geometry to verify that any pavement or structures can be easily widened in the future and still meet design standards.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.4.2 Construction Plan and Program

On all UDOT construction projects, site-specific construction methods are left to the discretion of the construction contractor selected by UDOT within the bounds of the project specifications developed during the NEPA and Final Design phases of the project. UDOT would be responsible for contractor oversight to ensure that all required construction practices, standards, and specifications are adhered to.

Construction would be completed using established highway construction practices, standards, and specifications. UDOT Standard Specifications for Road and Bridge Construction (UDOT 2020 or latest edition) (standard specifications) define required construction practices on all UDOT construction projects. The standard specifications are updated periodically via a review and approval process. Supplemental specifications may be used to add additional specifications specific to a location or issue of concern. Additionally, a 'special provision' may be used to revise a standard specification when required for a certain project.

[Specific road construction methods designed to avoid or mitigate potential project impacts, if necessary, would be identified in the Final POD.]

4.4.2.1 Flagging, Staking, and Fencing

The ROW would be marked by surveyors using stakes and lath. Identification of sensitive areas to be avoided would be done using pin flags, flagging ribbon, flexible fence, or temporary wire mesh fence. Where determined to be appropriate during the NEPA process, temporary fencing would be installed to discourage access by wildlife and the public.

All flagging, staking, and fencing would be completed in accordance with the specifications described in Section 6 of the POD and as shown on the maps accompanying the Final POD.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.4.2.2 Clearing and Grading

Surface preparations for roadway development would include surveying, clearing, grubbing, and grading. Clearing includes removal and disposal in an approved landfill or other approved location of trees, stumps, logs, limbs, sticks, vegetation, debris, and other materials from the



natural ground surface. Grubbing is the removal in the limits of clearing of roots, buried logs, debris, organic matter and other deleterious materials typically to a depth of 2 feet below natural ground surface. The contractor will be responsible for removal and disposal in an approved landfill or other approved location of cleared and grubbed material that cannot be reused on the project outside of BLM-administered land.

Only the minimum amount of vegetation and topsoil necessary would be removed for each phase of construction. For each phase of construction, topsoil would be removed and stored in dedicated locations within the ROW for reclamation of areas disturbed by construction. Topsoil would be stored and applied during the reclamation of construction disturbances in accordance with the restoration and rehabilitation specifications shown in Table 3. To preserve topsoil quality, topsoil would not be stored between phases of construction.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.4.2.3 Road Construction

All project construction would follow the most recently approved applicable construction standards until and unless a newer set is adopted prior to the design phase of the Project.

Construction of the Northern Corridor would include typical earthwork operations needed for ROW preparation, as well as roadway excavation, and placement and compaction of embankment and/or borrow. Pavement subgrade would consist of imported granular borrow and untreated base course and would also require compaction and water trucks.

Construction of pavement would involve equipment such as asphalt trucks, paving machines, and compactors.

If any underground drainage and utility conduits are identified during the design process (for future potential utility crossings), they would be trenched into existing ground or placed during earthwork operations. Bedding and backfill material would be used in pipe and utility conduit trench areas. Inlet and outlet areas of drainage crossings may require additional grading and riprap, and geotextile would be used as necessary to stabilize them.

The final construction site would be stabilized using erosion and sediment control measures such as silt fence, check dams, and inlet protection. Topsoil would be placed over fill material and seeding of an approved seed mixture would be used to establish vegetation.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.4.2.4 Construction Work Force

[The construction work force estimate will be provided in the Final POD.]



4.4.2.5 Construction Equipment

Earthwork activities would involve equipment such as scrapers, bulldozers, backhoes, water trucks, and compactors. Construction of pavement would involve asphalt trucks and compactors. Construction of drainage and utility conduits would require trenching equipment. Placement of prefabricated structures or construction of special structures such as bridges or box culverts, if included in design, may require cranes, drill rigs, and other specialized heavy machinery.

[Additional construction equipment may be identified during preliminary and final design and would be updated in the Final POD, as necessary.]

4.4.3 Construction Access

Access during construction is expected to be via local roads (e.g., Red Hills Parkway, Green Spring Drive, and Cottonwood Road) and along the ROW. During the initial construction along the ROW, temporary haul roads will be established to provide vehicular access to various work areas. These temporary haul roads would be located within the approved ROW.

[Additional information developed during preliminary engineering design would be included in the Final POD].

4.4.4 Safety Requirements

Road construction would comply with general Occupational Safety and Health Administration (OSHA) standards. This defines responsibility for health and safety personnel, instruction and training, accident reporting, and overall work practice control.

Work zone safety practices such as signage and pavement markings would adhere to the MUTCD.

[Additional information developed during preliminary engineering design would be included in the Final POD].

4.4.5 Environmental Compliance Requirements

The Applicant and its construction contractor would comply with all applicable federal and state environmental regulations during Project construction, including all design features, mitigation measures, or other environmental commitments made during the NEPA process. This includes submittals such as the Stormwater Pollution Prevention Plan (SWPPP) required under the Utah Pollutant Discharge Elimination System (UPDES) Construction General Permit and a Fugitive Dust Control Plan identified in Section 4.3.1 and documentation of environmental clearances for any areas not previously cleared in the approved NEPA decision document.

The selected construction contractor would be required to develop a SWPPP that is consistent with the UPDES Construction General Permit and any applicable stormwater management programs.



[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.4.6 Industrial Wastes and Toxic Substances

No specific industrial wastes or toxic substances are anticipated with project construction; however, if any are encountered, they would be reported and dealt with according to applicable construction standards. Any flammable or combustible materials storage areas would be identified and managed according to these standards.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

4.5 Stabilization and Rehabilitation

The final construction site would be stabilized using erosion and sediment control measures such as silt fence, check dams, and inlet protection. All disturbed areas would be stabilized and/or revegetated following construction as described in the Rehabilitation and Restoration specifications in Table 3. In areas that would be revegetated, once final grades are established, topsoil would be placed over fill material and seeding will be used to establish vegetation. A project-specific seed mixture and application methods would be developed in coordination with the BLM. Slopes would be roughened by walking track-mounted equipment up and down slopes. Erosion would be minimized during revegetation by applying mulch, erosion control blanket, flexible channel liner or other similar treatments. In some areas, other landscape treatments to protect exposed soils from erosion may be installed.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

5 Operation and Maintenance

Ongoing operation, maintenance, and traffic management of the roadway corridor will be managed by the Applicant's operations, maintenance, and traffic staff.

5.1 Road Maintenance Schedule and Minimum Maintenance

The minimum maintenance schedule and practices for the Northern Corridor would be determined based upon or current standards and practices at the time of implementation.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

5.2 Stormwater Management

The Utah Division of Water Quality issues UPDES permits to qualifying municipalities and UDOT that authorize the discharge of stormwater from Municipal Separate Storm Sewer Systems to Waters of the State, subject to meeting the terms and conditions of the permit including



implementation of a Stormwater Management Program. The goal is to reduce or eliminate the discharge of pollutants to Waters of the State to the maximum extent practicable through the programmatic implementation of control measures, best management practices (BMPs), monitoring, and adaptive management.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

5.3 Control, Warning, and Directional Traffic Signs

Roadway signage would be inspected and deficiencies would be repaired, or signs replaced as warranted.

5.4 Special Needs or Seasonal Conditions

Special roadway needs or seasonal conditions requiring maintenance could include planned trail foot race or bicycle race events that require traffic accommodation or seasonal storm events.

5.5 Safety

The roadway would be designed for safe use and operation. AASHTO and the MUTCD provide requirements for clear zones, lateral offsets, rumble strips, signing, striping, and other safety features which are included in the standard specifications. Once constructed, safety features would be inspected and maintained according to current standards and practices applicable at the time of implementation.

Data would be gathered on roadway performance, accidents, natural events, and other traffic parameters to track roadway safety.

5.6 Inspection, Maintenance, and Work Schedules

Once the Project is built, a survey would be completed to inspect all features on the Project. As-built drawings would be provided to by the contractor. Regular inspections would be conducted to ensure all equipment, structures, and BMPs are in good working order. Should deficiencies be detected during regular inspections, repairs would be made as required.

[Additional information developed during preliminary engineering design would be included in the Final POD.]

6 Mitigation of Environmental Concerns

Two types of measures to reduce potential environmental impacts were developed during the Pre-NEPA and NEPA process for the Project. These include: 1) design features of the Project for environmental protection, and 2) mitigation measures. See Table 3. The construction contractor would be required to comply with all design features of the Project for environmental protection and mitigation measures through the use of standard and special specifications in the construction documents.



6.1 Design Features of the Project for Environmental Protection

Design features of the Project for environmental protection are standard practices that are incorporated into the Project description. These design features for environmental protection typically address specific environmental policies and regulatory requirements and are applied Project-wide, wherever applicable. Project design features for environmental protection were developed following standard specifications for environmental compliance.

6.2 Mitigation Measures

Where warranted, based on the analysis in the NEPA document and on a case-by-case basis, mitigation beyond these design features for environmental protection were recommended to reduce potential impacts in specific locations. These types of mitigation are referred to as mitigation measures.

Mitigation measures were developed during the Pre-NEPA and NEPA phases of the project by the Applicant in collaboration with the BLM to achieve appropriate avoidance, minimization, and mitigation of environmental impacts identified through the NEPA process. If an action alternative is selected by the BLM, additional mitigation measures or other requirements may be identified by the BLM in a Record of Decision or ROW grant. The mitigation measures required by the BLM will be described in this section of the Final POD, along with a description of where and how the measures would be implemented. The locations where the measures would be implemented would be identified on the maps included in Appendix B. If needed, additional appendices to the POD would be developed to address the implementation of mitigation committed for specific resources or issues (e.g., Mojave Desert tortoise or detailed reclamation planning).

[Additional information developed during the Pre-NEPA and NEPA phases would be included in the Final POD.]



Table 3. Design Features of the Project for Environmental Protection

Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Air Quality and Climate Change/GHG	Do not conduct open burning within the site of work without approval from the Utah Division of Air Quality (DAQ).	01355 Environmental Compliance 1.10 Open Burning	Construction, Operations and Maintenance
Air Quality and Climate Change/GHG	<p>A. Submit a Fugitive Dust Control Plan to DAQ for construction activities as defined in Utah Administrative Code (UAC) R30, such as:</p> <ol style="list-style-type: none"> 1. Disturbing a ground surface greater than ¼ acre in size. 2. Demolition activities including razing homes, buildings, or other structures. 3. Material storage, hauling, or handling operations. <p>B. Minimize fugitive dust from construction activities using methods such as watering and chemical stabilization of potential fugitive dust sources or other methods approved by the DAQ.</p> <ol style="list-style-type: none"> 1. Do not exceed 10 percent opacity caused by fugitive dust at the project boundary and 20 percent within the project site. This requirement does not apply when wind speeds exceed 25 mph and the operator is taking appropriate actions to control fugitive dust. 2. Conduct opacity observations according to U.S. Environmental Protection Agency (EPA) Method 9 for stationary sources. Refer to http://www.udot.utah.gov/go/standardsreferences. 3. Use procedures similar to EPA Method 9 to conduct opacity observations for intermittent and mobile sources. <ol style="list-style-type: none"> a. The requirement for observations to be made at 15 second intervals over a six-minute period does not apply. <p>C. Minimize fugitive dust from material storage, handling, or hauling operations through the use of covers, stabilization, or other methods approved by the DAQ.</p>	01355 Environmental Compliance 1.11 Fugitive Dust	Construction
Air Quality and Climate Change/GHG	<p>Apply water for dust control in quantities and locations as directed by the Engineer and to maintain environmental compliance.</p> <ol style="list-style-type: none"> 1. Dust control may be required at any time. 2. Do not waste water. 	01572 Dust Control and Watering 3.1 Application	Construction
Air Quality and Climate Change/GHG	<p>A. Refer to Section 01355.</p> <p>B. Contact the Utah Division of Air Quality (DAQ) and obtain the appropriate Air Quality Permit for the project. Permit application forms can be obtained from DAQ's Web site. Refer to http://www.udot.utah.gov/go/standardsreferences.</p> <p style="margin-left: 40px;">Utah Division of Air Quality 195 North 1950 West PO Box 144820 Salt Lake City, UT 84116 Phone: (801) 536-4000 Fax: (801) 536-4099</p> <p>C. Do not proceed with work affecting air quality without an Air Quality Approval Order, Notice of Intent to Approve letter, or a Temporary Approval Order for the project, process, or equipment to be used.</p>	00820 Legal Relations and Responsibility to the Public 1.18 Air Quality Protection	Construction
Blasting	UDOT will draft and submit a Blasting Plan to the BLM and USFWS for review. All explosives will be securely stored and marked and will comply with OSHA standards. UDOT will notify the BLM and USFWS through email communication of any changes to the Blasting Plan that occur after blasting is in process.	Not applicable	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Blasting	A. Use explosives, delay fuses, and all blasting materials as recommended by the explosives firm. Refer to NFPA 495 – Explosive Materials Code.	02316 Roadway Excavation 2.3 Explosives	Construction
Blasting	A. Store all explosives securely in compliance with Laws and Regulations. Refer to Section 00820. Refer to NFPA 495: Explosive Materials Code. B. Mark all storage places clearly	02316 Roadway Excavation 3.2 Blasting Material Storage	Construction
Blasting	A. Comply with OSHA Constructions Standards 1926 Subpart U - Blasting and the Use of Explosives. B. Comply with NFPA 495 – Explosive Materials Code. C. Provide a qualified explosives expert to act as an advisor and consultant during drilling and blasting operations. D. Do not blast beyond designated areas.	02316 Roadway Excavation 3.7 Rock Removal – Explosive Method	Construction
Cultural Resources	A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Construction
Cultural Resources	A. Suspend work within the vicinity if historical, archaeological or paleontological objects, features, sites or human remains are discovered during construction: 1. Provide a 100-foot minimum buffer around the perimeter of the discovery. 2. Protect the discovery area. 3. Contact the Engineer and send notice of the nature and exact location of the discovery. 4. Provide written documentation to the Engineer within two calendar days of discovery. B. Do not recommence work within the area of discovery until the Engineer provides notice.	01355 Environmental Compliance 1.13 Discovery of Historical, Archaeological, or Paleontological Objects, Features, Sites, or Human Remains	Construction, Operations and Maintenance
Fish and Wildlife Resources	A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Construction
Fish and Wildlife Resources	A. Locate Wildlife Escape Ramps by type as shown. B. Clear and grade within the footprint of the Wildlife Escape Ramp to permit proper installation. C. Install Wildlife Escape Ramp according to FG Series Standard Drawings. D. Place embankment material for ramp as shown on the isometric view. Refer to FG Series Standard Drawings. E. Cover the Wildlife Escape Ramp with topsoil, broadcast seed, and Hydraulic Erosion Control Products (HECP) Type 1 mulch after placing embankment. Refer to Sections 02912, 02922, and 02911.	02827 Wildlife Escape Ramps 3.1 Installation	Design, Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Fish and Wildlife Resources	If project construction occurs during the maximum migratory bird nesting season (January 1 through August 31), a pre-construction survey by a qualified biologist (<less than 10 days prior to when work actually begins on the project site) is to be conducted for nesting birds. If an active nest is identified, a no-activity buffer (ranging from 100 feet to 1 mile, depending on species) is to be established around the nest site and remain in place until the young have fledged and/or the nest becomes non-active. If existing topography limits line of sight between an active nest and construction activities, spatial and seasonal buffers may be reduced. Spatial and seasonal buffers may also be adjusted based on existing activities or other site-specific factors. Upon completion of Migratory Bird surveys, a report detailing survey locations, survey methods, and results must be provided to the BLM St. George Field Office.	Not Applicable	Construction
Fish and Wildlife Resources	Activities will comply with Utah BLM BMPs for Raptors and Their Associated Habitats in Utah (BLM 2006). Project activities will not occur within recommended spatial and seasonal buffers for raptors unless otherwise approved by the BLM. If existing topography limits line of sight between an active nest and construction activities, spatial and seasonal buffers may be reduced. Spatial and seasonal buffers may also be adjusted based on existing activities or other site-specific factors.	Not Applicable	Construction
Fish and Wildlife Resources	Activities would comply with Utah BLM BMPs for Raptors and Their Associated Habitats in Utah (BLM 2006). Project activities would not occur within recommended spatial and seasonal buffers for raptors, unless otherwise approved by the BLM. If existing topography limits line-of-sight between an active nest and construction activities, spatial and seasonal buffers may be reduced.	Not Applicable	Construction
Hazardous Materials and Waste	Prepare Hazard Materials, Hazardous Waste, and Spill Prevention Plan.	Not Applicable	Construction
Hazardous Materials and Waste	Develop and implement a Litter Management Plan for the ROW.	Not Applicable	Construction
Hazardous Materials and Waste	<p>A. Suspend work immediately in an area if abnormal conditions are encountered or exposed during construction that indicates the presence of a hazardous waste.</p> <ol style="list-style-type: none"> 1. Notify the Engineer. <p>B. Do the following if a waste discovered or spilled on-site is suspected of being considered hazardous according to the reportable quantity limits identified in Title 40 CFR 302.4.</p> <ol style="list-style-type: none"> 1. Take appropriate actions to minimize the threat to human health and the environment. 2. Contact the Engineer immediately. 3. Follow appropriate testing measures to determine if waste is hazardous. 4. Do the following if waste is determined to be hazardous: <ol style="list-style-type: none"> a. Contact the Utah Department of Environmental Quality (DEQ), 24-hour Answering Service at (801) 536-4123, and the National Response Center at (800) 424-8802. 5. Follow requirements in UAC R315. <p>C. Coordinate with the Engineer to initiate development of a remediation plan according to DEQ and the EPA regulations and requirements.</p> <ol style="list-style-type: none"> 1. Pay for costs to address hazardous waste discovery or spill cleanup when caused by Contractor's activities. 2. Cost to test and remedy waste not caused by Contractor to be considered as contract change order by Engineer. <p>D. Complete the work required by the remediation plan before resuming operations in the affected area.</p>	01355 Environmental Compliance 1.7 Hazardous Waste	Construction, Operations and Maintenance



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Hazardous Materials and Waste	<p>Spill of Petroleum-Based Product and Used Oil</p> <p>A. Contact the Engineer if a spill occurs that exceeds 25 gallons, or that poses a potential threat to human health or the environment, such as discharging to groundwater, surface water, or a storm drain.</p> <ol style="list-style-type: none"> 1. Send notice following the discovery of the spill. 2. Notify DEQ, 24-hour Answering Service, at (801) 536-4123. 3. Coordinate with the Engineer to develop a remediation plan for spilled used oil or petroleum-based product according to UAC R315-15-8 and R315-15-9. <p>B. Cleanup petroleum-based or used oil product when caused by Contractor's activities.</p>	01355 Environmental Compliance 1.8 Spill of Petroleum-Based Product and Used Oil	Construction, Operations and Maintenance
Hazardous Materials and Waste	<p>C. Implement at least the following Pollution Prevention and Good Housekeeping Practices:</p> <ol style="list-style-type: none"> 1. Concrete Washout <ol style="list-style-type: none"> a. Provide a watertight container on-site before concrete placement activities begin and where concrete trucks, tools and equipment are to be washed. <ol style="list-style-type: none"> 1) Do not exceed 75 percent of total storage capacity 2) Do not place within 50 feet of storm drain inlets, open ditches or watercourses. b. Remove and properly dispose of concrete waste and washout water. 2. Street sweeping debris generated from construction track-out. <ol style="list-style-type: none"> a. Sweep debris back onto disturbed pervious project areas <ol style="list-style-type: none"> 1) Remove trash and litter b. Store debris collected by sweeping equipment on disturbed pervious project areas where it cannot enter into waterway or storm drain system. 3. Waste collected from cleaning pipes, inlets, culverts or ponds. <ol style="list-style-type: none"> a. Dispose of waste at a solid waste disposal facility currently regulated by the State of Utah, as follows: <ol style="list-style-type: none"> 1) Coordinate with facility in advance to determine disposal requirements 2) Comply with facility acceptance requirements. 3) Document waste collection and disposal using Department's waste disposal tracking form. Refer to http://www.udot.utah.gov/go/standardsreferences. b. Waste may be temporarily stored within a contained and impervious surface that prevents runoff to adjacent areas and seepage into the ground until disposal. c. Coordinate with Engineer for the disposal of waste that is not accepted at a solid waste disposal facility. 4. Prevent material from entering into stormwater conveyances, such as storm drain inlets and drainage pipes, ditches, natural waterways, and wetlands. 5. Maintain site of work in a clean condition through proper disposal and clean-up of sanitary waste, trash, spills, chemicals, and other waste materials. 6. Use drip pans and absorbent materials to mitigate discharges from leaking equipment until repairs can be made. Maintain a spill kit within the site of work. 	01355 Environmental Compliance 1.14 Stormwater Management Compliance	Design, Construction, Operations and Maintenance



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Land and Water Conservation Fund	Although Section 7 of the LWCF makes monies available for federal acquisition and land management activities, it does not assign management prescriptions or limitations to any federal lands in which LWCF funds are used for acquisition or management (54 U.S.C. 200306). In contrast, Section 6 of the LWCF generally requires that any property acquired or developed with funds under a state program cannot be converted to another use without approval from the National Park Service (54 U.S.C. § 200305(f)(3); see also 36 CFR § 59.3). In contrast to Alternative 5, the roadway design under Alternatives 2, 3, and 4 does not impact any parcels acquired through the state LWCF program, and accordingly would not require a Section 6(f) approval. In development of the roadway design included in the Final POD, UDOT will make reasonable efforts using construction techniques and technology or equipment available at the time of roadway construction and reasonable feasibility, including economic feasibility, to incorporate such technology into the project design as may be reasonably appropriate to comply with any specific requirements applicable to impacted LWCF parcels, such as avoiding any encumbrance that would be inconsistent with the purposes of the conservation easement acquired by BLM under UTU-79246.	Not Applicable	Design, Construction
Noise	<p>3. Minimize noise during Nighttime Construction Work.</p> <p>a. Comply with temporary noise permit conditions.</p> <ol style="list-style-type: none"> 1) Notify the Engineer and local government authority two weeks in advance of percussive noise activity. 2) Nonconformance with temporary noise permit conditions will result in disincentive according to Section 01355. <p>b. Department obtained Temporary Noise Permits are included in the contract.</p> <p>c. Obtain required temporary noise permits for:</p> <ol style="list-style-type: none"> 1) Nighttime construction work within the project construction limits when nighttime construction work is not required in the contract. 2) Activities outside of the project limits such as off-site batch plants and gravel pits. 	01355 Environmental Compliance 00555 Prosecution and Progress 1.9 Limitation of Operations	Design, Construction, Operations and Maintenance
Paleontological Resources	Prepare Paleontological Resources Protection Plan.	Not Applicable	Construction
Paleontological Resources	A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Construction
Paleontological Resources	<p>A. Suspend work within the vicinity if historical, archaeological or paleontological objects, features, sites or human remains are discovered during construction:</p> <ol style="list-style-type: none"> 1. Provide a 100-foot minimum buffer around the perimeter of the discovery. 2. Protect the discovery area. 3. Contact the Engineer and send notice of the nature and exact location of the discovery. 4. Provide written documentation to the Engineer within two calendar days of discovery. <p>B. Do not recommence work within the area of discovery until the Engineer provides notice.</p>	01355 Environmental Compliance 1.13 Discovery of Historical, Archaeological, or Paleontological Objects, Features, Sites, or Human Remains	Construction, Operations and Maintenance
Recreation	Recreational trails: UDOT would install under-road passages for each of the three existing recreational trails that cross the ROW. The T-Bone Trail passage may be incorporated into the passage that would be designed for Mojave desert tortoise. All under-road passages would provide sufficient clearance to allow for safe passage of users and UDOT and the BLM would collaboratively determine the final design to be included in the Final POD.	Not Applicable	Design, Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Recreation	Interpretive displays: UDOT would provide a minimum of eight waypoints along the new hike and bike path and install an interpretive display at each one. The content of the displays would be guided by the Red Cliffs NCA Interpretive Concept Plan and promote public education and understanding of the eight purposes for which the Red Cliffs NCA was designated. UDOT and the BLM would collaboratively determine the final location and design of the waypoints and interpretive displays through the Final POD.	Not Applicable	Design, Construction
Rehabilitation and Restoration	<ul style="list-style-type: none"> A. Preserve public and private property during the work. B. Secure legal right to access the property before any work is performed on public or private property. All damage as a result of trespass will be the financial responsibility of the Contractor including additional acquisition costs. C. Accept liability for any damage to public or private property resulting from defective work, materials, or non-execution of the contract until contract completion. D. Restore damaged property and items removed temporarily during construction to a condition similar or equal to that existing before the damage. E. Temporarily discontinue work if remains of prehistoric dwelling sites or artifacts of historical or archeological significance are encountered. Refer to Section 01355. 	00820 Legal Relations and Responsibility to the Public 1.12 Protecting and Restoring Property and Landscape	Construction, Operations and Maintenance
Rehabilitation and Restoration	<ul style="list-style-type: none"> A. Land monuments, property markers, or official datum points <ul style="list-style-type: none"> 1. Protect until their removal is approved. 2. Reference for re-establishment before removing. B. Protect trees from damage to roots and branches if they are designated to remain. C. Protect other vegetation and objects designated to remain. 	02231 Site Clearing and Grubbing 3.6 Protection	Design, Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Rehabilitation and Restoration	<p>C. Clean and finish areas within the clear zone as follows:</p> <ol style="list-style-type: none"> 1. Remove protrusions or depressions greater than 3 inches within the clear zone such as rocks, boulders, ridges, and stumps. 2. Remove trees and provide proper sight distance. 3. Determine clear zone according to AASHTO Roadside Design Guide when not shown. <p>D. Clean drainage facilities of debris and obstructions caused by construction.</p> <ol style="list-style-type: none"> 1. Dispose of material removed. <p>E. Remove or cover with fine material from roadway excavation or borrow, large rocks or boulders on fill slopes with the following exception:</p> <ol style="list-style-type: none"> 1. Large rocks and boulders protruding from the final graded surface six inches or less, on slopes steeper than 3:1 or beyond the clear zone. <p>F. Do not undercut the slope on cut slopes.</p> <ol style="list-style-type: none"> 1. Remove all overhanging rocks. 2. Solid ledge rock or partially buried boulders 0.33 yd³ or more may be left in place on slopes steeper than 4:1 beyond the clear zone. <p>G. Clean and finish areas within right-of-way limits as follows:</p> <ol style="list-style-type: none"> 1. Remove all dead trees and shrubs. 2. Prune trees and shrubs as required. 3. Trim and shape trees to provide horizontal sight distance and 20 ft vertical clearances above the roadway. 4. Remove undesirable live trees, shrubs, and all fruit trees to a depth of 18 inches below natural ground. 5. Dispose of trash and debris. <p>H. Clean and finish areas within staging and office sites as follows:</p> <ol style="list-style-type: none"> 1. Clean up and finish as specified for finishing local material source sites including seeding and mulching. Refer to Section 01455. 	01741 Final Cleanup	Construction
Rehabilitation and Restoration	<p>A. Remove temporary environmental controls when surrounding disturbed areas have met final stabilization measures, except as follows:</p> <ol style="list-style-type: none"> 1. Do not remove perimeter controls, such as silt fence, fiber rolls or straw bales, when they protect a wetland or waterway unless the surrounding area meets final stabilization requirements identified within the UCGP. 2. When the Engineer determines that controls should remain in place. <p>B. Remove temporary environmental fence and posts upon completion of construction.</p>	01571 Temporary Environmental Controls 3.4 Removal	Construction, Operations and Maintenance



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Rehabilitation and Restoration	<p>A. Complete final grading, trench settling, and surface preparation before placing topsoil.</p> <p>B. Place and spread topsoil as the slope is being constructed on steep cut slopes steeper than 2:1 and higher than 15 ft that require the placement of topsoil. Finish according to this Section, Article 3.3, paragraph D.</p> <p>C. Provide a suitable topsoil surface just before seeding on the remaining top soiled areas not covered under this article, paragraph B. Suitable topsoil surface is:</p> <ol style="list-style-type: none"> 1. Non-compacted and finished according to this Section, Article 3.3. 2. Weed free. 3. Finish grade uniform surface with smooth transitions between grade changes and disturbed areas. <p>D. Do not strip or handle wet topsoil.</p> <p>E. Establish finish grade at 1 inch below the top of all walks, curbs, mow strips, and other hard surfaces for areas receiving seed or turf seed and 1½ inch for areas receiving turf sod.</p>	02912 Topsoil 3.1 General Requirements	Construction
Rehabilitation and Restoration	<p>A. Clear area to receive topsoil of all trash, debris, weeds, and rock 3 inches or larger and dispose of objectionable material in an approved manner.</p> <p>B. Place and spread the stockpiled topsoil over the prepared slopes to the plan depths. Use 4 inches if no depth is indicated in the plans.</p> <p>C. Disc or harrow the placed topsoil along the contour on slopes 3:1 and flatter or cat-track the slopes to create continuous cleat tracks that run parallel with the contours.</p> <p>D. Cat-track slopes steeper than 3:1 to create continuous cleat tracks that run parallel with the contours.</p>	02912 Topsoil 3.3 Spread Stockpiled and Contractor-Furnished Topsoil	Construction
Rehabilitation and Restoration	<p>A. Complete all final grading, irrigation work, trench settling, topsoil placement, and surface preparation before seed or sod application.</p> <p>B. Prepare general seedbed for all seeded and sodded areas.</p> <ol style="list-style-type: none"> 1. Verify that a suitable topsoil surface has been prepared according to Section 02912 before seeding. 2. Do not work topsoil or seed when the soil is saturated or frozen. <p>C. Prepare Turf Seedbed</p> <ol style="list-style-type: none"> 1. Review finish grade to confirm that topsoil is 1 inch below the top of all walks, curbs, mow strips, and other hard surfaces. 2. Apply fertilizer at the rate of 2 lb/100 yd² and mix thoroughly into upper 2 inches of topsoil. 3. Do not apply fertilizer and seed at the same time in the same machine. <p>D. Prepare Turf Sod Surface</p> <ol style="list-style-type: none"> 1. Review finish grade to confirm that topsoil is 1½ inch below the top of all walks, curbs, mow strips, and other hard surfaces. 2. Apply fertilizer at the rate of 2 lb/100 yd² and mix thoroughly into upper 2 inches of topsoil. 3. Level and roll prepared areas using a 21-gal water-filled hand roller containing 8 to 10 gal of water. 4. Lightly rake and dampen with water the top 1/8 to 5/8 inches of soil just before laying the sod. 	02922 Seed, Turf Seed, And Turf Sod 3.1 Preparation	Construction
Rehabilitation and Restoration	<p>A. Notify the Engineer seven working days before seeding.</p> <p>B. Apply seed at the rate indicated in the Seed Schedule as shown. Note that drill seed and broadcast seed are applied at different rates.</p>	02922 Seed, Turf Seed, And Turf Sod 3.2 Seeding - General	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Rehabilitation and Restoration	<p>A. Use the drill method of seeding on accessible slopes 3:1 and flatter.</p> <p>B. Use a drill equipped with the following:</p> <ol style="list-style-type: none"> 1. Depth band 2. Seed box agitator 3. Seed metering device 4. Furrow opener 5. Packer wheels or drag chains <p>C. Use the drill manufacturer’s directions in the presence of the Engineer. Calibrate the drill to apply seed at the rate indicated in the seeding schedule.</p> <p>D. Space drill rows a minimum of 6 inches and a maximum of 8 inches.</p> <p>E. Fill the seed boxes no more than half full when drilling on a slope.</p> <p>F. Set depth bands to drill seeds to a ½ inch depth.</p> <p>G. Drill along the contour.</p> <p>H. Maintain the drill at the calibrated setting throughout the seeding operation.</p> <p>I. Allow the furrows that are created by the drill to remain.</p>	02922 Seed, Turf Seed, And Turf Sod 3.3 Drill Seeding Method	Construction
Rehabilitation and Restoration	<p>A. Use the broadcast method of seeding under the following conditions:</p> <ol style="list-style-type: none"> 1. Slopes steeper than 3:1. 2. Slopes 3:1 and flatter where the area to be seeded is inaccessible to drill. 3. The area to be seeded is not large enough to justify using a drill. 4. Rocky surface conditions will damage a drill. <p>B. Obtain approval of the broadcast method by demonstrating the procedure on a 100 yd² area.</p> <p>C. Evenly broadcast seed using either:</p> <ol style="list-style-type: none"> 1. A cyclone seeder or other approved mechanical seeder. 2. A hydroseeder. <ol style="list-style-type: none"> a. Apply seed, water, and 300 lb of cellulose fiber mulch (tracer) per acre. <p>D. Do not seed during windy weather or when soil is saturated.</p> <p>E. Incorporate the seed into the soil by one of three methods:</p> <ol style="list-style-type: none"> 1. Cat-tracking by running the dozer up and down the slope creating continuous cleat tracks that run parallel with the contours. 2. Hand raking the seed in ½ inch deep and along the contours of the slope. 3. Slope chaining by pulling the chain along the contour until the seed is covered. <p>F. Obtain approval from the Engineer that the seed has been adequately incorporated into the soil before applying wood fiber mulch, erosion control blanket, flexible growth medium, flexible channel liner, or other topdressing.</p>	02922 Seed, Turf Seed, and Turf Sod 3.4 Broadcast Seeding Method	Construction
Rehabilitation and Restoration	<p>A. Verify that the area prepared to receive plants is graded properly according to the plan, all work is completed in the area, and that topsoil has been placed. Refer to Section 02912.</p> <p>B. Install the irrigation system and have it fully operational before installing plants.</p> <p>C. Stake or delineate plant locations for approval before installation.</p>	02932 Trees, Shrubs, and Groundcovers 3.1 Preparation	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Rehabilitation and Restoration	<p>A. General</p> <ol style="list-style-type: none"> 1. Install plants using the plan details. 2. Water the plants within one hour of installation to saturate the rootball to a minimum of 4 inches below and around the plant hole. <ol style="list-style-type: none"> a. Add more backfill if settling occurs. <p>B. Containerized Plants</p> <ol style="list-style-type: none"> 1. Excavate plant holes to twice the diameter and the same depth of the rootball. 2. Carefully remove the plant from its container, scarify the sides and bottom of the rootball if needed, and place it in the prepared hole. 3. Place excavated soil in 4-inch lifts around the rootball and eliminate voids by tamping the soil between each lift. <p>C. Balled and Burlapped Plants</p> <ol style="list-style-type: none"> 1. Excavate plant holes to twice the diameter and the same depth of the rootball. 2. Gently place the plant in the prepared hole with burlap securely intact. 3. Do not mishandle or break root balls. 4. Carefully remove any wire baskets and the top half of the burlap without disturbing the root ball. <p>D. Tubeling Plants</p> <ol style="list-style-type: none"> 1. Auger a hole the same size as the tube. 2. Gently place watered tubeling in the prepared plant pit immediately following excavation of the hole so that the roots are not tangled, compacted, or curled up at the ends. 3. Compress the soil at the base of the tubeling to eliminate voids between the rootball and existing soil. 	02932 Trees, Shrubs, and Groundcovers 3.2 Installation	Construction
Rehabilitation and Restoration	UDOT would prepare a Reclamation Plan for the highway ROW for approval by the BLM. The Reclamation Plan would support the goal of returning the land to be reclaimed to a condition approximate to or more productive than that which existed before disturbance, while also allowing for the operation, maintenance, and safety needs of the roadway. The Reclamation Plan would include at least the following elements: (1) Reclamation timing, (2) Topsoil and Subsoil Measures, (3) Recontouring, Seeding, and Outplanting Measures, (4) Weed Control, (5) Performance Standards, (6) Reclamation Monitoring, including Reference sites (Qualitative and Quantitative), (7) Reclamation Success criteria, and (8) BLM Reclamation Goals and Process.	Not Applicable	Construction
Rehabilitation and Restoration	All disturbed areas will be re-vegetated in compliance with the Red Cliffs NCA RMP or other applicable standards at the time of reclamation. The BLM would inspect reclamation activities at the end of construction to ensure disturbed areas are revegetated/restored according to the performance standards within the approved Reclamation Plan.	Not Applicable	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Safety, Fire Protection, Emergency Preparedness	<p>A. Perform work with minimal obstruction to traffic.</p> <p>B. Follow the safety provisions of all applicable laws, rules, codes, and regulations to protect the safety and convenience of the public and property.</p> <p>C. Provide, erect, and maintain all traffic control devices such as barriers, barricades, and warning signs according to the TC Series Standard Drawings and Section 01554 requirements to protect the work and the public safety.</p> <ol style="list-style-type: none"> 1. Use barriers and barricades to delineate highway sections closed to traffic. 2. Illuminate obstructions during darkness and provide warning signs to control and direct traffic. <p>D. Erect warning signs for work that may interfere with traffic, or where new work crosses or coincides with an existing road.</p> <ol style="list-style-type: none"> 1. Place and maintain warning signs according to the authorized Traffic Control Plan. 2. Obtain approval before dismantling or removing traffic control devices. <p>E. Pedestrians</p> <ol style="list-style-type: none"> 1. Place and maintain warning signs according to the authorized Traffic Control Plan. 2. Provide ADA-compliant access in areas where construction interferes with existing access. 	00820 Legal Relations and Responsibility to the Public 1.11 Public Convenience and Safety	Design, Construction
Safety, Fire Protection, Emergency Preparedness	<p>A. Stop Work Order:</p> <ol style="list-style-type: none"> 1. The Engineer has the authority to stop work on a project, wholly or in part, when it is determined that the Contractor does not: <ol style="list-style-type: none"> a. Correct conditions unsafe for the project personnel or the public. b. Perform work properly or comply with contract provisions. c. Comply with the Engineer's orders. 2. Contract time will continue to accrue during a stop work order. Do not resume work until notification is received from Engineer. 3. The Engineer will provide a written Stop Work Order, within 24 hours of verbal notification, that describes the reason for ordering work to stop and what actions need to be taken or how conditions need to change before work may resume. 4. The Engineer will notify the Contractor when to resume work. 5. Time charges will continue to accrue during periods of stopped work. <p>B. Work may be stopped for any of the following reasons:</p> <ol style="list-style-type: none"> 1. Contractor's failure to comply with the contract. 2. Contractor's failure to keep insurance coverage according to 00820. 3. Contractor's failure to provide workers or equipment. 4. Work is being performed when unsuitable weather or soil conditions exist that are detrimental to the quality of the finished product. 5. Conditions exist that threaten the safety of the workers, public or nearby property. 	00555 Prosecution and Progress 1.14 Stop Work Orders	Construction
Safety, Fire Protection, Emergency Preparedness	<p>A. Perform work within or adjacent to State or National Forest under regulations of the State Fire Marshal, Conservation Commission, Forestry Department, or other authority having jurisdiction governing the protection of forests.</p> <p>B. Prevent and assist with the suppression of forest fires.</p> <p>C. Cooperate with responsible forestry officials.</p>	00820 Legal Relations and Responsibility to the Public 1.7 Protecting Forests	Construction, Operations and Maintenance



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Safety, Fire Protection, Emergency Preparedness	<p>A. Establish a local public information office. Office may be located within the Contractor’s regular office provided that the telephone number is a local call or toll-free number for project stakeholders.</p> <ol style="list-style-type: none"> 1. Maintain established working hours and days. 2. Provide a telephone or cell phone with voice mail capability dedicated to project public information services. <p>B. Maintain daily communication with the Engineer.</p> <p>C. Maintain and document weekly communications with Region Public Involvement Manager, affected residents, businesses, organizations, and public agencies such as local emergency services, public works, transit authorities, city offices, and other stakeholders.</p>	01540 Public Information Services 1.7 PIC Responsibilities	Construction
Safety, Fire Protection, Emergency Preparedness	<p>G. Maintain and document weekly communication and project updates with the following:</p> <ol style="list-style-type: none"> 1. Department, Region, and Public Involvement Manager 2. Affected local public agencies <ol style="list-style-type: none"> a. Emergency Service Agencies <ol style="list-style-type: none"> 1) Fire Departments 2) Police Departments and Highway Patrol 3) Ambulance Services b. Local city offices c. Public works departments d. Local transit authorities e. Local school districts f. Local U.S. Post Office 3. Affected businesses 4. Affected trucking and carrier associations 5. Local organizations interested in the project 6. Private citizens when requested 7. Engineer and Region Public Involvement Manager, providing copies of logbook documentation 8. Other stakeholders as required 	01540 Public Information Services 3.1 Establish Local Public Information Services	Construction
Safety, Fire Protection, Emergency Preparedness	<p>D. Responsibilities and Duties</p> <ol style="list-style-type: none"> 7. Coordinate project traffic control with emergency services and local law enforcement agencies. 	01554 Traffic Control 1.9 Traffic Control Maintainer	Construction
Safety, Fire Protection, Emergency Preparedness	<p>B. Provide emergency maintenance on a 7-day per week, 24-hour basis until substantial completion of the project.</p> <ol style="list-style-type: none"> 1. Respond within 15 minutes and be on-site within 30 minutes plus travel time when contacted by the dispatcher. 2. Provide contacts and telephone numbers to the Engineer for the emergency service. 	02892 Traffic Signal 3.24 Traffic Signal Maintenance During Construction	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Soils and Erosion Control	A. Do not interfere with the navigation of waterways when conducting work over, on, or adjacent to navigable waters. B. Comply with all conditions of permits from the U.S. Coast Guard or the U.S. Army Corps of Engineers.	00725 Scope of Work 1.10 Construction Over or Adjacent to Navigable Waters	Design, Construction
Soils and Erosion Control	(see Wetlands, Riparian Resources, and Waters of the U.S., below)	01355 Environmental Compliance 1.9 Water Resource Permits	Design, Construction
Soils and Erosion Control	A. Install appropriate controls as shown before beginning earth disturbing activities. B. Refer to installation procedures outlined in EN Series Standard Drawings and the AASHTO Construction Stormwater Field Guide. C. Install temporary environmental fence in the required locations before construction activities begin. 1. Install posts at a 12 ft maximum spacing so the fence does not sag more than 2 inches between posts. 2. Weave the fence over the support posts alternating every two loops and secure it to the posts with fasteners. D. Install Gutter-Inlet Barrier according to manufacturer's recommendations.	01571 Temporary Environmental Controls 3.1 Installation	Construction
Soils and Erosion Control	A. Check installed controls before and after each rain event to verify proper working function and compliance with the UCGP. B. Replace controls that are not properly working to prevent erosion and sedimentation.	01571 Temporary Environmental Controls 3.2 Inspection	Construction
Soils and Erosion Control	A. Maintain controls to function properly until surrounding disturbed areas have met final stabilization measures. B. Remove accumulated sediments from controls when depth reaches 50 percent of the control height or when it interferes with the performance of the control. C. Properly dispose of accumulated sediment.	01571 Temporary Environmental Controls 3.3 Maintenance	Construction
Soils and Erosion Control	A. Complete all required grading, topsoil placement, and seeding in designated areas before installing RECP. B. Make soil surface stable, firm, free of rocks, roots and other obstructions. C. Apply the RECP within 24 hours after seeding.	02376 Rolled Erosion Control Products 3.1 Preparation	Construction
Soils and Erosion Control	A. Minimize disturbance of the prepared seedbed when installing the product. B. Install product according to manufacturer's recommendations. C. Unroll product parallel to the primary direction of flow and place it in direct contact with the soil. 1. Do not stretch the product or allow it to "tent" or bridge over surface inconsistencies during installation. D. Install flexible channel liner or turf reinforcement mat, within a channel, ditch or swale, to allow runoff to flow directly to the centerline of ditch, not undermining or bypassing the lined ditch. E. Place additional staples in areas such as swales, base of humps, against rock outcrops, and as required achieving maximum contact between the product and the soil.	02376 Rolled Erosion Control Products 3.2 Installation	Construction
Soils and Erosion Control	A. Complete required grading, topsoil placement, and seeding in designated areas before applying HECP. B. Apply HECP within 24 hours after seeding. C. Provide sufficient time for HECP to cure according to manufacturer's recommendation before precipitations falls.	02911 Hydraulic Erosion Control Products 3.1 Preparation	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Soils and Erosion Control	<p>A. Backfill all stump holes, cuts, depressions, and other holes resulting from clearing and grubbing within areas to receive embankment.</p> <ol style="list-style-type: none"> 1. Compact backfilled areas to the density of the surrounding ground. <p>B. Measure and pay separately for materials used for backfilling under Roadway Excavation or Borrow.</p> <p>C. Consider Roadway Excavation and Borrow as incidental to the work when these items are not included in the bid proposal.</p> <ol style="list-style-type: none"> 1. No separate measurement or payment made in this case. 	02231 Site Clearing and Grubbing 3.3 Backfilling	Construction
Soils and Erosion Control	<p>A. Dispose of material. Refer to Section 01355.</p> <p>B. Do not dispose of material within the designated roadbed.</p> <p>C. Outside of the Right-of-Way</p> <ol style="list-style-type: none"> 1. Acceptable when done according to prevailing laws including environmental laws, ordinances, regulations, and rules. <p>D. Inside the Right-of-Way</p> <ol style="list-style-type: none"> 1. Bury material at locations specified by or acceptable to the Engineer. 2. Use material to widen embankments and flatten embankment side slopes as approved by the Engineer. 3. Cover disposed material with at least 2 ft of earth and grade to drain properly. 4. Reduce wood to chips a maximum of ½ inch thick for mulching cut and fill slopes. <ol style="list-style-type: none"> a. Chips may be buried or distributed uniformly on the ground surface and mixed with the underlying earth so the mixtures will not sustain burning. 	02231 Site Clearing and Grubbing 3.4 Disposal	Construction
Soils and Erosion Control	<p>A. Strip the topsoil:</p> <ol style="list-style-type: none"> 1. Only from areas shown or determined by Engineer. 2. To a depth determined by the Engineer. <p>B. Remove and dispose of any roots larger than 2 inches in diameter or 12 inches in length.</p> <p>C. Stockpile stripped topsoil:</p> <ol style="list-style-type: none"> 1. At locations acceptable to the Engineer. 2. So that placement or activity around the stockpile does not damage or impact any existing trees, shrubs, or environmentally sensitive areas. Obtain appropriate clearances if such impacts are unavoidable. <p>D. Grade to minimize erosion on and around the stockpiles.</p>	02912 Topsoil 3.2 Strip and Stockpile Topsoil	Design, Construction
Soils and Erosion Control	<p>D. Topsoil free of:</p> <ol style="list-style-type: none"> 1. Subsoils (no B or C horizon soils) 2. Coarse sand and gravel 3. Stiff clay, hard clods, or hard pan soils 4. Rock larger than 3 inches in any dimension 5. Trash, litter, or refuse 6. Noxious weeds and weed seeds 	02912 Topsoil 2.1 Contractor Furnished Topsoil	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Special Status Species: BLM Sensitive Species	A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds. 1. Comply with the Endangered Species Act.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Construction
Special Status Species: Federally Listed Species	A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds. 1. Comply with the Endangered Species Act.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Construction
Special Status Species: Federally Listed Species	Mojave desert tortoise fencing and shade structures: UDOT would install and maintain Mojave desert tortoise exclusion fencing and shade structures along the approved ROW in accordance with the most recent United States Fish and Wildlife Service (USFWS) guidance as incorporated into the Final POD. Fencing precludes Mojave desert tortoise from entering the construction area or completed highway and shading provides thermal and predation cover for desert tortoise that encounter the exclusion fencing and pace along it. Attachment 1 in Appendix D of the Final EIS provides additional guidance on this measure. Maintenance may be conducted through coordination with Washington County or other entities.	Not Applicable	Design, Construction, Operations and Maintenance



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Special Status Species: Federally Listed Species	<p>Under-road passages for Mojave desert tortoise: The roadway design included in the Final POD would incorporate passageways underneath the highway that could be used by Mojave desert tortoise where exclusion fencing has been placed along the highway. General locations for eight passages are provided in the POD, although they are expected to be further refined through any additional monitoring and/or field surveys and best information available at the time of design (1) to ensure effective placement for the Mojave desert tortoise and other wildlife species where concentrated use or burrows are found and (2) for technical and economic feasibility for design, construction, and long-term maintenance. To the extent consistent with project design and engineering and reasonably feasible, UDOT would consider additional locations for desert tortoise passages where natural topography creates an opportunity. Passageways would vary in size and be developed in final design of the project in coordination with the BLM, with the goal of achieving the following general design elements:</p> <ul style="list-style-type: none"> • Creating passages of sufficient size, based on the best available information at the time, to promote usage by desert tortoise. • Incorporating natural light through sizing the passage appropriately and incorporating ceiling grates, open air sections, or other elements that allow for natural light throughout the passage. • To the extent feasible, establishing a natural surface continuous with the surrounding environment and incorporating appropriate vegetation and substrate along the bottom through the passages. • Focusing on fill areas and natural drainages to maximize the size of openings where consistent with natural topography. <p>In development of the final design, UDOT would reasonably consult with the BLM, USFWS, and Utah Division of Wildlife Resources when determining the appropriate type of structure, sizing, and placement of under-road passages for Mojave desert tortoise as discussed above. Such determinations would be made based on current monitoring data, findings regarding minimizing fragmentation, construction techniques, and the availability of new technology or equipment and reasonable feasibility to incorporate such technology into the project design, realizing technology may be improved at the time the roadway is constructed. Any deviations based on site-specific conditions, topography, or design and engineering from the established parameters would be subject to review and approval by the BLM. UDOT would select the final structure type for the passages, which may incorporate culverts, bridges or modifying bridge design to better provide flyover intersections (rather than at-grade), pre-cast structures, or other methods that achieve the goals and parameters listed above, in accordance with current standards and published research studies.</p>	Not Applicable	Design, Construction, Operations and Maintenance
Special Status Species: Federally Listed Species	<p>UDOT would evaluate and monitor existing passages along SR 18 for tortoise passage, including, as needed, additional maintenance activities and debris removal. UDOT would also consider modifying the structure design to improve tortoise passage as feasible. Modifications would ideally occur in conjunction with future road construction projects scheduled for the same area, or funding can be directed toward this project from the HCP partners (i.e., BLM, USFWS, Utah Department of Natural Resources, etc.).</p>	Not Applicable	Design, Operations and Maintenance
Special Status Species: Federally Listed Species	<p>Survey and Monitoring</p> <ol style="list-style-type: none"> 1. Pre-project distribution surveys would be performed within 1 year prior to construction of the highway. 2. Pre-construction clearance surveys would be conducted prior to the initiation of construction. Areas that have been cleared and fenced with permanent fencing would not need to be resurveyed as long as the fence is monitored and maintained per the "Mojave desert tortoise fencing and shade structures" design feature listed above. 3. Fenceline checks would be conducted prior to activities, any breaches fixed, and if breaches are found, a coarse clearance survey would occur. Increased monitoring in the following 2 weeks and when the more active season starts would also occur. 	Not Applicable	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
<p>Special Status Species: Federally Listed Species</p>	<p>UDOT would hire individuals to conduct the surveys and monitoring with the following qualification requirements:</p> <ol style="list-style-type: none"> 1. Desert Tortoise Biologist – Authorized desert tortoise biologist(s) would be qualified to perform various activities that may include, but are not limited to, the following: conduct and oversee presence/absence and clearance surveys, handle desert tortoises, translocate desert tortoises, construct burrows, excavate burrows, conduct health assessments (including any necessary bloodwork), and oversee monitoring and compliance during project activities. Authorized biologists should have sufficient desert tortoise field experience in each category (a minimum of 480 hours searching for tortoises and tortoise sign) to detect the presence of desert tortoises through observations of animals and sign including scat and burrows. Authorized biologists must maintain up-to-date Federal and State desert tortoise handling permits when they are conducting any handling activities. In some circumstances, Washington County Habitat Conservation Plan (WCHCP) Administration staff or local State or Federal biologists may be available to serve this function. All desert tortoise biologists would report to and coordinate with the BLM, Utah Division of Wildlife Resource (UDWR), and the WCHCP Biologist. The biologist would keep detailed field notes that would be submitted to the BLM and USFWS, Utah Ecological Services Field Office every 3 months. 2. Desert Tortoise Monitor – Desert tortoise monitors are individuals who are approved by the USFWS to: <ol style="list-style-type: none"> a. assess habitat suitability; b. conduct presence/absence and abundance surveys for desert tortoises; c. monitor project activities within desert tortoise habitat; d. ensure proper implementation of conservation measures outlined in this document; and e. report incidents of non-compliance with the Reasonable and Prudent Measures and Terms and Conditions in the Biological Opinion (BO) issued for the project by the USFWS. <p>Desert tortoise monitors should have enough desert tortoise field experience (a minimum of 480 hours searching for tortoises and tortoise sign) to detect the presence of desert tortoises through observations of animals and sign including scat and burrows. A desert tortoise monitor is not authorized to handle desert tortoises. The monitor would keep detailed field notes and turn them in regularly to the biologist. See example field report form (Daily Desert Tortoise Report Form).</p> 3. Field Contact Representative – Field contact representatives (FCR) are individuals who are approved by the USFWS to: <ol style="list-style-type: none"> a. monitor some project activities within desert tortoise habitat (i.e., for this project, unsuitable habitat) b. assist with daily clearance sweeps as detailed in the text below; c. assist with proper implementation of protective measures; and d. call the desert tortoise monitor, biologist, BLM, UDWR, or USFWS, with any questions or concerns. <p>The FCRs would not be permitted to assess habitat suitability or conduct USFWS protocol level surveys for desert tortoises because they would not have sufficient training or field experience. Because the project area supports such high densities of desert tortoises, FCRs would not be qualified to monitor within suitable habitat. FCRs would meet the following qualifications:</p> <ol style="list-style-type: none"> a. can recognize signs of desert tortoises; b. understand monitoring protocols; and c. have a minimum of one field day under the supervision of a desert tortoise monitor in each activity season and habitat type. <p>While FCRs and monitors would not be authorized to handle desert tortoise or conduct USFWS protocol level surveys, FCRs may, depending on the activity season and habitat quality, assist with daily clearance sweeps for desert tortoises immediately prior to or during project activities. The FCR would keep detailed field notes that would be turned in to the biologist.</p> 	<p>Not Applicable</p>	<p>Construction</p>



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
<p>Special Status Species: Federally Listed Species</p>	<p>For Occupied desert tortoise habitat, the following protocols would apply for project activities that occur during the Most Active Season (February 15 to November 30):</p> <ol style="list-style-type: none"> 1. A desert tortoise biologist would be onsite during all highway project activities for the protection of desert tortoises. The biologist would be responsible for determining compliance with the conservation measures as defined in a BO issued for the highway. 2. No more than 1 hour prior to daily construction activities commencing or by 7 a.m. each work day (whichever is later), a desert tortoise biologist would conduct a clearance sweep of that day's activity area (including a 100-meter zone of influence on all sides) to identify desert tortoises and occupied burrows in the area. The monitor would also carefully inspect any hazards (e.g., trenches, open pipes). If temperatures are outside the range where desert tortoise activity is expected, the proponent may coordinate with the USFWS to reduce the monitoring requirements. 3. A desert tortoise monitor would be assigned to each grouping of equipment (heavy machines which use power to perform a construction function specific to the machine) operating in spatially disjunct areas within the project site. A grouping of equipment is defined as all construction equipment working within a 1,000-foot linear distance from the first piece of equipment to the last piece of equipment. Equipment performing backfilling, re-contouring, and reclamation activities are included in this measure. 4. Project vehicle speeds in the project area would be limited to 15 mph. Speed limit signs would be posted when entering and exiting the project area. 5. Blasting may be required for the highway. Blasting would not be conducted within 100 meters of an occupied desert tortoise burrow due to possible direct effects of this action on burrow stability. The desert tortoise biologist would conduct 10-meter belt transect protocol desert tortoise surveys prior to and within 100 meters of any blasting. If a burrow is occupied, the UDWR, BLM, and USFWS would be contacted to discuss appropriate translocation measures based on the case-specific circumstances. Any contractor performing blasting would comply with applicable regulations, codes, and standards established by the regulatory agencies, and follow the Reasonable and Prudent Measures and Terms and Conditions in the USFWS BO to minimize impacts to desert tortoise. 6. If highway project activities occur during the desert tortoise Most Active Season (February 15 to November 30, highest activity during March 15 to May 15 and August 20 to October 20), UDOT would hold a short refresher meeting with all highway project personnel that would be led by the desert tortoise biologist on February 15 or the first working day just prior to that date and on March 15 and August 20 (or the first working day just prior to those dates). This meeting would include instruction and handouts to remind workers of the highway project's conservation measures. Refresher meetings would be held in addition to the pre-project meeting described in General Measures. However, if the initial pre-project meeting occurred recently (within 1 month prior to the Most Active Season start date, March 15 or October 20), the refresher meeting that would have normally been held on that date is not required. 7. Because shade structures are being installed, once daily fenceline checks by the desert tortoise biologist would be conducted no more than one hour prior to each day's project activities beginning or 7 a.m. (whichever is later). 8. Open trenches and other open excavations would be covered or provided with desert tortoise escape ramps. Excavations left open would be checked each morning for presence of tortoise prior to commencement of daily work and at the end of the work day. Escape ramps would have a slope no steeper than 3:1 and be a minimum of 91.5 centimeters (3 feet) in length. Escape ramps would be placed at 100-meter intervals. These distances would be reduced if the desert tortoise biologist and Federal agencies determine that the plug/escape ramp spacing is insufficient to facilitate animal escape from the trench. 9. No standing water caused by highway project operations would be permitted in desert tortoise habitat because this can attract desert tortoises and predators. Similarly, leaks on water trucks and water tanks would be repaired to prevent pooling water. If watering conditions could temporarily attract desert tortoises, the desert tortoise monitor assigned to a group of equipment constructing the project may periodically leave the group of equipment to patrol each area being watered. 10. The storing and handling of bulk hazardous waste materials would be excluded from the project areas within 600 meters of active tortoise burrows. 	<p>Not applicable</p>	<p>Construction</p>



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Special Status Species: Federally Listed Species	<p>For Occupied habitat, the same measures as above for the Most Active Season would be applied during the Less Active Season (December 1 to February 14), with the following exceptions:</p> <ol style="list-style-type: none"> 1. A desert tortoise biologist is not required onsite daily. A monitor would remain onsite during all project activities, conduct daily clearance sweeps out to 100-meter zone of influence, check any hazards, and check all backfilling, re-contouring, and reclamation activities prior to initiation. A desert tortoise biologist would conduct an initial pre-construction clearance survey and identify any occupied burrows or hibernacula. The biologist would also come out to the site weekly to check in with the monitor, review and collect field notes, and check any hazards. 2. The fenceline would be checked once per day by the biologist or monitor. 3. An FCR would be assigned to each grouping of equipment as described above. 	Not applicable	Construction
Special Status Species: Federally Listed Species	<p>For Unsuitable habitat (within the fenced areas of Cottonwood Springs Road and Red Hills Parkway), the following conservation measures would be applied during the Most Active Season (February 15 to November 30):</p> <ol style="list-style-type: none"> 1. A desert tortoise biologist would conduct an initial pre-construction clearance survey and identify any occupied burrows or other hibernacula adjacent to the desert tortoise exclusion fence. 2. A desert tortoise biologist would come out to the site weekly to check in with the monitor, review and collect field notes, and check any hazards. 3. A monitor would stay onsite and perform a clearance sweep out to 100 meters and check any open trench and any other open excavations at least three times daily. 4. If a desert tortoise or fresh desert tortoise sign is found within the 100-meter zone of influence of the project, the monitor would contact BLM, UDWR, and USFWS to discuss appropriate translocation, avoidance, and minimization measures based on the case-specific circumstances. 5. No standing water caused by project operations would be permitted in desert tortoise habitat as this can attract desert tortoises and predators. Similarly, leaks on water trucks and water tanks would be repaired to prevent pooling water. If conditions favor tortoise activity, the FCR or a desert tortoise monitor assigned to a group of equipment constructing the project may periodically leave the group of equipment to patrol each area being watered. 6. If project activities occur during the desert tortoise Most Active Season (February 15 to November 30, highest activity during March 15 to May 15 and August 20 to October 20), the proponent would hold a short refresher meeting with all project personnel that would be led by the desert tortoise biologist on February 15, March 15, and August 20 (or the first working day just prior to those dates). This meeting would include instruction and handouts to remind workers of the project's conservation measures. Refresher meetings would be held in addition to the pre-project meeting described in General Measures. However, if the initial pre-project meeting occurred recently (within 1 month prior to February 15, March 15, or October 20), the refresher meeting that would have normally been held on that date is not required. 	Not applicable	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Special Status Species: Federally Listed Species	For Unsuitable habitat (within the fenced areas of Cottonwood Springs Road and Red Hills Parkway), the following measures would be applied during the Less Active Season (December 1 to February 14): <ol style="list-style-type: none"> 1. The onsite desert tortoise monitor does not need to remain onsite during all project activities. 2. A monitor would perform a sweep of any open trench and any other open excavations once daily. 3. The desert tortoise biologist would visit the site once a week to review field notes and assess any hazards. 4. If a desert tortoise or fresh desert tortoise sign is found within the 100-meter zone of influence of the project, the monitor or FCR would contact BLM, UDWR, and USFWS to discuss appropriate translocation, avoidance, and minimization measures based on the case-specific circumstances. 	Not applicable	Construction
Special Status Species: Federally Listed Species	All individuals working onsite would be required to take a worker education training class, conducted by the Washington County HCP Office (WCC 2006). The class would describe desert tortoises, and the appropriate measures to take upon discovery of a desert tortoise or burrow. The class would also include a discussion of construction techniques and conservation measures to minimize potential adverse impacts. All project personnel would sign an affidavit certifying that they have read and understand the material presented in the brochure and class. UDOT would work with Washington County to maintain all records of affidavits.	Not applicable	Construction
Special Status Species: Federally Listed Species	Before project activities begin, a pre-project meeting would be held between UDOT, all onsite workers, and the desert tortoise monitor and biologist to review all conservation measures. A handout of the conservation measures would be provided to all onsite workers.	Not applicable	Construction
Special Status Species: Federally Listed Species	Trash and food items would be contained in closed (predator-proof) containers and removed regularly as needed to reduce attractiveness to opportunistic predators such as ravens, coyotes, and feral dogs.	Not applicable	Construction
Special Status Species: Federally Listed Species	Contractor personnel would not bring domestic dogs to the project site.	Not applicable	Construction
Special Status Species: Federally Listed Species	Any time a vehicle or construction equipment is parked in desert tortoise habitat, the area around and directly under the vehicle must be inspected for desert tortoises before the vehicle or equipment is moved. The inspection does not need to be performed by a desert tortoise monitor, biologist, or FCR. If a desert tortoise is observed, it would be left to move on its own – the desert tortoise would not be approached or handled. If this does not occur within 15 minutes, an approved desert tortoise biologist would be contacted to remove and relocate the animal.	Not applicable	Construction
Special Status Species: Federally Listed Species	Any time a vehicle or construction equipment is parked in desert tortoise habitat, the area around and directly under the vehicle must be inspected for desert tortoises before the vehicle or equipment is moved. The inspection does not need to be performed by a desert tortoise monitor, biologist, or FCR. If a desert tortoise is observed, it would be left to move on its own – the desert tortoise would not be approached or handled. If this does not occur within 15 minutes, an approved desert tortoise biologist would be contacted to remove and relocate the animal.	Not applicable	Construction
Special Status Species: Federally Listed Species	A desert tortoise biologist would prepare all survey reports and field notes and submit them to USFWS quarterly. The desert tortoise biologist would prepare a final summary report and submit it to USFWS at project completion. The reports would describe: <ol style="list-style-type: none"> 1. The desert tortoise survey and monitoring activity that was completed; 2. The extent of impacts to desert tortoises, including all desert tortoise encounters within the project boundaries and how they were reported and addressed. 	Not applicable	Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Special Status Species: Federally Listed Species	During routine inspections, scheduled maintenance, emergency maintenance, or any other maintenance, if desert tortoises are encountered, they would be avoided, and the UDWR and BLM Biologist would be contacted if there appear to be hazards to the desert tortoise. If appreciably higher than average desert tortoise mortalities are documented at a given location, UDOT (or the subsequent ROW holder) would coordinate with the UDWR or BLM. The UDWR and BLM would coordinate with the USFWS as appropriate.	Not applicable	Construction
Special Status Species: Federally Listed Species	Maintenance activities that create new surface disturbance in suitable habitat would be coordinated with the BLM. The BLM would coordinate with the USFWS as appropriate.	Not applicable	Operations and Maintenance
Special Status Species: Federally Listed Species	If emergency maintenance activities create new surface disturbance in suitable habitat or are required during the Most Active Season in suitable habitat, the BLM would be contacted within 24 hours to minimize any impacts and coordinate post-emergency response. The BLM would coordinate with the USFWS as appropriate.	Not applicable	Operations and Maintenance
Survey, Flagging, Fencing, and Signage	<ul style="list-style-type: none"> A. Preserve public and private property during the work. B. Secure legal right to access the property before any work is performed on public or private property. All damage as a result of trespass will be the financial responsibility of the Contractor including additional acquisition costs. C. Accept liability for any damage to public or private property resulting from defective work, materials, or non-execution of the contract until contract completion. D. Restore damaged property and items removed temporarily during construction to a condition similar or equal to that existing before the damage. E. Temporarily discontinue work if remains of prehistoric dwelling sites or artifacts of historical or archeological significance are encountered. Refer to Section 01355. 	00820 Legal Relations and Responsibility to the Public 1.12 Protecting and Restoring Property and Landscape	Design, Construction
Survey, Flagging, Fencing, and Signage	A. Remove and dispose of flagging, lath, stakes, and other staking material after the project has reached physical completion and the Engineer has approved removal.	01721 Survey 3.15 Cleanup	Construction
Transportation Management	<ul style="list-style-type: none"> A. Minimize interference with traffic during performance of the work. B. Sunday and Category I Holiday Work <ul style="list-style-type: none"> 1. Provide advance notice to the Engineer no later than noon on Wednesday, or four calendar days prior, whichever is greater before any Sunday or Category I holiday work, unless otherwise restricted in the contract. C. Category II Holiday Work <ul style="list-style-type: none"> 1. Do not perform any work without approval except for repairing or servicing equipment, protecting work, maintaining or curing concrete, and maintaining traffic on Category II holiday. 2. Provide notice to the Engineer no later than noon on the Wednesday, or four calendar days prior, whichever is greater before any Category II holiday work, unless otherwise restricted in the contract. D. Nighttime Construction Work <ul style="list-style-type: none"> 1. Notify the Engineer at least five calendar days before starting nighttime construction work. 2. Provide adequate lighting for safely performing satisfactory inspection and construction operations. 3. Minimize noise during Nighttime Construction Work. 	00555 Prosecution and Progress 1.9 Limitation of Operations	Design, Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Transportation Management	<p>A. Keep roads open to traffic during the work and work suspensions or provide and maintain detour roads as specified or directed.</p> <ol style="list-style-type: none"> 1. Maintain all necessary accesses to areas such as parking lots, garages, businesses, residences, and farms. 2. Exclude snow removal. <p>B. The Department does not provide additional compensation for maintenance.</p> <p>C. Failure to maintain traffic is cause for the Department to take action to meet the requirements of this specification.</p> <ol style="list-style-type: none"> 1. The Department deducts its costs incurred in such actions from money due. 	00725 Scope of Work 1.8 Maintaining Traffic	Design, Construction
Transportation Management	<p>A. Maintain work included in the contract during construction until physical completion.</p> <ol style="list-style-type: none"> 1. Maintain traffic detour routes and project travel ways according to the Traffic Control Plan. <p>B. The Engineer immediately notifies the Contractor of failure to meet these provisions.</p> <ol style="list-style-type: none"> 1. The Department maintains the project if unsatisfactory maintenance is not remedied within 24 hours after receiving notice. 2. The Department deducts the entire cost to maintain the work from the money due or to become due the Contractor. 	00727 Control of Work 1.16 Maintain the Work During Construction	Construction
Transportation Management	Follow the authorized Traffic Control Plan	01554 Traffic Control	Design, Construction
Vegetation (excluding listed species)	<p>A. Perform work within or adjacent to State or National Forest under regulations of the State Fire Marshal, Conservation Commission, Forestry Department, or other authority having jurisdiction governing the protection of forests.</p> <p>B. Prevent and assist with the suppression of forest fires.</p> <p>C. Cooperate with responsible forestry officials.</p>	00820 Legal Relations and Responsibility to the Public 1.7 Protecting Forests	Construction
Vegetation (excluding listed species)	<p>A. Grub the areas 2 ft below natural ground, within the limits of clearing, of all stumps, roots, buried logs, and all other underground obstructions.</p> <p>B. Stumps, roots, and non-perishable solid objects may remain in cleared areas where the embankment is:</p> <ol style="list-style-type: none"> 1. 2 ft or more above the natural ground. 2. At least 2 ft away outside the slope stake lines. <p>C. Completely grub stumps and roots where a structure is to be constructed, piles are to be driven, or unsuitable material is to be removed.</p>	02231 Site Clearing and Grubbing 3.2 Vegetation Removal	Construction
Vegetation (excluding listed species)	Prepare a Noxious Weed Management Plan.	Not Applicable	Construction
Vegetation (excluding listed species)	Broadcast applications of herbicides would be prohibited within the project area; if necessary, spot treatments would be applied by hand using herbicides approved by EPA and BLM in order to treat noxious weeds. The highway project area would be monitored and controlled, as necessary, for weeds for the life of the ROW grant (which may include maintenance activities).	Not Applicable	Construction
Visual Resources	<p>D. Nighttime Construction Work</p> <ol style="list-style-type: none"> 1. Notify the Engineer at least five calendar days before starting nighttime construction work. 2. Provide adequate lighting for safely performing satisfactory inspection and construction operations. 3. Minimize noise during Nighttime Construction Work. 	00555 Prosecution and Progress 1.9 Limitation of Operations	Construction
Visual Resources	Roadway Lighting: Lighting installation within the ROW would be minimized to only emergency lighting where the roadway crosses the NCA, except where additional lighting is necessary near intersections or other areas that would support safety and proper visibility for vehicles and pedestrians.	Not applicable	Design, Construction



Resource or Issue Applicability	Design Feature	UDOT Construction Specification (UDOT 2020)	Applicability
Water Resources: Federal Emergency Management Agency (FEMA) Floodplains	Environmental Clearance by the Contractor A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds. 3. Comply with the National Flood Insurance Program's floodplain management regulations if the activity is in a Special Flood Hazard Area.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Design, Construction
Water Resources: Stormwater Pollution Prevention Methodology	UDOT will be required to obtain an UPDES General Stormwater Discharge Permit from the State Division of Water Quality. The general permit requires the development and implementation of a Stormwater Pollution Prevention Plan that will identify good housekeeping BMPs, such as materials handling and storage and fueling and equipment maintenance, as well as site-specific measures to protect slopes and natural features, minimize erosion, and prevent eroded sediment from leaving the construction zone. The Plan will be prepared in accordance with the requirements of the UDOT Stormwater Management Program plan.	01355 Environmental Compliance 1.5 Submittals	Construction
Water Resources: Stormwater Pollution Prevention Methodology	Environmental Clearance by the Contractor A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds. 4. Comply with National (NPDES) and Utah (UPDES) Pollutant Discharge Elimination System regulations.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Construction
Wetlands, Riparian Resources, Waters of the U.S.	A. Check installed controls before and after each rain event to verify proper working function and compliance with the UCGP. B. Replace controls that are not properly working to prevent erosion and sedimentation.	01571 Temporary Environmental Controls 3.2 Inspection	Design, Construction, Operations and Maintenance
Wetlands, Riparian Resources, Waters of the U.S.	A. Comply with the Utah State Stream Alteration Program. B. Comply with Section 10 of the Rivers and Harbors Act. C. Comply with Section 404 of the Clean Water Act. D. Comply with the National Flood Insurance Program for a project within a Special Flood Hazard Area (SFHA), as defined by the Federal Emergency Management Agency (FEMA).	01355 Environmental Compliance 1.9 Water Resource Permits	Design, Construction, Operations and Maintenance
Wetlands, Riparian Resources, Waters of the U.S.	A. Comply with applicable environmental regulations as part of a ground disturbing activity not previously evaluated in the project environmental document such as wasting project-generated material, excavating borrow material, locating equipment, storage areas, office sites, utility lines, or holding ponds. 2. Comply with regulations governing Waters of the United States and Waters of the State of Utah.	01355 Environmental Compliance 1.12 Environmental Compliance by the Contractor	Construction

[The Applicant will develop / adopt standards and specifications throughout the NEPA and design process. This information will be included in the Final POD as it is developed.]



7 Definitions

Definitions of terms used in this POD from UDOT's Standard Specifications (UDOT 2020) and other UDOT manuals are included in this section.

Borrow: Construction material that must be imported from outside the roadway limits for the construction of the roadbed embankments, subgrade, shoulders, etc.

Capacity: The maximum rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or a roadway during a given time period under prevailing roadway and traffic conditions. Capacity may refer to the entire roadway, a single lane, or an intersection. Measures of capacity may include, but are not limited to, traffic volumes, speed, throughput and density.

Construction Limits: The established boundaries within the highway right-of-way or construction easements that define the construction area.

Contractor: The individual or legal entity contracting with UDOT for performance of prescribed work.

Easement: An interest in real property that conveys use, but not ownership, of a portion of an owner's property.

Equipment: All machinery, tools, apparatus, and the fuels, lubricants, batteries, and other supplies and parts needed to use, operate, and maintain these items for use in constructing and completing the work.

Highway: A general term denoting a public way used by vehicles and pedestrians, including the entire area within the right-of-way.

Intersection: The general area where two or more highways or streets join or cross at-grade.

Impervious Surface: Surfaces through which water cannot infiltrate.

Land Disturbance: Activities that alter natural ground or material below impervious surfaces (e.g., clearing, excavation or grading).

Level of Service (LOS): A qualitative measure describing a range of traffic operating conditions such as travel speed and time, freedom to maneuver, traffic interruptions, and comfort and convenience as experienced and perceived by motorists and passengers. Six levels of service are defined from A to F, with A representing the free flow travel conditions and F representing extreme traffic congestion. LOS shall be evaluated according to the procedures and conditions defined in the most recent edition of AASHTO's *A Policy on Geometric Design of Highways and Streets*.



Median Island: A curbed island that prevents egress traffic from encroaching upon the side of the drive used by ingress traffic. The island ensures that ingress traffic has the necessary maneuvering space.

New Development: Any construction resulting in new impervious surfaces on undeveloped land causing land disturbance.

Notice to Proceed (BLM): A written notice provided by BLM Authorized Office to begin action under approved plan and grant or permit, subject to any particular provisions the BLM includes.

Notice to Proceed (UDOT): Written notice to the contractor to begin the contract.

Pavement Structure: The combination of subbase, base course, and surface course placed on a subgrade to support and distribute the traffic load to the roadbed.

- a. **Surface Course** – One or more layers of a pavement structure designed to accommodate the traffic load, the top layer that resists skidding, traffic abrasion, and the disintegrating effects of climate. The top layer is sometimes called the wearing course.
- b. **Base Course** – One or more layers of specified material and thickness placed on a subbase or a subgrade to support a surface course.
- c. **Subbase** – One or more layers of specified material thickness placed on a subgrade to support a base course.

Plans: Contract drawings showing the location, type, dimensions, and details of the specified work.

- a. **Standard Drawings** – Detailed drawings approved for repetitive use.
- b. **Supplemental Drawings** – Approved additions and revisions to the standard drawings.

Specifications: The compilation of provisions and requirements for the performance of prescribed work, including any combination of the following:

- a. **Project-specific Specifications** – A unique specification or a modification or revision to the standard specifications applicable to an individual contract.
- b. **Standard Specifications** – Specifications approved for general application and repetitive use.

Stormwater BMP: Long-term stormwater features and measures that prevent, reduce, or remove pollution to Waters of the State.

Superelevation: The rotation of the pavement on the approach to and through a horizontal curve.



8 References

Bureau of Land Management (BLM) 2006. Instruction Memorandum No. UT 2006-096. *Utah Supplemental Planning Guidance: Raptor Best Management Practices*. Salt Lake City, Utah.

BLM 2008. *BLM National Environmental Policy Act Handbook* (H-1790-1). 184p. Available online at: https://www.ntc.blm.gov/krc/uploads/366/NEPAHandbook_H-1790_508.pdf

Dixie Metropolitan Planning Organization (DMPO). 2019. *2019–2050 Regional Transportation Plan*. Approved October 2019.

Federal Highway Administration 2016. *Transportation Asset Management Case Studies. Managing and Maintaining Roadway Assets, The Utah Journey*. Available online at: <https://www.fhwa.dot.gov/asset/hif12016/hif12016.pdf>

Utah Department of Transportation (UDOT) 2013. R930. Transportation, Preconstruction. R930-6. Access Management. August 2013.

UDOT 2018a. Statewide Transportation Improvement Program. Final STIP 2019-2024. UDOT Electronic Program Management. Report run on: October 12, 2018.

UDOT 2018b. Development Standards for Washington Parkway from Red Hills Parkway to I-15 Exit 13.

UDOT 2020. Utah Department of Transportation 2020 Standard Specifications for Road and Bridge Construction. July 9, 2020.



Appendix A

Legal Description of Right-of-Way and List of Landowners

[Appendix A will be provided in a future version of the POD.]



Appendix B

Detailed Maps of Proposed Right-of-Way

[Appendix B will be updated as the POD is revised.]



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

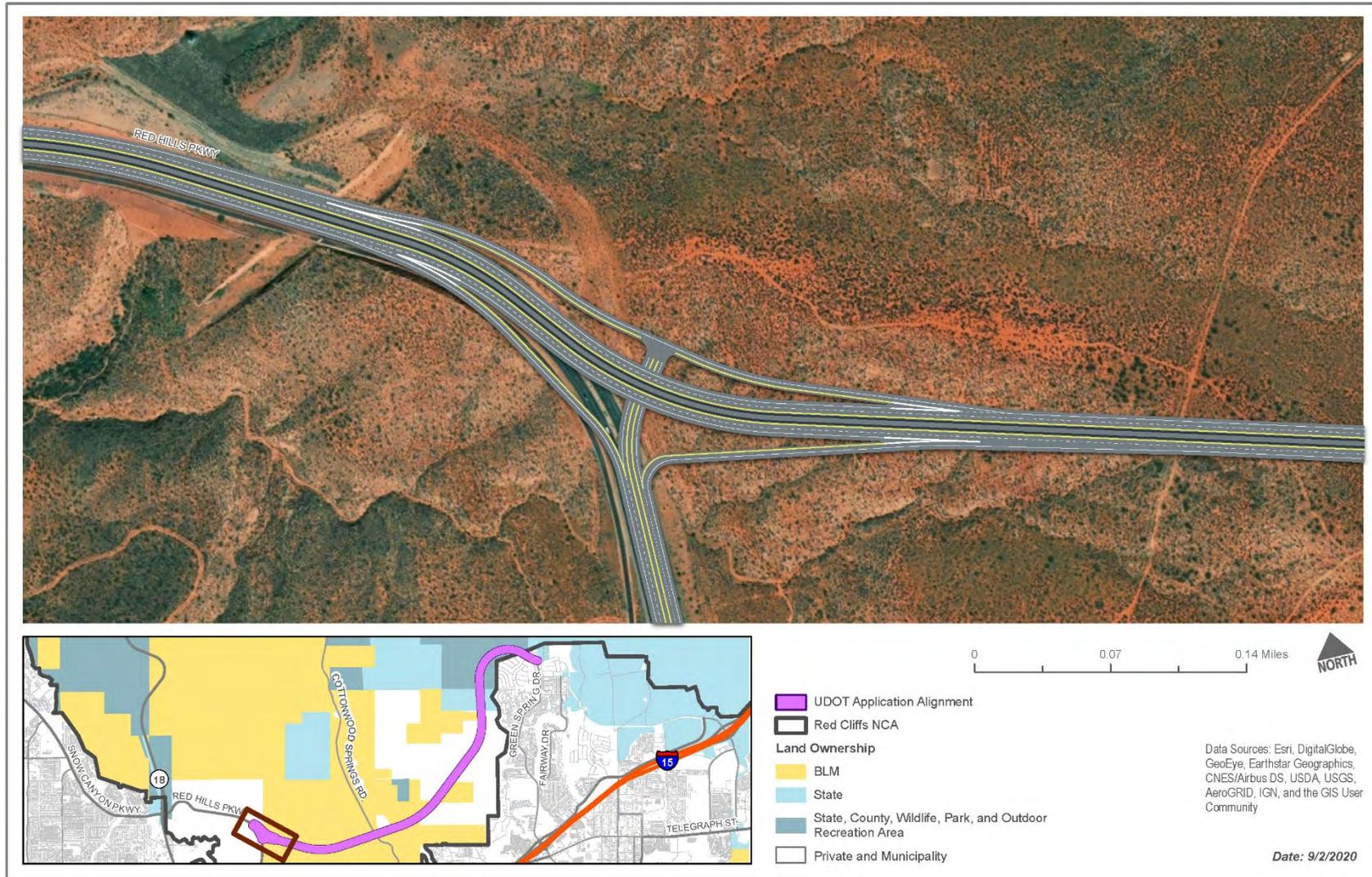


Figure B-1: Proposed Alignment Plan View (1 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

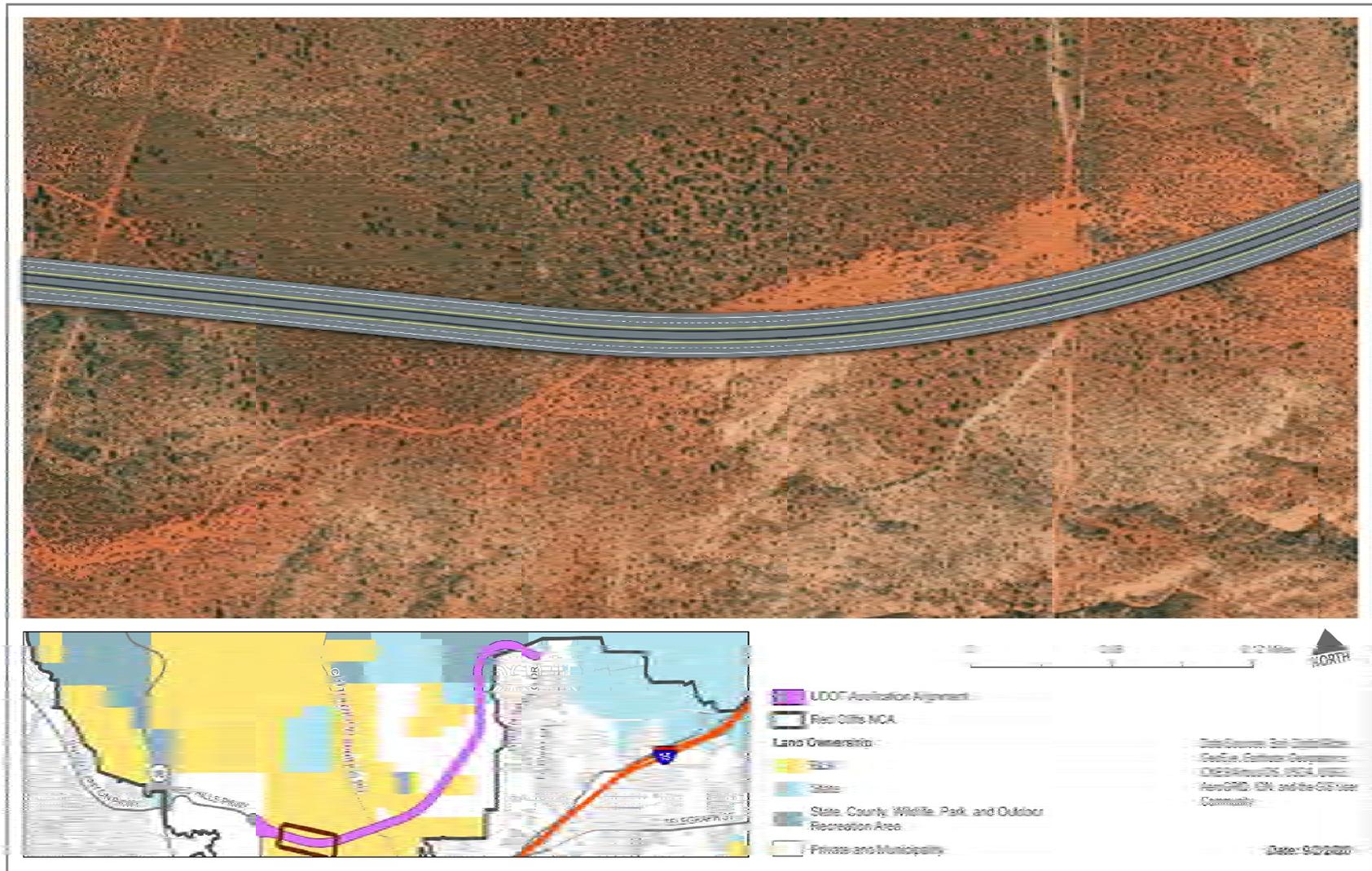


Figure B-2: Proposed Alignment Plan View (2 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

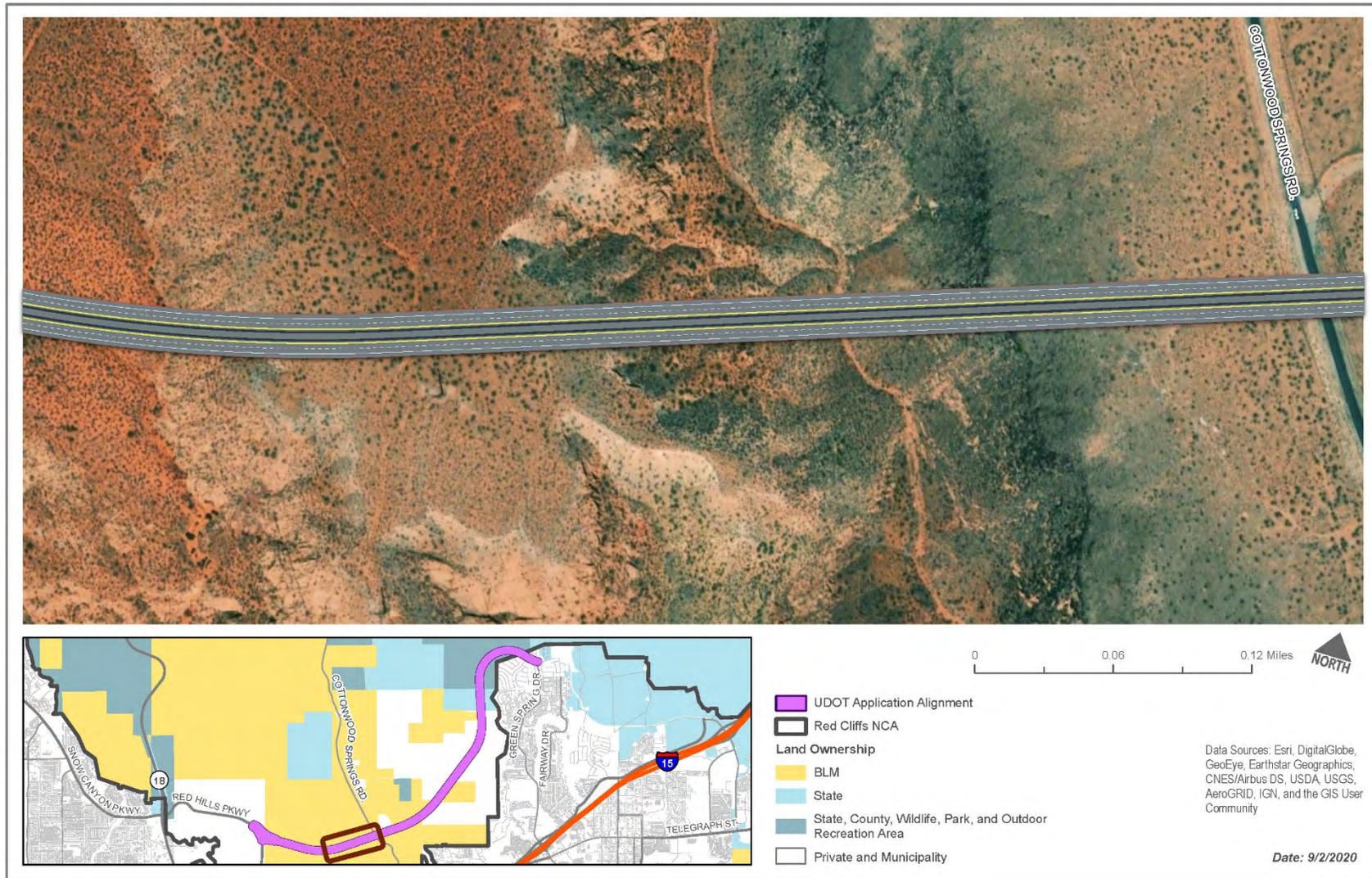


Figure B-3: Proposed Alignment Plan View (3 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

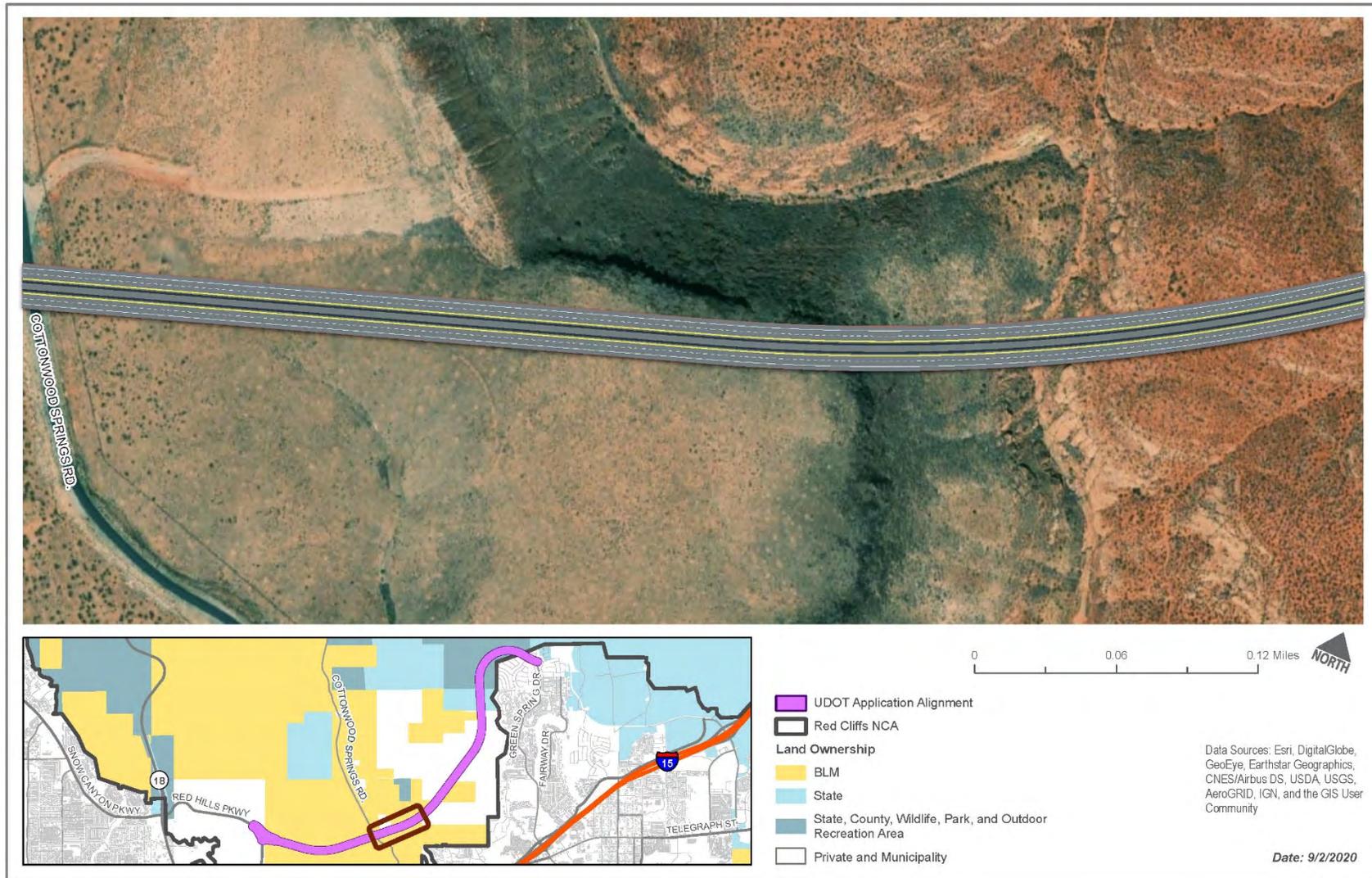


Figure B-4: Proposed Alignment Plan View (4 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

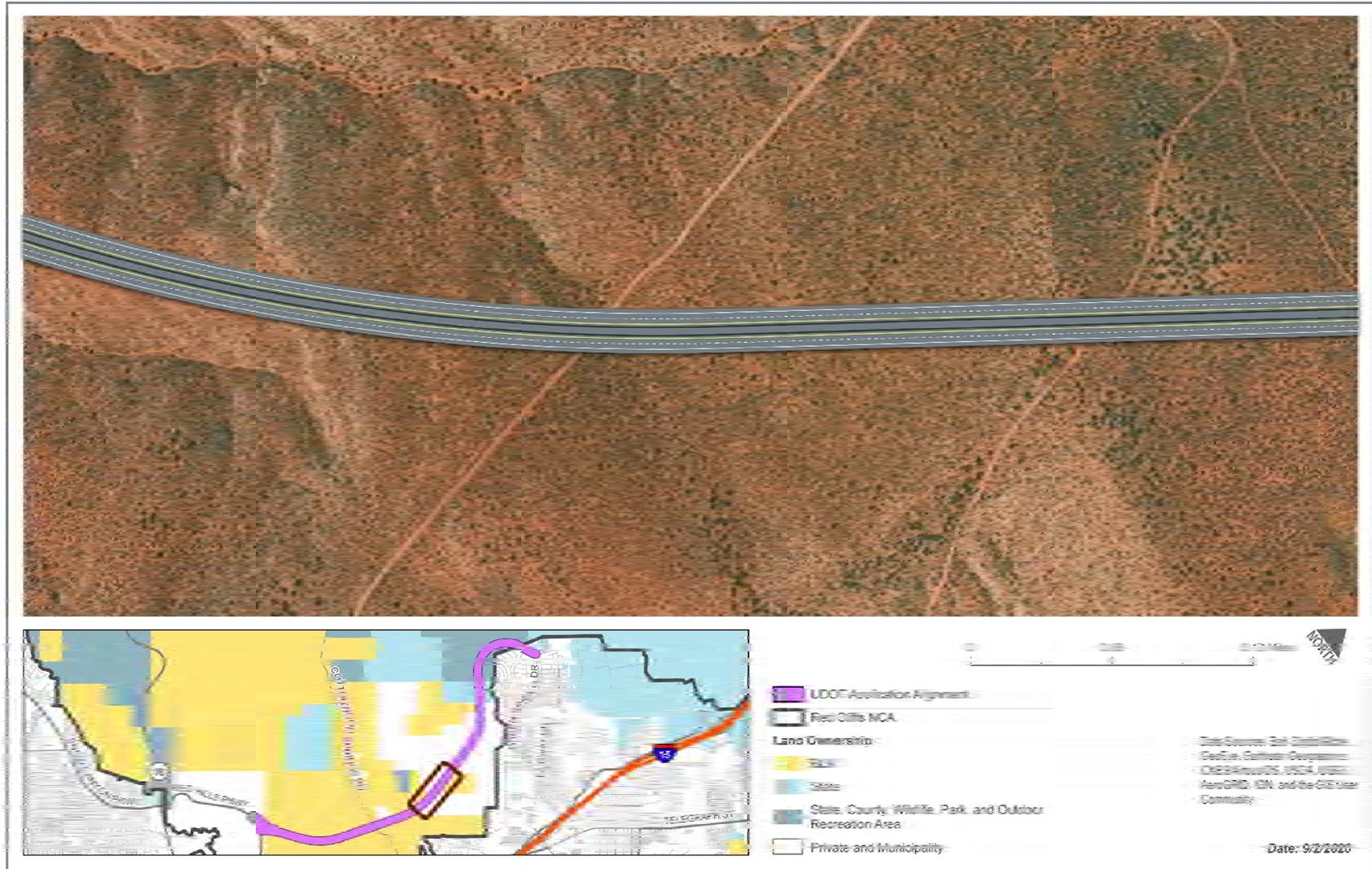


Figure B-5: Proposed Alignment Plan View (5 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development



Figure B-6: Proposed Alignment Plan View (6 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development



Figure B-7: Proposed Alignment Plan View (7 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

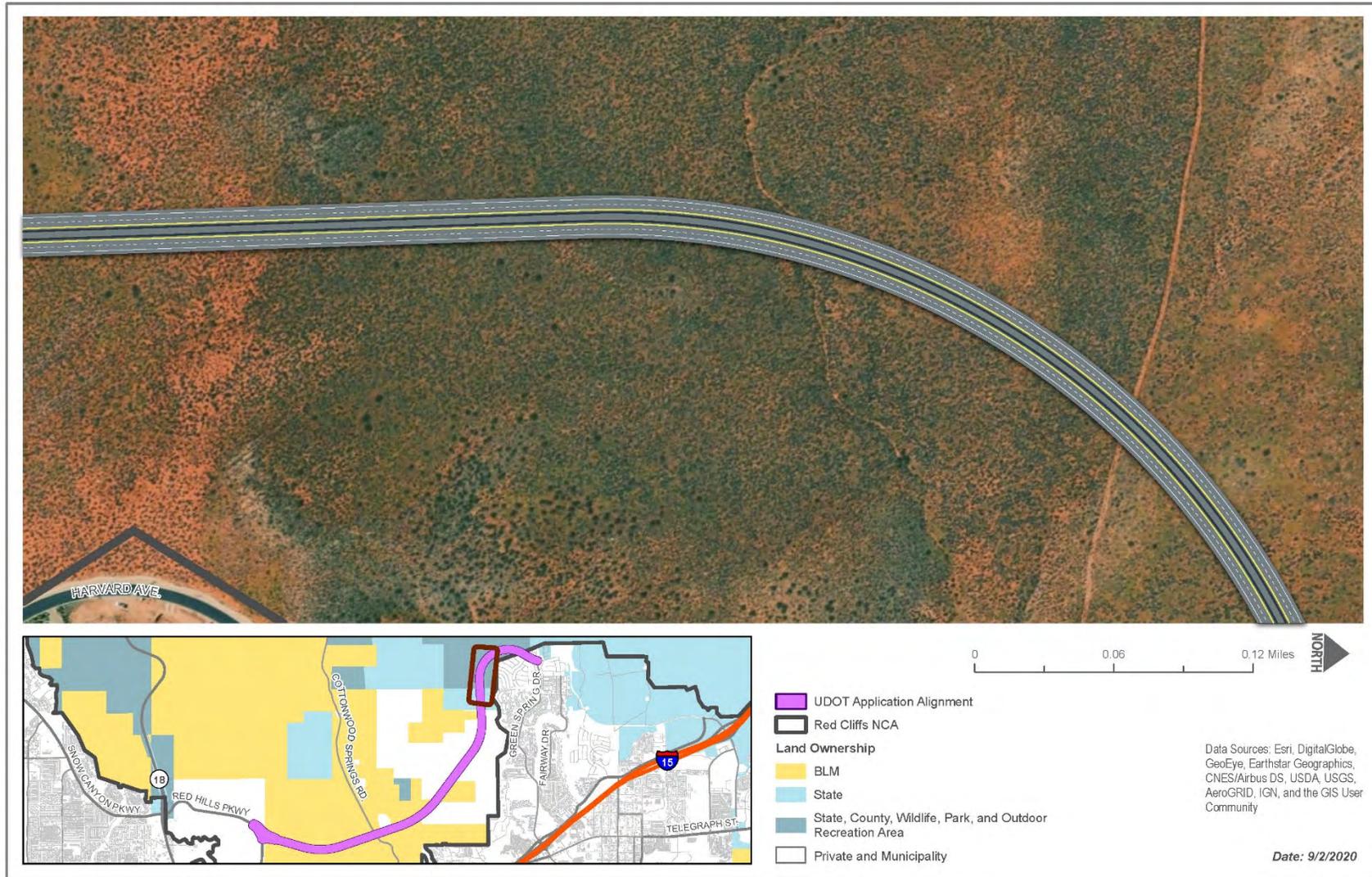


Figure B-8: Proposed Alignment Plan View (8 of 9)



Northern Corridor – Red Hills Parkway to Green Spring Drive Project

Draft Plan of Development

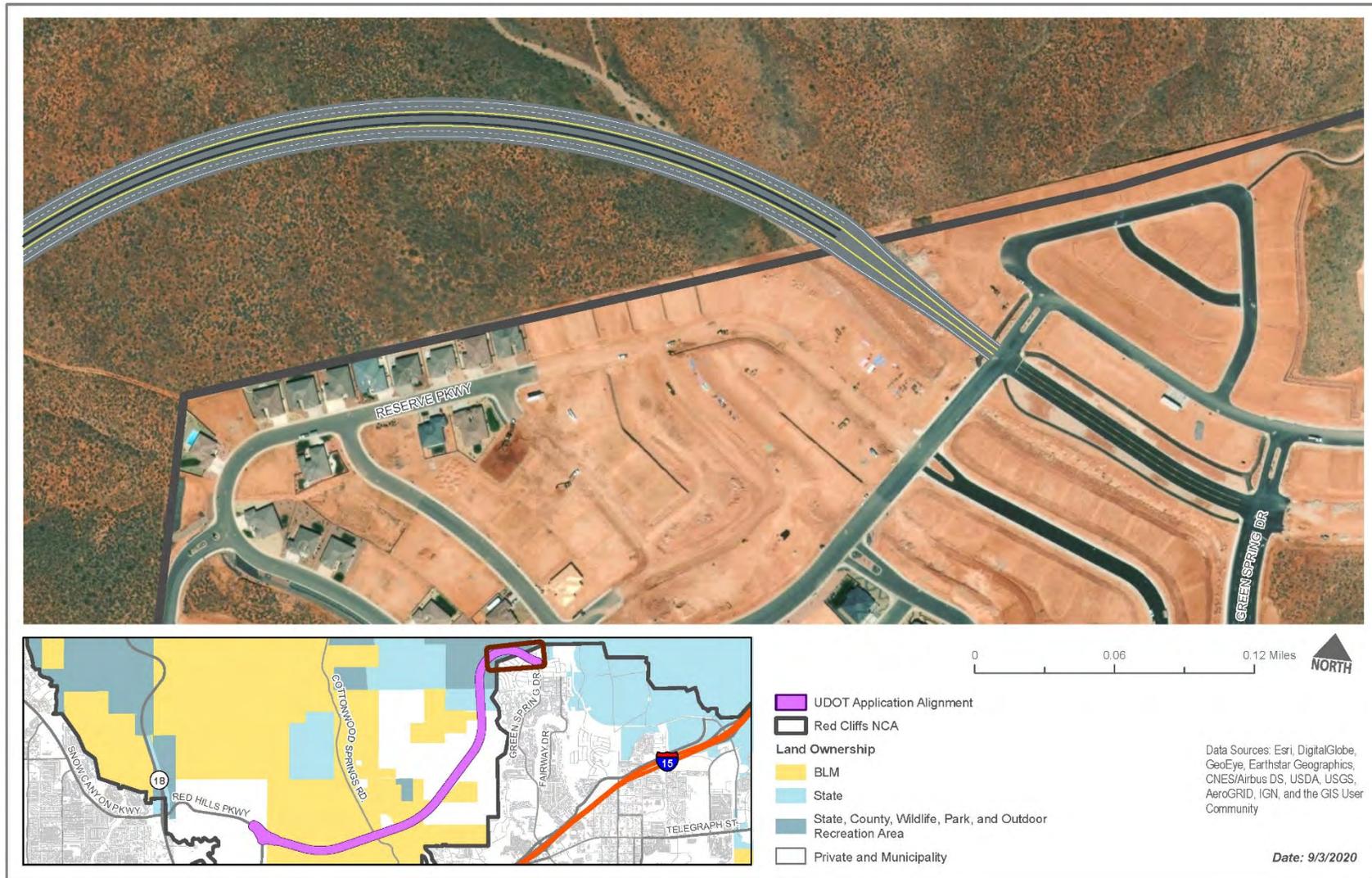


Figure B-9: Proposed Alignment Plan View (9 of 9)

Appendix D: ROW Grant BLM Conditions and Stipulations

BLM CONDITIONS AND STIPULATIONS
UDOT, Northern Corridor Road ROW UTU-93260

General Administrative Stipulations

1. Hereinafter, Holder means any party granted this Right-of-Way (ROW), temporary use permit, or both, its agents, contractors, representatives, or other persons directed by Holder to construct, maintain, repair, restore, relinquish, abandon, modify, rehabilitate, or terminate this ROW, and Holder's successors, or assigns.
2. Prior to any ground disturbing activity, a Notice to Proceed (NTP) shall be required. To obtain a NTP to allow the initiation of construction, UDOT is required to submit a Final Plan of Development (POD) to the BLM. The Final POD may be informed by pedestrian resource surveys and will identify the site-specific ROW needs and disturbance areas, include maps of all proposed facilities, site-specific construction actions, temporary work areas, and any other facilities required for the project. The Final POD will also identify the site-specific application of design features and mitigation measures as required in the Record of Decision issued by the BLM. UDOT will not begin construction until the Final POD is approved by the agency.
3. A NTP will be required prior to undertaking non-emergency work in areas of the ROW that are undisturbed or which have been reclaimed. The Holder shall submit to BLM in writing, 90 days prior to activities the following information: The Company Point of Contact; the BLM serial number or location of the ROW (legal description, GIS data, coordinate location); map or GIS data with access route; a listing of activities proposed (type of work, acreage of treatment area, equipment used, start and end dates. Recent biological data and/or cultural survey data may be required for approval. This pre-approval does not apply to Operation and Maintenance work necessary to reduce the risk of wildfire.
4. The Holder shall comply with all Federal, State, and local laws and regulations whether or not specifically mentioned within this grant.
5. Only those structures identified in the POD are authorized under this grant. New construction must be approved by an amendment to this grant.
6. This grant is issued subject to the holder's compliance with all applicable regulations contained in Title 43 Code of Federal Regulations part 2800.
7. The Holder shall notify the Bureau of Land Management Field Manager 7 days in advance of his/her intent to commence any field operations associated with this right-of-way grant.
8. The Holder agrees not to exclude any person from participating in employment or procurement activities connected with this grant on the grounds of race, creed, color, national origin, and sex, and to ensure against such exclusions.

9. Within 60 days of construction completion, the holder shall submit to the authorized officer, as-built drawings, including Geographic Information System (GIS) data, incorporating all design modifications, field changes, and corrections or deviations during construction for all constructed facilities and access to those facilities.
10. Holder may not construct or make new access roads or travel cross-county by vehicle to reach the grant area unless prior written approval is given by the authorized officer.
11. In case of legal name changes, transfers/sales, or change of address the Holder shall notify the Bureau of Land Management (BLM) authorized officer within 30 calendar days of any such change.
12. This grant is subject to all valid rights existing on the effective date of this grant.
13. The Holder shall protect all survey monuments found within the ROW. Survey monuments include, but are not limited to, General Land Office (GLO) and Bureau of Land Management (BLM) Cadastral Survey Corners, reference corners, witness points, U.S. Coastal and Geodetic benchmarks and triangulation stations, military control monuments, and recognizable public and private civil survey monuments. In the event of the obliteration or disturbance of any survey monument, the Holder shall immediately report the incident in writing to the AO and the respective installing authority. Where GLO or BLM right-of-way monuments or references are obliterated during operations, the Holder shall secure the services of a registered land surveyor or a BLM cadastral surveyor to restore the disturbed monuments or references using the surveying procedures found within the latest edition of the Manual of Surveying Instructions for the Survey of the Public Lands in the United States. The Holder shall record the resulting survey at the appropriate county facility and send a copy to the AO. If any BLM cadastral surveyors or other Federal surveyors are used to restore the disturbed survey monument, the Holder shall be responsible for all survey costs.

Cultural and Paleontological Resources

14. After the highway and associated facilities have been designed to a level where adverse effects to historic properties can be fully evaluated, a Memorandum of Agreement must be prepared, signed by the signatories and interested parties for this project, and implemented by the Holder. The Memorandum of Agreement will include terms and conditions to address the resolution of adverse effects to historic properties, including the approved historic properties Treatment Plan. The Holder shall be responsible for hiring and funding a contractor to develop the Treatment Plan, which must be reviewed by the signatories to the Memorandum of Agreement, including the BLM, State Historic Preservation Officer (SHPO), Tribes, others, and finally approved by the SHPO. All field work associated with data recovery treatments, including those that require excavations, will be completed prior to issuance of a Notice to Proceed.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land 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 and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.
16. If in connection with operations under this authorization, any human remains, funerary objects, sacred objects or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (P.L. 101-601; 104 Stat. 3048; 25 U.S.C. 3001) are discovered, the holder shall stop operations in the immediate area of the discovery, protect the remains and objects, and immediately notify the authorized officer. The holder shall continue to protect the immediate area of the discovery until notified by the authorized officer that operations may resume.

Environmental Protection

17. The Holder shall promptly remove and dispose of all litter and debris, caused by its activities to the satisfaction of the authorized officer.
18. Access with motorized vehicles/equipment must be kept to existing or approved constructed routes, in accordance with the Plan of Development.
19. Stormwater prevention controls will be maintained until surrounding disturbed areas have met final stabilization measures.
20. Avoid construction activities causing sound levels to exceed 95 decibels in daytime (7am to 9pm) or 55 dba in nighttime (9 pm to 7 am) within 10 feet of the nearest noise receptor.

Fire Prevention and Mitigation

21. The Holder or its contractors will notify the BLM of any fires and comply with all rules and regulations administered by the BLM concerning the use, prevention and suppression of fires on Federal lands, including any fire prevention orders that may be in effect at the time of the permitted activity. The Holder or its contractors may be held liable for the cost of fire suppression, stabilization and rehabilitation. In the event of a fire, personal safety will be the first priority of the Holder or its contractors.
22. Construction staff will adhere to BLM fire prevention and suppression requirements; all construction personnel will have fire tools and extinguishers available at all times.

Hazardous Materials and Waste

23. Local, State, and Federal laws and regulations related to the use, handling, storage, transportation, and disposal of hazardous materials will be followed.

- No equipment oil or fuel will be drained on the ground; oils or chemicals will be hauled to an approved site for disposal.
24. All toxic substances (e.g., oil, gas, antifreeze) will be stored in waterproof closed containers at all times. Accidental spills will be reported and cleaned up immediately.
 25. Refuse and trash, including stakes and flags, will be removed and disposed of properly.
 26. Construction sites, staging areas, and access roads will be kept orderly during construction.
 27. Portable toilets will be used on-site and maintained on a regular schedule.
 28. A hazardous materials spill kit that is appropriate for the solvents involved in operation and maintenance of vehicles and machinery used during the Project will be kept on-site during construction.
 29. The BLM and other regulatory agencies will be contacted as soon as possible in the event of a fuel/oil or hazardous material spill. Actions will be taken to minimize the amount and spread of the spill material, including the use of straw bale plugs, earthen berms, and the use of absorbent materials. If necessary, soil remediation will be conducted, including the removal of contaminated soils to an approved facility and soil sampling to verify successful site remediation.

Public Health and Safety

30. The Holder agrees to indemnify the United States against any liability arising from the release of any hazardous 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.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
31. The holder shall provide for the safety of the public entering the right-of-way consistent with applicable law.
32. Signs will be placed on roads and trails where needed to warn recreational users of any hazards.
33. Project traffic control will be coordinated with local emergency and law enforcement agencies. Emergency maintenance will be provided 7-days a week, 24-hours a day until completion of the project. Contact information will be provided.
34. All new roads will be constructed to a safe and appropriate standard, to accommodate intended vehicle use. Roads will follow the contour of the land where practical.

Soils and Erosion Control

35. No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of four inches deep, the soil shall be deemed too wet to adequately support construction equipment.
36. The holder shall provide satisfactory reclamation of all sites disturbed by the activity. This may include installation of additional erosion control devices and seeding at the discretion of the authorized officer.

Vegetation and Weeds

37. UDOT shall submit a rehabilitation plan to BLM for approval, including a weed control plan. An area is considered to be satisfactorily reclaimed when all disturbed areas have been re-contoured to blend with the natural topography, erosion has been stabilized, and an acceptable vegetative cover has been established.
38. All equipment will be cleaned of soils, seeds, vegetation matter, and other debris prior to entering or re-entering the Project area.
39. The Holder will follow BLM regulations pertaining to control of noxious weeds; use of herbicides will comply with BLM requirements.
40. The Holder shall remove only the minimum amount of vegetation necessary for the construction of structures and facilities. Where possible and if needed, topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate regrowth of vegetation. Native vegetation shall be retained in and around project activity areas.
41. During construction activities UDOT will protect trees and other vegetation designated to remain.
42. Where linear disturbance is proposed edges of vegetation shall be feathered to avoid long linear edges of habitat and allow for greater habitat complexity for wildlife.
43. Site clearing will be conducted in accordance with BLM BMPs and UDOT specifications, including vegetation removal and topsoil stockpiling.
44. Disturbance of natural vegetation within the ROW will be limited to the extent necessary to complete the Project and to reduce the impact to native plant species and ground nesting pollinators.
45. The top soils within the disturbance area of the proposed ROW will be salvaged, stockpiled, and redistributed along the cut-and-fill slopes. The contractor will remove these soils after clearing and grubbing activities but prior to roadway excavation or other use of the site.
46. Areas of disturbance within the ROW, but outside of the road itself, will be revegetated as determined by the BLM. These areas would be established and maintained in compliance with UDOT clear zone requirements.

47. The Holder shall be responsible for weed control on disturbed areas within the limits of the right-of-way. The Holder is responsible for consultation with the authorized officer and/or local authorities for acceptable weed control methods (within limits imposed in the grant stipulations).
48. Prior to the import of borrow or fill from outside the ROWs, the source material location will be inspected by a qualified biologist or weed scientist to ensure it is free of noxious weeds or specifically identified in the agency-approved Weed Management Plan for the project.
49. Any straw or other organic products used during construction, restoration, operations, maintenance, or for stabilization will be certified weed free. If certified weed free products are unavailable, the Holder shall coordinate with the BLM to identify other acceptable materials.
50. Construction vehicles and equipment will be cleaned with a high-pressure washer or high-pressure air and wire brush prior to arrival on the ROWs and prior to departure from areas of known noxious weed infestations to minimize the introduction or spread of noxious weeds. All water and material at the vehicle cleaning stations will be contained, collected, and hauled off site for disposal at an approved disposal site.
51. UDOT or its certified licensed contractor will submit a request for a Pesticide Use Proposal to the BLM and other applicable agencies prior to the planned application of any herbicide and a Pesticide Application Record after the planned application of the herbicide. The Pesticide Use Proposal will identify areas of planned herbicide application. No herbicide mixing or rinsing of containers or application equipment will occur within 100 ft. of natural water sources (i.e., lakes, streams, or springs). An annual report on herbicide application on public lands within the ROWs will be provided to applicable agencies.
52. Surface-disturbing activities will be avoided within 100 meters of occupied BLM-sensitive plant species habitat wherever possible and where geography and other resource concerns allow. Fragmentation of existing populations and identified areas of suitable habitat will be avoided wherever possible, unless authorized by the BLM and USFWS. In such instances, a monitoring plan approved by the USFWS will be implemented for the duration of the project to assess impacts to the plant population or seed bank. If detrimental effects are detected through monitoring, corrective action will be taken through adaptive management.

Visual Resources

53. The Holder shall paint all facilities a color that best allows the facility to blend with the background.
54. Impacts to dark night skies will be prevented or reduced through the following mitigation measures: directing lighting downward, using shield lights, using minimum illumination necessary, using less prone lamps, using circuit timers and motion sensors.