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Bureau of Land Management

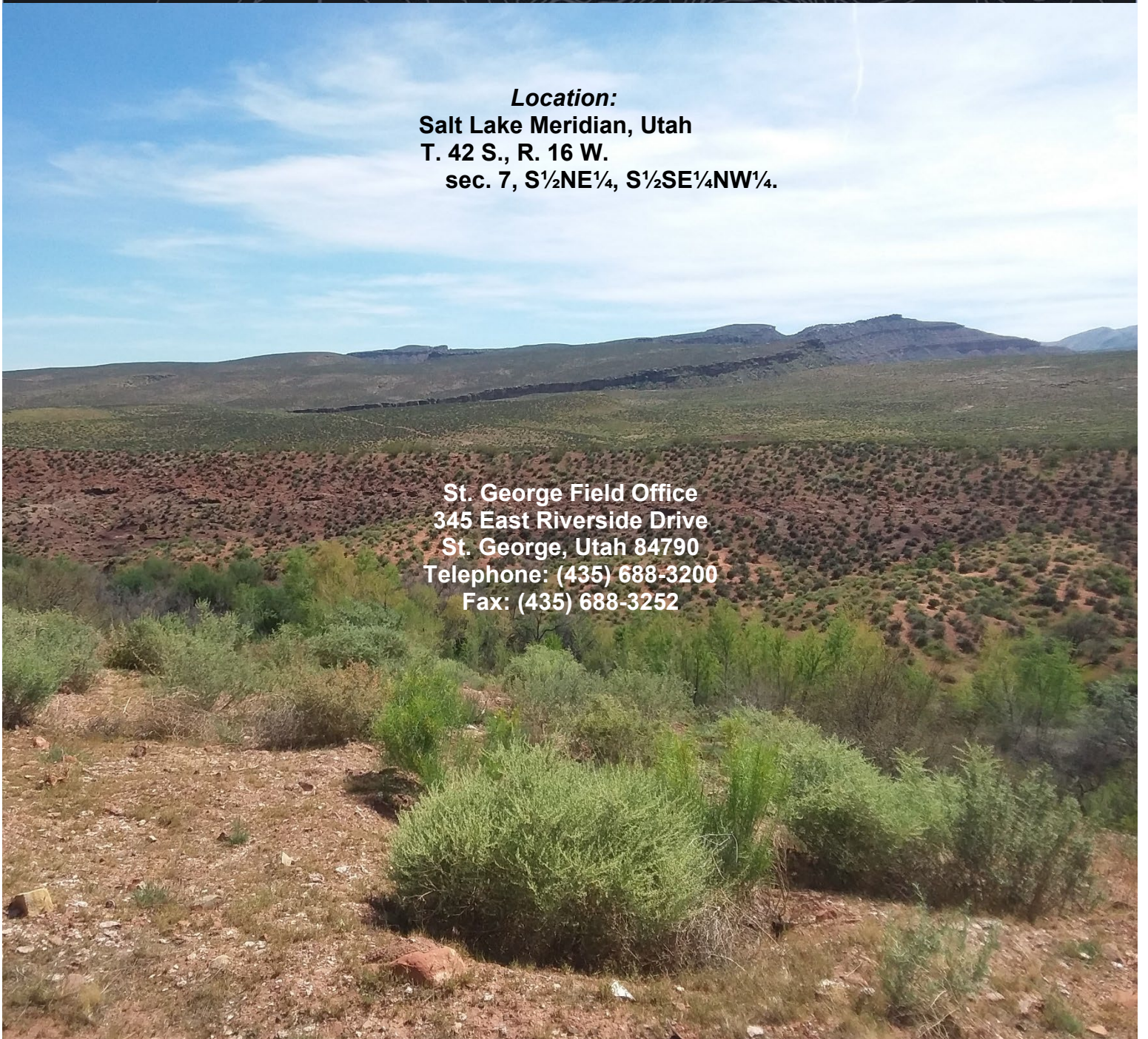
# Ivins City Recreation, Public Works, and Cemetery Project Proposed Recreation and Public Purposes Act Lease

Environmental Assessment

DOI-BLM-UT-C030-2021-009-EA

***Location:***  
**Salt Lake Meridian, Utah**  
**T. 42 S., R. 16 W.**  
**sec. 7, S $\frac{1}{2}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ .**

**St. George Field Office**  
**345 East Riverside Drive**  
**St. George, Utah 84790**  
**Telephone: (435) 688-3200**  
**Fax: (435) 688-3252**



## Table of Contents

<b>Chapter 1.0. Introduction.....</b>	<b>1</b>
1.1. Summary of Proposed Project .....	1
1.2. Purpose and Need .....	4
1.3. Decision to be Made .....	4
1.4. Land Use Plan Conformance .....	4
1.5. Relationship to Statutes, Regulations, Other National Environmental Policy Act Documents .....	5
1.6. Issues Identified for Analysis .....	7
1.7. Issues Identified but Eliminated from Further Analysis .....	8
<b>Chapter 2.0. Proposed Action And No Action Alternative .....</b>	<b>9</b>
2.1. No Action Alternative .....	9
2.2. Proposed Action .....	9
2.3. Alternatives Considered but not Analyzed in Detail (if applicable).....	14
<b>Chapter 3.0. Affected Environment and Environmental Consequences .....</b>	<b>15</b>
3.1. Introduction .....	15
3.2. General Setting .....	15
3.3. How Would Cultural Resources and Native American Religious Concerns Be Affected by the Proposed Action?.....	17
3.4. How Would Surface Disturbance from Construction of the Proposed Project Affect Soils and Erosion Potential? .....	19
3.5. How Would the Proposed Action Affect Fish and Wildlife Species' Populations and Habitats, Including Bureau of Land Management Sensitive Species? How Would the Proposed Action Affect Migratory Birds That May Pass through or Use the Project Area? .....	21
3.6. How Would the Proposed Action Affect the Mojave Desert Tortoise ( <i>Gopherus agassizii</i> ) and Its Habitat? .....	24
3.7. How Would Surface Disturbance from Construction of the Proposed Project Affect Native Vegetation? How Would the Proposed Action Affect the Spread of Noxious Weeds and Invasive Species? .....	27
3.8. How Many Animal Unit Months (AUMs) Would Be Affected by the Proposed Action? How Would Existing Livestock Management Be Affected?.....	32
3.9. How Would the Proposed Action Affect Recreational Use and Opportunities, Including Changes to Existing Trails, within the Santa Clara River Reserve?.....	35
3.10. How Would Development of the Proposed Project Change the Existing Visual Character of the Landscape? .....	38
<b>Chapter 4.0. Consultation and Coordination .....</b>	<b>44</b>
4.1. Summary of Consultation and Coordination .....	44
4.2. Summary of Public Participation.....	45
4.3. List of Preparers.....	45
<b>Chapter 5.0. Literature Cited .....</b>	<b>47</b>

**Appendices**

- Appendix A. Letters of Support
- Appendix B. Bureau of Land Management Interdisciplinary Team Checklist
- Appendix C. Mojave Desert Tortoise Conservation Measures (to be added when finalized)
- Appendix D. State Historic Preservation Office Concurrence Letters
- Appendix E. Visual Contrast Rating Worksheets

**Figures**

Figure 1-1. Project area location. ....	2
Figure 1-2. Interior of the project area with Ivins City in the background. ....	3
Figure 2-1. Preliminary conceptual plan for the project (Ivins City 2021). ....	10
Figure 3-1. Survey results for live desert tortoises and sign. ....	25
Figure 3-2. Southwest Regional Gap Analysis Project (SWReGAP) land cover types in the analysis area. ....	29
Figure 3-3. Representative vegetative cover in the central part of the project area, view facing south. ....	30
Figure 3-4. Land Hill grazing allotment. ....	33
Figure 3-5. Existing Santa Clara River Reserve trails in the project area. ....	36
Figure 3-6. Visual Resource Management classes and key observation point locations. ....	40
Figure 3-7. Views from the key observation point locations. ....	43

**Tables**

Table 2-1. Construction Schedule. ....	12
Table 2-2. Estimated Permanent Surface Disturbance on BLM-Administered Land. ....	12
Table 3-1. Key Observation Points. ....	41
Table 4-1. List of Agencies and Organizations Consulted. ....	44
Table 4-2. Bureau of Land Management St. George Field Office Preparers and Reviewers. ....	45
Table 4-3. SWCA Environmental Consultants Preparers and Reviewers. ....	46

## **CHAPTER 1.0. INTRODUCTION**

### **1.1. SUMMARY OF PROPOSED PROJECT**

Ivins City (the Applicant) filed a Recreation and Public Purposes (R&PP) Act application with the Bureau of Land Management (BLM) St. George Field Office in September 2018. The application is for a lease with an option to patent under the R&PP Act for an outdoor recreation area, a public works facility and yard, and a public city cemetery (project). The outdoor recreation area would likely contain a regional park, a disc golf course, a junior mountain biking trail, and a trail system that connects to existing trails. The public works facility and yard would consist of an office, a fleet maintenance facility, various storage areas, covered employee parking, and a public garbage area. A communications tower would be developed near the public works facility and yard in the southwest corner of the R&PP Act lease area. The communications tower is a connected action that is being applied for under a separate communication site lease rather than the R&PP Act lease. The city cemetery would include burial areas, an interior roadway, grass, and landscaping.

The land proposed for lease is located adjacent to Ivins City in Washington County, Utah, within the BLM-administered Santa Clara River Reserve. A map showing the affected area of the Santa Clara River Reserve can be found in Section 3.9. The project area for this environmental assessment (EA) consists of approximately 101.5 acres of BLM-administered land (the BLM lease area [i.e., the R&PP Act lease area]) plus 25.2 acres of private land for the development of an access road (the access road area) (Figure 1-1).

The R&PP Act (68 Statute 173; 43 United States Code [USC] 869 et seq.) was enacted by Congress in 1954. Administered by the BLM, the R&PP Act authorizes the sale or lease of public lands for recreational or public purposes to state and local governments or to qualified nonprofit organizations. This EA has been prepared to analyze and disclose the potential effects of granting the R&PP Act lease (and associated communication site) requested by the Applicant.

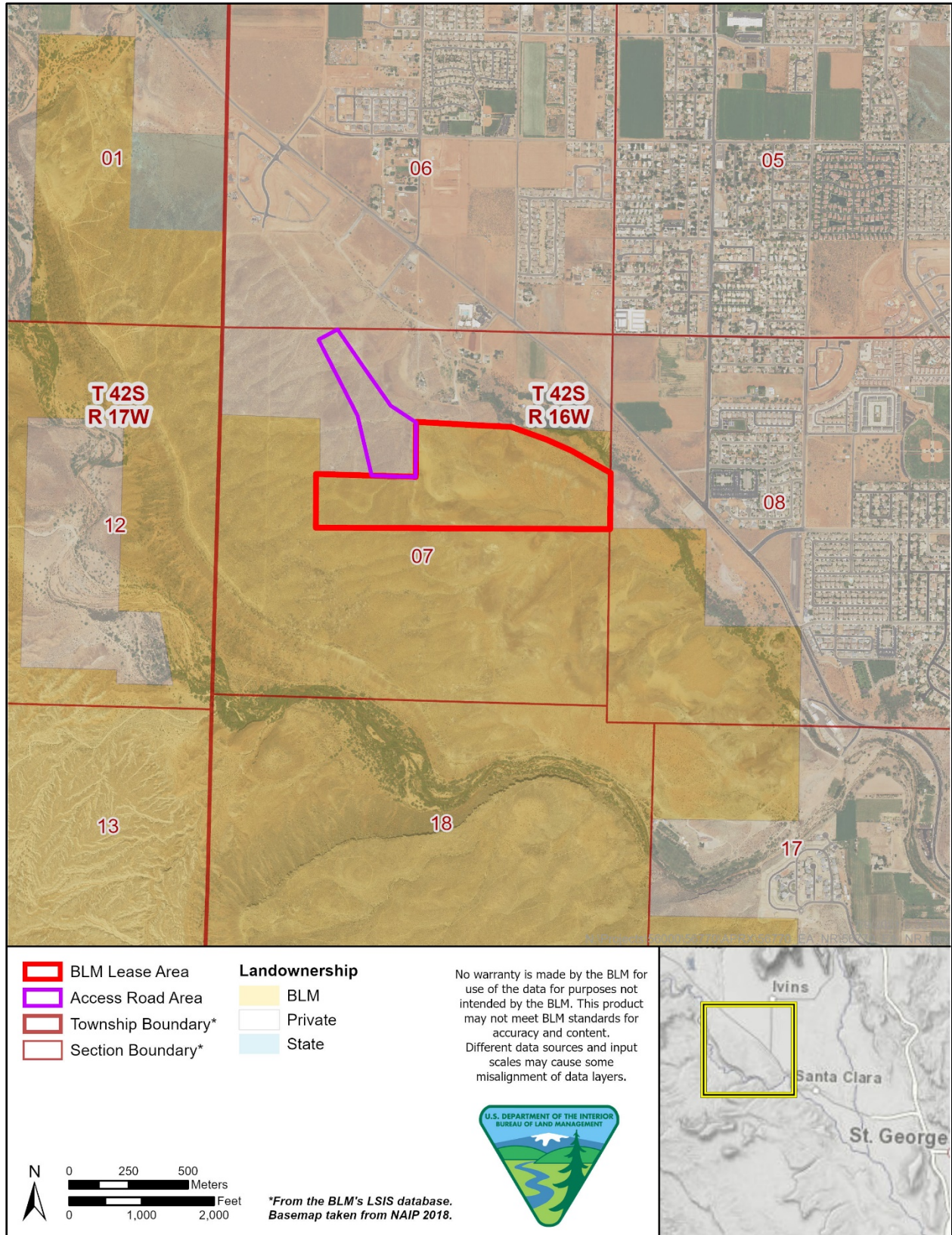


Figure 1-1. Project area location.

### **1.1.1. Background**

The Santa Clara River Reserve, which contains the project area and is approximately 9,014 acres in size, has more than 58 miles of trails for equestrians, trail runners, hikers, mountain bikers, and motorized use. The *Santa Clara River Reserve Recreation and Open Space Management Plan* (BLM et al. 2005), a community-based planning document, discusses common goals and management objectives for the area. The boundaries of the Santa Clara River Reserve were established through a Cooperative Management Agreement signed by the BLM and the city councils of Ivins City and the City of Santa Clara in 1997 (amended in 2003 to reconfigure the public land base). Boundaries were selected based on community priorities to protect sensitive resources, preserve open space, and enhance recreation opportunities. Santa Clara River Reserve maps show a developed pedestrian trail (the Cholla Trail) crossing the project area (BLM et al. 2005).

Ivins City has grown significantly since 1970, with annual growth rates of 10% to 16% between 1970 and 2000 (Sunrise Engineering 2016). From April 1, 2010, to July 1, 2019, the population of Ivins City grew 36% (for comparison, Utah’s population grew 16% during this time) (U.S. Census Bureau 2019). Population increases have led to a corresponding increase in the demand for outdoor recreation facilities such as parks and trails. The overall region has also increasingly become a destination for out-of-town visitors who use the parks, trails, and other amenities.

The proposed outdoor recreation area would service high-density residential areas of Ivins City that typically have limited open space for residents. The project would also include construction of a trail system for hiking, mountain biking, and equestrian use, which would connect to the Cholla Trail. A new public trailhead would be developed for the existing Cholla Trail, which currently has limited access.

Ivins City anticipates the need to expand its existing public works facility within the next 5 years. It does not have enough property at its current location to do so. The R&PP Act lease would allow for the development of a new facility and for future expansions. The current city cemetery is expected to reach capacity within 5 to 10 years. The new cemetery would provide additional space for burials. Figure 1-2 provides an overview of the landscape in the project area.



**Figure 1-2. Interior of the project area with Ivins City in the background.**

## **1.2. PURPOSE AND NEED**

The purpose of the federal action is to respond to the Applicant's application for an R&PP Act lease with an option to patent on BLM-administered public lands near Ivins City, Washington County, for an outdoor recreation area, a public works facility and yard, and a public city cemetery. A second purpose of the federal action is to respond to the Applicant's application for a communication site lease right-of-way (ROW) within the R&PP Act lease area. The need for the Proposed Action is established by the BLM's statutory and regulatory responsibilities under the R&PP Act (43 CFR 2740) and Title II of the Federal Land Policy and Management Act of 1976 (FLPMA) (43 CFR 2910).

## **1.3. DECISION TO BE MADE**

The decision the BLM will make based on this environmental analysis is whether or not to issue the proposed R&PP Act lease and, if a lease is granted, under what terms and conditions. The BLM will also decide whether or not to issue the proposed communication site ROW, and if so, under what terms and conditions.

## **1.4. LAND USE PLAN CONFORMANCE**

The *St. George Field Office Record of Decision and Resource Management Plan (ROD/RMP)* (BLM 1999) contains management direction for lands and realty actions, ROW, special-status animal species, and recreation that would apply to the Proposed Action.

Although the St. George Field Office ROD/RMP does not expressly include decisions relating to R&PP Act leases in the project area, decisions LD-01, LD-02, and LD-06 provide overall objectives for lands and realty actions:

LD-01: . . . Lease or transfer of lands under the Recreation and Public Purposes Act shall occur where such is determined to be the most appropriate method for achieving desired public and municipal purposes. (BLM 1999:2.1)

LD-02: Land ownership changes will be considered on lands not specifically identified in this Plan for disposal or acquisition if the changes are in accordance with resource management objectives and other Plan decisions and will accomplish one or more of the following criteria:

- a) Such changes are determined to be in the public interest and will accommodate the needs of local and state governments, including needs for the economy, public purposes, and community growth.
- c) Such changes ensure public access to lands in areas where access is needed and cannot otherwise be obtained. (BLM 1999:2.1, 2.2)

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. 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. (BLM 1999:2.2)

These objectives provide general guidance for lands and realty actions. The proposed project is consistent with these objectives and is considered to be in conformance with the St. George Field Office ROD/RMP because it achieves desired public and municipal purposes, is in the public interest (e.g., it meets recreation needs, expands cemetery space, and improves public works services), accommodates the needs of the local government (Ivins City), and allows for economic and community growth through additional recreational access, an improved public works facility, and increased cemetery space. The proposed project also ensures access to public lands where access is needed through the addition of new trailheads.

Further, the communication site ROW element of the Proposed Action is considered to be in conformance with the St. George Field Office ROD/RMP because the following decision expressly allows for consideration of ROWs:

LD-12: Application for new rights-of-way on public lands will be considered and analyzed on a case-by-case basis. Proposals will be reviewed for consistency with planning decisions and evaluated under requirements of the National Environmental Policy Act and other applicable laws for resource protection. (BLM 1999:2.3)

Decision FW-13 of the St. George Field Office ROD/RMP provides specific guidance for special-status animal species:

FW-13: Public lands supporting federally-listed or sensitive animal species will be retained in public ownership unless exchange or transfer will result in acquisition of better habitat for the same species or provide for suitable management by another agency or qualified organization. Habitats for such species may be acquired where logical to consolidate management areas and where BLM or qualified partners have the resources needed to effectively manage for the intended purpose. (BLM 1999:2.26)

The Proposed Action would be consistent with this objective. If the Applicant chooses to exercise the option to patent for the portion of the project area where Mojave desert tortoises (*Gopherus agassizii*) have been identified (see Section 3.6), Ivins City would acquire better desert tortoise habitat elsewhere to satisfy the conditions of FW-13.

Recreation objectives in the St. George Field Office ROD/RMP apply to the Proposed Action:

Recreation Objectives: BLM's objective for recreation management will be to provide an array of quality recreation experiences within the agency's capability and logical recreation niche to meet the reasonable needs and expectations of local residents and visitors from outside the area. (BLM 1999:2.37)

The Proposed Action is consistent with this objective and is considered to be in conformance with the St. George Field Office ROD/RMP because it provides additional recreational experiences for local residents and visitors.

## **1.5. RELATIONSHIP TO STATUTES, REGULATIONS, OTHER NATIONAL ENVIRONMENTAL POLICY ACT DOCUMENTS**

The Proposed Action is consistent with federal laws, implementing regulations, and BLM policy, including the requirements of Title II of the FLPMA (43 USC 1716) and the R&PP Act (43 USC 869).

The Proposed Action is also consistent with the *Ivins City General Plan* (Ivins City 2015). The Ivins City General Plan identifies parks and recreation as being important aspects of a healthy community, and its vision includes encouraging activities and recreational opportunities to serve the needs of the community, attract tourism, and promote economic development. Policies for parks and recreation in the Ivins City



General Plan include increasing total developed parkland; encouraging new development to provide neighborhood park facilities that are easily accessible and available for all residents; and developing and maintaining a trail system to connect neighborhoods to parks, open spaces, recreation, and other community facilities. Policies in the Ivins City General Plan also include supporting and funding Santa Clara River Reserve trails and protections (Ivins City 2015).

The Proposed Action is also consistent with the *Santa Clara River Reserve Recreation and Open Space Management Plan* (BLM et al. 2005:33), which states that reserve lands “will remain available for communities or other public entities under R&PP or ROW application in accordance with guidance established under the St. George RMP. Facilities for communities such as parks, museums, and paved pathway systems would complement the SCRR mission.” The project area has been identified in the plan as public land that is suitable for an R&PP Act lease or sale for compatible activity (BLM et al. 2005). Although the public works facility and yard is not the type of facility that necessarily complements the reserve’s mission, it serves a public purpose through construction and maintenance of infrastructure, including infrastructure needed for the reserve (e.g., parking lots, streets, utilities). In addition, inclusion of the public works facility and yard in the R&PP Act lease would accommodate the needs of local government and respond to community growth issues. The proposed R&PP Act lease would also help meet the reserve’s goals of developing a trail network responsive to various user groups and developing trailhead staging areas with parking (BLM et al. 2005).

There are five management zones in the Santa Clara River Reserve. The project area is in Zone 1, Urban Recreation. Zone 1 encompasses areas that are immediately adjacent to primary roads and communities. In terms of human-made development, a high amount of change is acceptable in this zone (e.g., paved trailheads, paved/unpaved trails, buildings, restrooms, fences, kiosks, signs, landscaping, and dam structures). High levels of visitation and high densities of diverse groups are expected in Zone 1, along with a high level of management (BLM et al. 2005). The general goal for this zone is a highly interactive recreation and educational experience. The proposed project would generally be consistent with Zone 1 characteristics.

Mayor Rick Rosenberg of the City of Santa Clara signed a letter of support for the Applicant’s R&PP Act application on September 10, 2018. The Washington County Commission also signed a letter of support for the R&PP Act application on August 29, 2018. The letters of support can be found in Appendix A.

Required elements of specific laws have been considered by the BLM Interdisciplinary (ID) Team, as documented in the ID Team Checklist in Appendix B.

### **1.5.1. Visual Resource Regulatory Framework**

#### ***1.5.1.1. St. George Field Office Record of Decision/Resource Management Plan Visual Resource Direction***

The St. George Field Office ROD/RMP has the following project-associated direction regarding the management of visual resources:

VR-01: BLM will apply Visual Resource Management (VRM) Class Objectives described in Appendix 5 to public lands in the county. The class objectives will guide decisionmakers in evaluating potential impacts from land use proposals on the public lands and in designing alternatives or measures that will eliminate or reduce undesirable impacts on the quality of the visual resource. (BLM 1999:2.51)

VR-02: The classifications reflect the results of scenic quality inventories upgraded in those locations where BLM deemed it necessary to retain desirable landscape character and achieve the broad management objectives identified previously. BLM managers may use discretion in applying the standards to various land use proposals and grant exceptions where warranted by the public interest or valid development rights, such as those conveyed under the mining and mineral leasing laws. Within excepted areas, BLM will apply appropriate mitigating measures to authorized actions to achieve the lowest feasible level of impact. (BLM 1999:2.51)

Current management objectives for visual resources in the project area are prescribed in the St. George Field Office ROD/RMP (BLM 1999). The project area is on VRM Class III lands.

### ***1.5.1.2. Santa Clara River Reserve Recreation and Open Space Management Plan Visual Resource Direction***

The Santa Clara River Reserve has five management zones (BLM et al. 2005). Each of the zones has a description of the intended visitor experience, including the zone's level of visual sensitivity. The project area is in Zone 1, Urban Recreation Management Zone, which is described as follows:

High level of sensitivity: Facilities should complement the existing environment and community. A design image plan and sign plan will be developed to guide the overall look of the built environment of the Santa Clara River Reserve. This plan will be strictly followed in this zone. (BLM et al. 2005:20)

## **1.6. ISSUES IDENTIFIED FOR ANALYSIS**

The BLM ID Team screened the Proposed Action and completed an ID Team Checklist (see Appendix B) to identify resource values and land uses that could be affected by implementation of the Proposed Action and that would therefore require analysis in the EA.

The following potential issues were identified by the BLM ID Team on the ID Team Checklist (see Appendix B) during the internal scoping process:

- **Cultural resources and Native American religious concerns:** How would cultural resources and Native American religious concerns be affected by the Proposed Action?
- **Soils:** How would surface disturbance from construction of the proposed project affect soils and erosion potential?
- **Fish and wildlife (excluding U.S. Fish and Wildlife Service [USFWS] designated species) and migratory birds:** How would the Proposed Action affect fish and wildlife species' populations and habitats, including BLM Sensitive Species? How would the Proposed Action affect migratory birds that may pass through or use the project area?
- **Threatened, endangered, or candidate animal species:** How would the Proposed Action affect the Mojave desert tortoise and its habitat?
- **Vegetation (excluding USFWS designated species) and invasive species and noxious weeds:** How would surface disturbance from construction of the proposed project affect native vegetation? How would the Proposed Action affect the spread of noxious weeds and invasive species?
- **Livestock grazing:** How many animal unit months (AUMs) would be affected by the Proposed Action? How would existing livestock management be affected?

- **Recreation:** How would the Proposed Action affect recreational use and opportunities, including changes to existing trails, within the Santa Clara River Reserve?
- **Visual resources:** How would development of the proposed project change the existing visual character of the landscape?

These issues are discussed in detail in Chapter 3, Affected Environment and Environmental Consequences.

## 1.7. ISSUES IDENTIFIED BUT ELIMINATED FROM FURTHER ANALYSIS

The ID Team Checklist details issues and resources considered by the BLM ID Team and provides a rationale for the findings of the resource specialists. Issues and resources that are either not present or would not be affected to a degree that require detailed analysis were dismissed from further analysis in this EA (see Appendix B). The following issues were eliminated from further analysis based on field surveys or modifications to the Proposed Action:

- **Paleontological resources:** How would paleontological resources be affected by the Proposed Action?

A paleontological analysis of existing data and a paleontological pedestrian field survey were completed in March and April 2020 at the request of the BLM. Four non-significant silicified wood localities were recorded during the survey. No vertebrate or invertebrate body fossils or tracks were observed in the project area. Three of the localities consist of scattered small silicified wood fragments, while the fourth locality within the Petrified Forest Member of the Chinle Formation contains 10 large pieces and hundreds of fragments of a weathered log. The largest piece of the log is approximately 2 feet long and approximately 1 foot across; however, a complete cross section is not preserved, and the log pieces are not in situ (SWCA 2020a). It is understood that silicified wood is common in the Petrified Forest Member, so no collection or other mitigation was recommended at these localities. Petrified wood can be personally collected according to BLM guidelines on public lands; the discovered petrified wood may be collected from this area over time (BLM n.d.). Based on the results of the paleontological analysis and field survey, this issue was dismissed from further analysis in the EA.

- **Water resources/wetlands/riparian zones:** How would Graveyard Wash, a riparian area, be affected by the Proposed Action?

The Proposed Action was modified to exclude Graveyard Wash. Sediment and erosion control measures were selected as a design feature to minimize potential construction impacts to Graveyard Wash.

- **Threatened, endangered, or candidate plant species:** How would the Proposed Action affect dwarf bear-poppy (*Arctomecon humilis*) and Holmgren milk-vetch (*Astragalus holmgreniorum*) and their habitats?

Two federally listed endangered plant species are known to occur near the project area: dwarf bear-poppy and Holmgren milk-vetch. As a result, USFWS protocol presence-absence surveys were conducted for dwarf bear-poppy and Holmgren milk-vetch in April and May 2020. During the 2020 surveys, no dwarf bear-poppy or Holmgren milk-vetch individuals were found in the survey area, and the surveyor noted that habitat characteristics within the survey area were different from those observed in nearby occupied critical habitat (SWCA 2020b). Based on the results of the surveys, the BLM dismissed potential impacts on threatened and endangered plant species from further analysis.

## **CHAPTER 2.0. PROPOSED ACTION AND NO ACTION ALTERNATIVE**

This EA analyzes the potential effects of implementing the No Action Alternative and the Proposed Action. The No Action Alternative is considered and analyzed to provide a baseline against which to compare the impacts of the Proposed Action. No other alternatives were brought forward for detailed analysis.

### **2.1. NO ACTION ALTERNATIVE**

Under the No Action Alternative, the BLM would not grant the Applicant an R&PP Act lease with an option to patent, and the construction of the proposed project on BLM-administered public lands and private lands would not occur. In addition, the communication site ROW would not be granted. The existing conditions of resources in the project area would not change because there would be no development of the outdoor recreation area, public works facility and yard, and public city cemetery.

### **2.2. PROPOSED ACTION**

The project area is located on the southwest side of the intersection of Old U.S. Highway 91 and Main Street in Township 42 South, Range 16 West, Section 7, Salt Lake Base and Meridian, adjacent to Ivins City in Washington County (see Figure 1-1). Under the Proposed Action, the BLM would grant to the Applicant an R&PP Act lease with an option to patent for approximately 101.5 acres of BLM-administered public lands for the development of an outdoor recreation area, a public works facility and yard, and a public city cemetery. An access road would also be developed within 25.2 acres of private land adjacent to the R&PP lease area. The BLM would also grant the communication site ROW within the R&PP Act lease area to the Applicant under the Proposed Action. The cemetery could be leased and developed prior to the issuance of a patent; however, it would need to be patented before burials could occur. The issuance of a patent for the portion of the project area where desert tortoises have been identified (see Section 3.6) would require the Applicant to acquire better desert tortoise habitat elsewhere to satisfy the conditions of FW-13.

If an R&PP Act lease is issued, the BLM would issue the lease with encumbrances and stipulations for the development and use of the property.

#### **2.2.1. Applicant's Proposed Land Use**

Information regarding the Applicant's proposed use of the project area was extracted from the Applicant's Proposed Ivins City Public Works Yard and Recreation Area Development and Improvement Plan (Ivins City 2018), which was submitted along with the R&PP Act lease application.

The Applicant proposes to construct an outdoor recreation area, public works facility and yard, and a city cemetery on approximately 101.5 acres of BLM-administered land. An easement would be obtained across private land north of the proposed project to provide access to the R&PP Act lease area from Old U.S. Highway 91. The preliminary conceptual plan for the proposed outdoor recreation area, public works facility and yard, and city cemetery is described in more detail below and shown in Figure 2-1. Detailed site plans have not yet been developed.

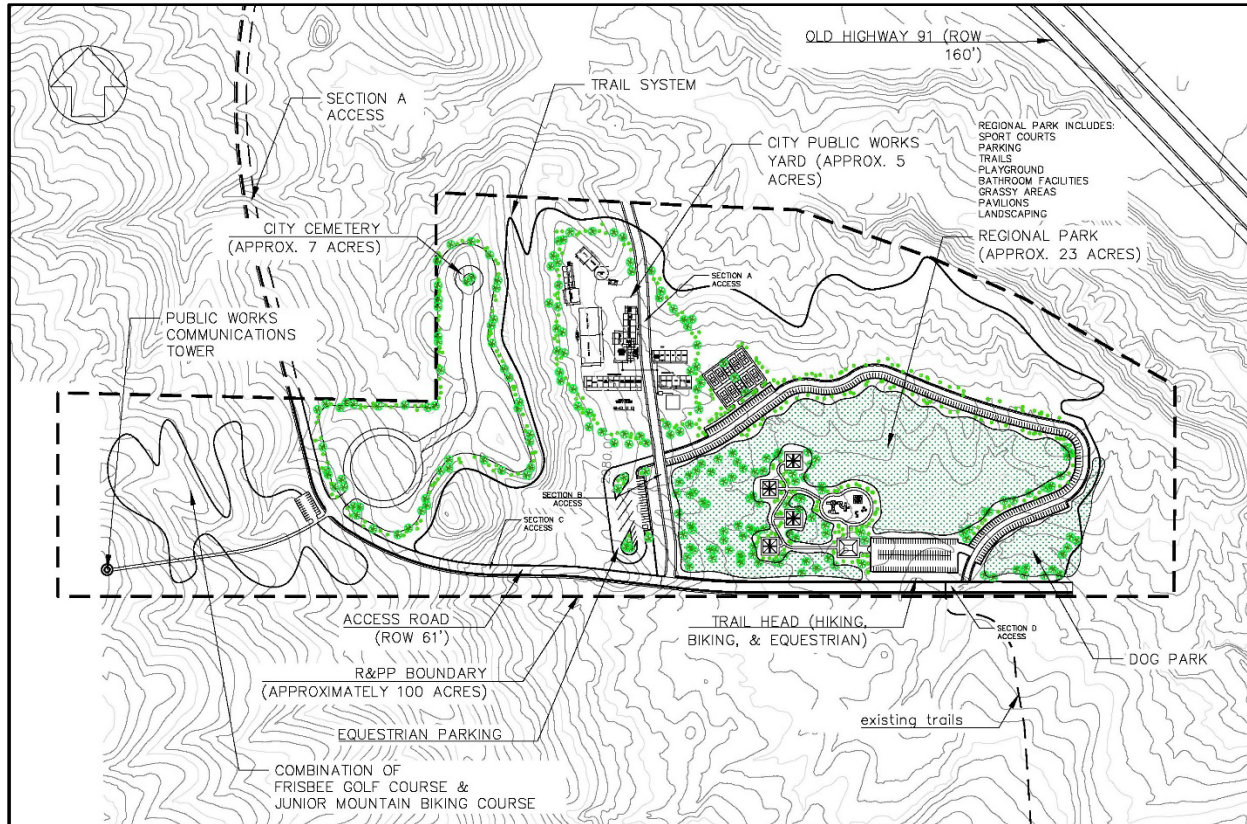


Figure 2-1. Preliminary conceptual plan for the project (Ivins City 2021).

### 2.2.1.1. Outdoor Recreation Area

The Applicant is evaluating options for the outdoor recreation area but is anticipating development of the following elements:

- Regional park
- Equestrian parking and trailhead
- Walking/hiking trail system
- Secondary trailhead
- Walking/hiking and/or equestrian trails
- Junior mountain biking trail system
- Frisbee golf course

The regional park would cover approximately 23 acres of land and likely contain sports courts or pickleball courts; trails; pavilions; restrooms; playground equipment; a dog park; open, grassy areas and tree groves; parking; and interior park roadways. The restrooms would be connected to power, water, and a septic system. Trails in the trail system would be approximately 3 feet wide and graveled; the length of the trail system would be approximately 2 miles.

The junior mountain biking trail system would be at a minimum 3 to 5 miles in length, with a 10-mile length being preferable. Based on a length of 3 to 10 miles and a width of approximately 2 feet, total surface disturbance for the mountain biking trail system would be between 0.7 and 2.4 acres. The disc golf course would be spread out over approximately 20 acres, but most of this acreage would be undisturbed open space. A parking lot would be constructed near this area for its intended users.

The existing trail in the project area, the Cholla Trail, would be reconfigured to connect with the new trails and trailheads. Future trails planned for the general area could connect with the new trailheads in the outdoor recreation area.

Construction of the outdoor recreation area would require grading, fencing or walls, public utilities (e.g., sewer, water, irrigation, power, storm drains), and landscaping.

### **2.2.1.2. Public Works Facility and Yard**

The public works facility and yard would cover approximately 5 acres and include the following elements:

- Administrative and office building
- Fleet maintenance facility
- Covered employee parking
- Two covered equipment storage areas (one for equipment such as backhoes and dump trucks and one for pipes, forms, trailers, sandbags, and similar equipment)
- Temperature-controlled equipment storage
- Covered tailings storage
- Road materials storage (sand, gravel, road base, and rock)
- Waste pile storage (asphalt and concrete waste)
- General outdoor storage
- Public garbage drop off

A communications tower approximately 30 to 60 feet high would also be developed outside of the public works facility and yard in the southwest corner of the project area. The tower would be used by Ivins City to communicate with its Supervisory Control and Data Acquisition system and for meter reading. An access road would be constructed to the tower. The communications tower is a connected action that would be permitted under a separate communication site lease rather than the R&PP Act lease.

Construction of the public works facility and yard would include mass grading, retaining walls along the western edge of the site, a privacy wall surrounding the entire site, communications infrastructure, hardscape surfacing, and landscaping. The facility would be constructed with a septic system and leach field, septic system laterals and cleanouts, water lines, power, fire hydrants, and storm drains.

### **2.2.1.3. City Cemetery**

The cemetery would cover approximately 7 acres and include burial areas, an interior roadway, grass, and landscaping. Grading would be required for construction.

## **2.2.2. Project Development**

Equipment used during construction would likely include backhoes, bulldozers, excavators, scrapers, loaders, pavers, graders, dump trucks, concrete trucks, lift trucks, drum roller compactors, skid-steer loaders, and trenchers. All staging and materials stockpiles would be contained and secured in designated construction areas. Construction would occur from approximately 6:00 a.m. to 10:00 p.m., 5 days a week. Safety measures would be strictly followed during construction to ensure safe access for users of nearby trails. After construction, disturbance in undeveloped areas would be restored with saved topsoil and native vegetation.

Upon approval of the R&PP Act lease, the Applicant would begin planning and engineering work. Construction of the public works facility and yard, along with the first phases of the outdoor recreation area and the city cemetery, would begin in approximately 2023. The anticipated construction schedule is shown in Table 2-1.

**Table 2-1. Construction Schedule**

<b>Timing</b>	<b>Amenity</b>
2023–2025	Outdoor recreation area (Phase 1) City cemetery (Phase 1) Public works facility and yard
2028–2030	Outdoor recreation area (Phase 2) City cemetery (Phase 2)
2033–2035	Outdoor recreation area (Phase 3) City cemetery (Phase 3)

The estimated permanent surface disturbance for each element of the Proposed Action on BLM-administered land (based on the preliminary conceptual plan) is shown in Table 2-2. Construction of the proposed project may also require some areas of temporary surface disturbance (e.g., for staging); however, these areas cannot be estimated at this preliminary conceptual stage of project design. A design feature has been included to reduce impacts from any necessary areas of temporary surface disturbance (Section 2.2.4).

**Table 2-2. Estimated Permanent Surface Disturbance on BLM-Administered Land**

<b>Project Element</b>	<b>Estimated Permanent Surface Disturbance (acres)</b>
Regional park	23.0
Trail system	0.7
Public works facility and yard	5.0
City cemetery	7.0
Access road from northwest corner	4.6
Central road (area outside the 5-acre public works yard)	1.3
Communications tower road	0.2
Communications tower	0.03
Parking lot for disc golf and mountain biking	0.2
Junior mountain biking trail system	2.4
<b>Total surface disturbance</b>	<b>44.4</b>

The exact location of the access road on private land has not yet been determined; however, it would be located within the access road area shown on Figure 1-1. All staging and temporary or permanent surface disturbance would occur within this area. The access road would be constructed of asphalt and would be approximately 28 feet in width, with a 6-foot drainage ditch on either side.

### **2.2.3. Management**

The Applicant would be the owner and manager of the facilities located in the project area. The Ivins City Parks & Recreation Department would manage the outdoor recreation area and the city cemetery, including recreation facilities, trails, trailheads, and associated parking. The Ivins City Public Works Department would manage the public works facility and yard and all roads and utilities in the project area.

Recreational lands would be kept open for public use. There would be no charge for use of the recreation amenities, which would be maintained through Ivins City's general fund and user rates. All facilities would be kept in a satisfactory condition. The outdoor recreation area would be managed pursuant to the Applicant's rules and regulations for parks. Garbage collection service and law enforcement would be provided by the Applicant.

For the public works facility and yard, hours of operation would vary depending on the time of year, on-call services, and inspection services. Typical hours of operation would be from approximately 6:00 a.m. to 5:00 p.m., Monday through Friday, but exceptions would be frequent. Operations would occasionally occur at the public works facility and yard on Saturdays. For example, public garbage collection (for larger items) with the use of temporary dumpsters would be offered approximately 16 times per year on Saturdays.

#### **2.2.4. Design Features**

Design features are measures or procedures incorporated into the Proposed Action that could reduce or avoid adverse impacts. The following design features are incorporated into this Proposed Action:

- Sediment and erosion control measures such as silt fencing and fiber rolls would be implemented during construction activities to control runoff, erosion, and sedimentation into nearby Graveyard Wash and other areas. Watering would also be used as needed to control dust.
- If temporary surface disturbance areas are necessary for construction, topsoil would be removed, stored, and then replaced in areas of temporary surface disturbance after construction is complete, whenever possible. If topsoil removal and replacement is not possible, disturbed areas would be reseeded with BLM-approved native species.
- If possible, construction activities would occur outside of the migratory bird nesting season. If project construction occurs during the migratory bird nesting season, a preconstruction survey for nesting birds would be conducted by a qualified biologist 7 to 10 days prior to the beginning of construction work. If an active nest is identified, a no-activity buffer (ranging from 1 mile to 100 feet, depending on the species) would be established around the nest and remain in place until the young have fledged and/or the nest becomes non-active.
- A noxious species and invasive weed management plan would be developed and implemented for the proposed project. The plan would be reviewed and approved by the BLM before implementation.
- Educational information would be posted in the outdoor recreation area for trail users about livestock harassment.
- A historic properties treatment plan (HPTP) would be implemented to mitigate impacts to cultural resources.
- Trail building for the junior mountain biking trail system would follow the International Mountain Bicycling Association's guidelines to avoid erosion and other impacts (e.g., *Guidelines for a Quality Trail Experience* [IMBA and BLM 2018]).
- Paintable exterior building surfaces on new buildings would be painted according to the BLM Standard Environmental Colors Chart (CC-001).

##### **2.2.4.1. Mojave Desert Tortoise Conservation Measures**

Because the proposed project would be developed in an area that provides suitable habitat for the Mojave desert tortoise, the Applicant developed Mojave desert tortoise conservation measures that would be implemented during construction and use of the project area to avoid and minimize potential impacts on the species. These measures are presented in Appendix C.



**2.3. ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL (IF APPLICABLE)**

The Applicant initially investigated other areas in the city for the public works yard and the city cemetery, but the cost of land was prohibitive. In the current conceptual plan for the proposed project, the outdoor recreation area was situated in the portion of the project area most suitable for that use, the public works facility and yard was sited to minimize visual impacts, and the cemetery was located in an area flat enough for burials.

In addition, the Applicant and the BLM considered an alternative that would have included Graveyard Wash in the project area and allowed for a different public access road. This alternative was eliminated because it would not have been consistent with the guidance for riparian resources (RP-07) in the St. George Field Office ROD/RMP (BLM 1999).

## **CHAPTER 3.0. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

### **3.1. INTRODUCTION**

This chapter describes the existing baseline conditions relevant to the issues presented in Section 1.6 and discloses the potential environmental impacts of the Proposed Action and No Action Alternative on those issues.

The granting of the R&PP Act lease to the Applicant would not itself cause impacts to resources in the project area; however, the Applicant's proposed development of an outdoor recreation area, a public works facility and yard, and a city cemetery would have impacts. These impacts are analyzed in this chapter. Disturbance from the proposed project is estimated based on the preliminary conceptual plan; a detailed site plan for the project has not been prepared by the Applicant at this time. The project area consists of approximately 101.5 acres of BLM-administered land, plus 25.2 acres of private land for the development of an access road.

Impacts can be both adverse and beneficial. Adverse impacts could result from actions that diminish any of the resource values described in the analysis. Beneficial effects could result from actions that maintain or enhance any of the resource values described in the analysis. The analysis of impacts in this chapter is based on the best available data. Knowledge of the area and professional judgment are used to infer environmental impacts where data are incomplete or unavailable.

### **3.2. GENERAL SETTING**

The project area is in southwestern Utah, in the Mojave Desert along the eastern margin of the semiarid Basin and Range Physiographic Province, which is characterized by parallel, north-south-trending mountain ranges separated by desert basins and valleys. Elevations in the region surrounding and including the project area range from approximately 1,200 feet above mean sea level in the lower river valleys to approximately 7,000 feet in the nearby Pine Valley Mountains. The project area is atop a broad, sloping alluvial bench extending between Land Hill and the Santa Clara River corridor to the west and south and Graveyard Wash to the east and north (SWCA 2020c).

The section of the Basin and Range Physiographic Province in which the project area falls is considered the Eastern Great Basin region and is categorized as desert and steppe. This area experiences little rainfall and large daily temperature fluctuations but is outside of the summer monsoon boundary, so it does not receive the summer rainstorms that occur on the Colorado Plateau. The part of the province that is located in the project area is composed of part of the Cordilleran fold (the Mesozoic structure) that is superimposed by Cenozoic volcanic layers, and volcanic rocks are abundant in the project area (SWCA 2020c).

The project area contains undeveloped land (with the exception of the Cholla Trail) in Washington County (see Figure 1-1). Adjacent land uses include residential development and the Graveyard Wash riparian area to the north, agricultural fields to the north and across Old U.S. Highway 91 to the northeast, and the Santa Clara River Reserve to the south and west.

#### **3.2.1. Past and Present Actions**

Past and present actions are discussed in the Affected Environment section for each issue.

### **3.2.2. Reasonably Foreseeable Future Actions**

Reasonably foreseeable future actions are decisions, funding, or formal proposals that are either existing or highly probable based on known opportunities or trends. The BLM is aware of three proposals within most of the issue analysis areas at this time:

- Anasazi Valley Trailhead Improvements (located approximately 1.3 miles northwest of the project area): Installation of a parking lot and fence, a restroom, pavilions and an aggregate surface trail, a kiosk, a trailhead sign and register, a bicycle rack and repair station, wire fencing, and a single-track trail. The estimated permanent surface disturbance for this project is 0.8 acre.
- City of Santa Clara ROW Amendment (located approximately 1.5 miles southeast of the project area): Application to amend a current ROW authorization to add an additional water line and buried power line and to improve an existing access road. The project would also include the addition of a new water line and buried power line outside the current authorization area, as well as a secondary access road for emergency services. The estimated permanent surface disturbance for this project is 1.4 acres.
- Future Western Corridor Project as described in the Dixie Metropolitan Planning Organization (MPO) 2019-2050 Regional Transportation Plan (Dixie MPO 2019): Construction of a highway that would eventually connect Snow Canyon Parkway in Ivins City to Interstate 15 (anticipated construction for most of the Western Corridor would occur from 2031 to 2040). Although the final alignment and design of the proposed highway is not known at this time, it is likely to be constructed near the BLM-administered land in the project area. Similar highway projects have resulted in the development of roadway corridors between 150 and 300 feet wide. Western Corridor highway segments described in the MPO currently total approximately 14.1 miles. Based on this length and an assumed 300-foot width, this project could result in approximately 513 acres of permanent surface disturbance.

In addition to the three projects listed above, the following proposals are within the analysis areas for fish and wildlife, migratory birds, and vegetation:

- Northern Corridor Highway ROW (located approximately 5.5 miles southeast of the project area): Application requesting a four-lane highway ROW in the Red Cliffs National Conservation Area north of St. George, Utah. Based on an approximate road length of 4.5 miles and a maximum ROW width of 500 feet, permanent surface disturbance for this project is estimated to be 273 acres.
- Long Valley Road Extension ROW (located approximately 12 miles east of the project area): Application to construct a road that extends from the Long Valley Exchange parcel to the future planned 3650 South Interchange on the Southern Parkway. Permanent surface disturbance for the road project is estimated to be approximately 93 acres.
- Twin Peaks/Desert Inn Catchment Project (located over 10 miles to the northwest of the project area): Construction of a catchment to provide a reliable source of water for livestock grazing in two allotments. The estimated permanent surface disturbance for the catchment project is 2 acres.

The actions below have no formal proposals but are likely to become reasonably foreseeable future actions in the analysis areas based on current land use patterns and trends:

- Development of planned trails, trailheads, recreational amenities, bike routes, and city parks in Ivins City and/or in the Santa Clara River Reserve
- Construction of additional residential developments and associated roads and utilities
- Road improvement projects

### **3.3. HOW WOULD CULTURAL RESOURCES AND NATIVE AMERICAN RELIGIOUS CONCERNS BE AFFECTED BY THE PROPOSED ACTION?**

#### **3.3.1. Affected Environment**

For the review of past, present, and reasonably foreseeable actions, the analysis area for cultural resources is the Wittwer Canyon-Santa Clara River subwatershed (38,677.8 acres) because it encompasses the project area and provides distinct topographical boundaries against which to measure impacts to archaeological resources. Past and present activities causing surface and subsurface disturbance in this analysis area may have disturbed or damaged cultural resources. In the analysis area, approximately 2.4 acres are classified as Developed, Medium – High Intensity land cover type and 1,774.4 acres are classified as the Developed, Low Intensity land cover type. These land cover types indicate the potential for surface and subsurface impacts that have affected cultural resources.

##### ***3.3.1.1. Cultural Context***

There is potential to encounter both prehistoric and historic cultural resources in the project area. Utah has a rich and varied cultural history spanning more than 10,000 years. Current archaeological evidence indicates that people first arrived in the northwestern Colorado Plateau and eastern Great Basin region ca. 13,000 years ago, near the end of the last ice age during the terminal Pleistocene. Since the Pleistocene, a variety of prehistoric groups, Native American tribes encountered by Euro-American explorers, and those who currently call this portion of southwestern Utah home have inhabited the region. Over the last 13,000 years, highly variable adaptations have characterized the region, evidenced by differences in diet, habitation, tool use, and artifact production. A detailed prehistoric context, including a discussion of the Paleoindian, Archaic, Formative, and Late Prehistoric periods, can be found in the *Class III Cultural Resources Survey of 114 Acres in Support of the Ivins City Environmental Assessment and Phase I Environmental Site Assessment, Washington County, Utah* (SWCA 2020c).

The Historic period in Utah refers to the time recorded by Euro-American history. For the project area, it can be divided into five major periods: early exploration and settlement (1776–1847), colonization and water development (1848–1929), the Great Depression (1930–1939), World War II (1940–1945), and postwar (1946–present). Discussions of each historic period can be found in the cultural resources survey report (SWCA 2020c).

##### ***3.3.1.2. Previous Research***

On April 17, 2020, a file search was conducted by SWCA Environmental Consultants (SWCA) on behalf of the BLM using the Utah Division of State History’s Preservation Pro database to identify previously recorded cultural resources projects and previously documented archaeological sites in or within 0.5 mile of the project area. The BLM St. George Field Office provided additional file search information that was not available from the Utah Division of State History.

In all, 15 cultural resources projects and 20 archaeological sites are located in or within 0.5 mile of the project area. Of the previous projects, the 1980 Hafen Desert Land Entry survey (BLM project 053-341) covered almost all of the BLM-administered land within the current project area. Of the previously recorded sites, only two are in or adjacent to (i.e., within a 200-foot buffer area) the project area: one prehistoric artifact scatter (42WS626) and one historic road (42WS3709).

Geographic information system (GIS) layers and General Land Office (GLO) plat maps were also examined for possible cultural resources in and near the project area. The GIS layers, available from state and federal agencies, include properties eligible for or listed in the National Register for Historic Places (NRHP), Utah historic trails, Utah historic districts, historical topographic maps, and other historical aerial imagery. Based on an analysis of these maps, no historic properties are located within 0.5 mile of the project area.

### **3.3.1.3. Cultural Resources Survey**

An intensive-level (Class III) survey was conducted by SWCA on behalf of the BLM from April 27 through April 30, 2020, to identify and record any cultural resources visible on the ground surface of the BLM lease area. The archaeological survey resulted in the identification of seven isolated occurrences (IOs), two isolated features (IFs), two previously documented sites, and one newly recorded site. Of the seven IOs recorded, one is historic (hole-in-top can) and six are prehistoric. Prehistoric IOs include metate fragments, a utilized flake, a mano, three flakes, and a likely North Creek Black-on-Gray ceramic sherd. The IFs are both historic: one is an isolated rock concentration and the other consists of axe-cut fence posts. The isolates are not eligible for the NHRP.

Two previously recorded sites (42WS626 and 42WS3709) and one newly recorded site (42WS6465) were documented within the project area. Site 42WS626 is a previously recorded prehistoric temporary camp that was recommended eligible for the NRHP under Criterion D. Site 42WS3709 is the previously recorded Old U.S. Highway 91/Telegraph Road/Arrowhead Trail. The site has previously been determined eligible for the NRHP under Criterion A or Criterion D; however, it was recommended that the currently recorded segment is a non-contributing element of the overall eligible resource because it is lacking the integrity needed to convey its significance. Site 42WS6465 is a historic rock concentration that may represent a gravesite; it was recommended eligible for the NRHP under Criterion D. The Utah State Historic Preservation Office (SHPO) concurred with the determination of the area of potential effects; identification efforts; and the eligibility for the NRHP of 42WS626, 42WS3709, and 42WS6465 on November 30, 2020 (Appendix D).

The access road area was added to the project area after the original cultural resources survey was completed. An additional intensive-level (Class III) cultural resources survey was conducted by SWCA in the 25.2-acre access road area on June 22, 2021. An associated literature review identified 16 cultural resources projects and 21 archaeological sites within 0.5 mile of the access road survey area (SWCA 2021). No previously recorded archaeological sites are within the 25.2-acre survey area. Based on the results of the file search, map examination, and the 2020 field survey, SWCA anticipated that prehistoric and historic sites could be encountered in low numbers in the access road survey area (SWCA 2021).

The access road cultural resources survey recorded three IFs in the survey area: a white cryptocrystalline silicate fragment, a rectangular depression, and a second rectangular depression with an associated cairn. No sites were encountered within the access road survey area.

### **3.3.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant and development of the outdoor recreation area, public works facility and yard, and city cemetery would not occur. In addition, the communication site ROW would not be granted. There would be no impacts to 42WS626 and 42WS6465 from the Proposed Action. However, disturbance of existing archaeological resources could occur from recreational use or livestock grazing currently occurring in the area. The present and reasonably foreseeable future actions as outlined in Sections 3.3.1 and 3.2.2 are expected to continue in the analysis area. The three reasonably foreseeable future actions in the analysis area (Anasazi Valley Trailhead Improvements, City of Santa Clara ROW Amendment, and Dixie MPO Future Western Corridor Project) would contribute 515.2 acres of new surface disturbance to the analysis area, which could affect cultural resources.

### **3.3.3. Environmental Impacts—Proposed Action**

SWCA initially recommended appropriate avoidance measures for sites 42WS626 and 42WS6465 if feasible, but subsequent consultation with the BLM determined that the Proposed Action would result in adverse impacts to both sites. Construction of the outdoor recreation area under the Proposed Action would

disturb and potentially damage or destroy both archaeological resources. A historic properties treatment plan (HPTP) is being developed to mitigate potential adverse effects to the two NRHP-eligible sites. The HPTP must be approved by SHPO and would be implemented before construction of the proposed project. In addition, tribal consultation is ongoing and would occur for the HPTP. Treatment measures would likely include surface collection and site mapping, ground-penetrating radar, excavation, artifact collection and analysis, reporting, and curation. Implementation of the HPTP would ensure that there are no significant adverse impacts to cultural resources in the project area.

For the access road area, the BLM recommends a finding of no historic properties affected. No further work is needed with regards to archaeological evaluation or project avoidance measures for the access road area. The Utah State Historic Preservation Office (SHPO) concurred with this determination on July 22, 2021 (see Appendix D).

The present and reasonably foreseeable future actions and their impacts as discussed in Sections 3.3.2 and 3.2.2 are expected to continue in the analysis area. However, the Proposed Action would not result in incremental impacts to past, present, and reasonably foreseeable future actions on archaeological resources because all archaeological sites eligible for the NRHP in the project area would be mitigated for adverse effects through recovery of the data that contributes to each site's eligibility.

### **3.4. HOW WOULD SURFACE DISTURBANCE FROM CONSTRUCTION OF THE PROPOSED PROJECT AFFECT SOILS AND EROSION POTENTIAL?**

#### **3.4.1. Affected Environment**

The analysis area for soil-related issues consists of the Wittwer Canyon-Santa Clara River subwatershed. This area covers 38,677.8 acres and was chosen because it encompasses the project and provides a distinct, natural topographic boundary in which to analyze potential impacts to soils.

Soil types in the analysis area were identified and described using land cover data from the Soil Survey Geographic (SSURGO) database, which provides spatial reference and descriptive data for soil characteristics. A total of 40 soil types are in the analysis area, and two of these soil types are specifically in the project area: Eroded land-Shalet complex warm (EB) and rich silt loam. The Eroded land series consists of stratified shale and gypsum; slopes are gently rolling to steep and are strongly dissected. EB is approximately 80% Eroded land and 20% Shalet clay loam, warm, with slopes of 2 percent to 20 percent (United States Department of Agriculture [USDA] et al. 1977).

Biological soil crusts are assemblages of living organisms on soil surfaces in arid and semiarid areas. They are typically composed of cyanobacteria, fungi, lichens, and algae. Sporadic patches of biological soil crusts were observed along the western edge of the survey area (which contains the project area) during biological surveys conducted in April and May 2020 (SWCA 2020b).

Past and present actions that have may affected soils in the analysis area include surface disturbance from residential and urban development, road construction, utilities development, livestock grazing, range improvements, and recreation (e.g., off-highway vehicle use, trail development and use). These activities may have resulted in impacts to soils by contributing to reduced soil productivity, soil compaction, surface runoff, and soil erosion. These past and present actions, along with ongoing landscape-scale phenomena such as climate change and drought, could lead to a loss of soil productivity and an increase in soil erosion and soil loss in the analysis area over time.

### **3.4.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant for the development of an outdoor recreation area, a public works facility and yard, and a city cemetery. In addition, the communication site ROW would not be granted. No surface disturbance to soils would occur from the Proposed Action, and there would be no loss of soil or changes to soil health from the Proposed Action. Existing approved uses such as recreation and livestock grazing would continue to occur, which could potentially disturb and impact soils.

The present and reasonably foreseeable future actions as outlined in Sections 3.4.1 and 3.2.2 are expected to continue in the analysis area. Approximately 2.4 acres of the soils analysis area are classified as the Developed, Medium – High Intensity land cover type and 1,774.4 acres of the analysis area are classified as the Developed, Low Intensity land cover type. These developed land cover types indicate potential past and present impacts to soils. Reasonably foreseeable future actions that would affect soils in the analysis area include the Anasazi Valley Trailhead Improvements, the City of Santa Clara ROW Amendment, and the Dixie MPO Future Western Corridor Project. These future actions could have a total of 515.2 acres of estimated surface disturbance to soils in the analysis area.

### **3.4.3. Environmental Impacts—Proposed Action**

The Proposed Action would result in approximately 44.4 acres of permanent surface disturbance to soils in the BLM lease area. In addition, the development of the access road on private land would result in surface disturbance to soils within the 25.2-acre road corridor. Because the exact alignment of the access road and the location of staging areas are not yet known, it is assumed that the entire road corridor would be permanently disturbed for road development. Together, disturbance in the BLM lease area and private land road corridor totals 69.6 acres, or 0.2% of the analysis area. This disturbance could result in adverse impacts such as soil compaction, increased susceptibility to soil erosion, mixing of soil horizons, changes in soil function due to exposure from vegetation removal, and loss of soil productivity (ability to support vegetation). A loss of soil productivity could reduce the health of local vegetation communities and affect the wildlife and livestock that depend on them; however, similar vegetation communities are available on adjacent lands and the overall soil disturbance is a small percentage within the larger analysis area. It is unlikely that the biological soil crusts described in Section 3.4.1 would be significantly disturbed by construction activities because of their location in relation to the amenities described in the preliminary conceptual plan for the project.

Properties that make soils more susceptible to degradation include water erosion hazard, wind erosion hazard, soil drought susceptibility, excess sodium, and rooting depth. Water erodibility indicates soil detachment by runoff and raindrop impact. Wind erodibility indicates the susceptibility of soil to blowing or wind erosion. Soil drought susceptibility is based on the available water capacity of soils. Soils with excess sodium exhibit a general degradation of soil structure. Rooting depth, or depth to bedrock, is the soil depth to fixed rock; shallow soils are often not conducive to vegetation establishment and are prone to erosion (Natural Resources Conservation Service 2019). The EB soil type covers 72.1 acres of the project area and has low water and wind erosion hazards, a low droughty soil hazard, a low excess sodium hazard, and a low rooting depth hazard. The rich silt loam soil type covers 54.6 acres of the project area and has a low water erosion hazard, a low droughty soil hazard, and a low rooting depth hazard; however, it has a moderate wind erosion hazard and a moderate excess sodium hazard. Based on this data, approximately 43.1% of the project area is moderately susceptible to erosion.

Based on the preliminary conceptual plan for the project, most of the amenities would be developed in the EB soil type, which is less susceptible to erosion, but the access road would be developed in the rich silt loam soil type, which is moderately susceptible to erosion. The implementation of the sediment and erosion

control measures and the preservation of topsoil described in Section 2.2.4 would minimize soil erosion from construction activities and would protect topsoil where possible. Areas of soil disturbance that would be replaced with developed recreational amenities such as roads, parking lots, structures, and landscaping would have little to no risk of long-term erosion. Areas of soil disturbance that would be replaced with dirt trails would be at greater risk of erosion; proper trail construction and regular trail maintenance by Ivins City would minimize impacts in these areas.

Under the Proposed Action, 69.6 acres of surface disturbance to soils would occur, which would contribute incrementally to the impacts on soils from past, present, and reasonably foreseeable future actions as discussed in Section 3.4.2. The 69.6 acres of disturbance from the Proposed Action would represent an approximately 3.0% addition to the combined 1,776.8 acres of past and present surface disturbance and the 515.2 acres of reasonably foreseeable future surface disturbance in the analysis area.

### **3.5. HOW WOULD THE PROPOSED ACTION AFFECT FISH AND WILDLIFE SPECIES' POPULATIONS AND HABITATS, INCLUDING BUREAU OF LAND MANAGEMENT SENSITIVE SPECIES? HOW WOULD THE PROPOSED ACTION AFFECT MIGRATORY BIRDS THAT MAY PASS THROUGH OR USE THE PROJECT AREA?**

#### **3.5.1. Affected Environment**

The analysis area for potential impacts to fish and wildlife species and migratory birds is the Eastern Mojave Basins ecoregion, which comprises 224,538.2 acres. This analysis area was chosen because it provides a natural boundary against which to measure potential impacts to habitat that may be used by wildlife species and migratory birds in the project area.

Both the project area and the analysis area are dominated by the Sonora-Mojave Creosotebush-White Bursage Desert Scrub land cover type (98.9% of the project area and 58.1% of the analysis area). Plant species observed during biological surveys conducted in 2020 were consistent with the dominant land cover type and included blackbrush (*Coleogyne ramosissima*), burrobush (*Ambrosia salsola*), white bursage (*Ambrosia dumosa*), spiny hopsage (*Grayia spinosa*), Mojave prickly pear (*Opuntia polyacantha* var. *erinacea*), common fishhook cactus (*Mammillaria tetrancistra*), and limited creosote bush (*Larrea tridentata*) (SWCA 2020b). The Sonora-Mojave Creosotebush-White Bursage Desert Scrub land cover type provides habitat for a variety of resident small mammals, birds, and reptiles. The more common of these species may include desert cottontail (*Sylvilagus audubonii*), antelope ground squirrel (*Ammospermophilus leucurus*), kangaroo rat (*Dipodomys ordii*), deer mouse (*Peromyscus maniculatus*), desert woodrat (*Neotoma lepida*), Gambel's quail (*Lophortyx gambelii*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), wrens (*Catherpes mexicanus*, *Salpinctes obsoletus*), and the side-blotched lizard (*Uta stansburiana*). Larger animals such as raptors, coyotes (*Canis latrans*), gray foxes (*Urocyon cinereoargenteus*), and mule deer (*Odocoileus hemionus*) may use the analysis area for a portion of the year or year-round; they may occasionally frequent the project area. There are approximately 2,239.7 acres of mapped winter mule deer habitat and 14,240.8 acres of mapped year-long mule deer habitat in the analysis area. However, no mapped mule deer habitat occurs in the project area.

The project and analysis areas may also provide habitat for and support populations of BLM Sensitive Species that are known to use Sonora-Mojave Creosotebush-White Bursage Desert Scrub communities, including the following:

- Gila monster (*Xantusia vigilis*): permanent resident, rare
- Western banded gecko (*Coleonyx variegatus*): permanent resident, uncommon



- Zebra-tailed lizard (*Callisaurus draconoides*): permanent resident, uncommon
- Bald eagle (*Haliaeetus leucocephalus*): winter resident, uncommon
- Ferruginous hawk (*Buteo regalis*): transient, fairly common
- Spotted bat (*Euderma maculatum*): permanent resident, rare
- Townsend’s big-eared bat (*Corynorhinus townsendii*): permanent resident, fairly common
- Western red bat (*Lasiurus blossevillii*): permanent resident, very rare
- Allen’s big-eared bat (*Idionycteris phyllotis*): probable permanent resident, very rare
- Big free-tailed bat (*Nyctinomops macrotis*): summer resident, rare
- Fringed myotis (*Myotis thysanodes*): permanent resident, uncommon

More than 300 species of migratory birds have been documented using habitats in Washington County for breeding, nesting, foraging, and migration (Fridell and Comella 2007; Parrish et al. 2002). A number of these species may use the project area for a portion of the year or year long.

In Washington County, the migratory bird nesting season is divided into two major time frames: early nesting season January 1–March 31 (e.g., raptors such as eagles, owls, falcons, and hawks) and primary nesting season April 1–July 15 (e.g., songbirds, flycatchers, cuckoos, and raptors). However, migratory bird nesting season can extend through August 31.

Past and present actions that have affected wildlife, including BLM Sensitive Species and migratory birds, in the analysis area include surface disturbance from residential and urban development, road construction, utilities development, livestock grazing, range improvements, and recreation (e.g., off-highway vehicle use, trail development and use). These activities may have resulted in surface disturbance to wildlife habitat as well as increased human activity that can affect wildlife behavior.

### **3.5.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant and development of the outdoor recreation area, public works facility and yard, and city cemetery would not occur. In addition, the communication site ROW would not be granted. There would be no impacts to wildlife, BLM Sensitive Species, migratory bird habitat, or to individual species from the Proposed Action. Existing uses of the project area, which include use of the Cholla Trail, would continue. Human activity on the Cholla Trail in the project area could intermittently affect wildlife and migratory bird behavior; individuals may avoid the area while the trail is in use.

The present and reasonably foreseeable future actions as outlined in Sections 3.5.1 and 3.2.2 are expected to continue in the analysis area. Approximately 2,178.8 acres of the analysis area are classified as the Developed, Medium – High Intensity land cover type and 14,550.1 acres of the analysis area are classified as the Developed, Low Intensity land cover type. These developed land cover types indicate past and present impacts to wildlife and migratory bird habitats. Reasonably foreseeable future actions that would affect wildlife species (including BLM Sensitive Species) and migratory birds and their habitats in the analysis area are described in Section 3.2.2. These actions include six projects that would have a total of 883.2 acres of estimated surface disturbance, which is assumed to be a loss of wildlife and migratory bird habitat.

### **3.5.3. Environmental Impacts—Proposed Action**

The Proposed Action would adversely affect wildlife species, including BLM Sensitive Species and migratory birds, that occupy the project area or adjacent lands during some or all of the year. The construction of the project would result in the permanent removal of approximately 69.6 acres of vegetative communities, all of which are assumed to be the Sonora-Mojave Creosotebush-White Bursage Desert Scrub land cover type. This vegetation provides potential habitat for the species listed in Section 3.5.1. The permanent loss of this habitat would have an adverse impact on individuals of particular species that occupy the area. In addition to this permanent loss of habitat, the entire project area would be fenced to exclude desert tortoise and cattle. Fencing could prohibit some wildlife species (but not migratory birds) from accessing 126.7 acres of habitat, eliminating it from use. The 69.6-acre habitat loss would comprise 0.05% of the Sonora-Mojave Creosotebush-White Bursage Desert Scrub habitat in the analysis area, a relatively small amount. The 126.7-acre habitat loss for some species would comprise 0.10% of the Sonora-Mojave Creosotebush-White Bursage Desert Scrub habitat in the analysis area, also a relatively small amount. Because of the low percentages of relative habitat loss, the health of wildlife and migratory bird populations in the analysis area would not be impacted.

In addition to habitat loss, the equipment used for construction activities and the increase in human and pet presence, both during construction and after the project is complete, could result in adverse impacts on wildlife and migratory birds. During construction activities, individuals of particular species that use the project area may be killed or injured by heavy machinery if they are unable to move away from the equipment. Burrows or nests could be destroyed if they are present. Additionally, the increase in noise and human and pet presence associated with operating the machinery and using the outdoor recreation area, public works facility and yard, and city cemetery could result in the displacement of wildlife (including BLM Sensitive Species) and migratory birds from habitats in and adjacent to the project area that are not physically disturbed. The effects caused by construction equipment and noise would be temporary and would occur only during the actual construction activities. The effects caused by human and pet presence associated with use of the project area would occur for the foreseeable future.

More specifically for migratory birds, they are most susceptible to harm from construction machinery during the nesting season when eggs are present or when young are not yet mobile enough to move away from machinery. Migratory bird individuals that use the project area may be killed or injured by heavy machinery if they are unable to move away from the equipment. Nests could be destroyed if they are present, and the increase in noise could result in the displacement of individual birds. The timing of project construction and the preconstruction surveys described in Section 2.2.4 would limit adverse impacts to migratory birds.

Also, migratory birds can collide with communication towers, especially at night. The risk of collision is highest for towers using steady-burning lights, for towers with heights greater than 350 feet, and for towers supported with guy wires (USFWS 2021). The Proposed Action's communications tower would have a maximum height of 60 feet, which would reduce the likelihood of collisions. In addition, implementing USFWS-recommended best practices for the design, construction, and operation of communication towers would further reduce impacts to migratory birds.

Under the Proposed Action, 69.6 acres of habitat loss would occur, which would contribute incrementally to the impacts on wildlife and migratory bird habitat from past, present, and reasonably foreseeable future actions as discussed in Section 3.5.2. The 69.6-acre habitat loss from the Proposed Action would represent an approximately 0.4% addition to the combined 16,728.9 acres of past and present surface disturbance and the 883.2 acres of reasonably foreseeable future surface disturbance in the analysis area. For those species that would lose 126.7 acres of habitat, it would represent an approximately 0.7% addition to the past, present, and reasonably foreseeable future surface disturbance in the analysis area.

The Proposed Action would also contribute incrementally to the disturbance, displacement, and potential mortality of wildlife. In addition, disturbance as a result of human and pet presence from the completed project is anticipated to occur for the foreseeable future. The past actions, present actions, and reasonably foreseeable future actions that would contribute the most to the disturbance, displacement, and potential mortality of wildlife are activities that involve ground disturbance, prolonged use of heavy machinery, noise from the presence of humans, and disturbance during periods in which wildlife are particularly sensitive (e.g., breeding and rearing young). However, similar habitat is available throughout the analysis area for wildlife and migratory bird dispersal (130,421.9 acres of Sonora-Mojave Creosotebush-White Bursage Desert Scrub).

### **3.6. HOW WOULD THE PROPOSED ACTION AFFECT THE MOJAVE DESERT TORTOISE (*GOPHERUS AGASSIZII*) AND ITS HABITAT?**

#### **3.6.1. Affected Environment**

The analysis area for potential impacts to the Mojave desert tortoise is the Eastern Mojave Basins ecoregion (224,538.2 acres in size). This analysis area was chosen because it provides a natural boundary against which to measure potential impacts to habitat that may be used by the desert tortoise in the project area.

The project area provides suitable habitat for the Mojave desert tortoise and is in the vicinity of designated critical habitat for this species. No other threatened, endangered, or candidate wildlife species or designated critical habitat are known to occur within the project area.

Past and present actions that may have affected Mojave desert tortoise in the analysis area include surface disturbance from residential and urban development, road construction, utilities development, livestock grazing, range improvements, and recreation (e.g., off-highway vehicle use, trail development and use). These activities may have resulted in surface disturbance in Mojave desert tortoise habitat, as well as increased human activity and noise that can adversely affect individual desert tortoises.

##### **3.6.1.1. Surveys**

To determine whether Mojave desert tortoises or their sign were present in the project area, field surveys for Mojave desert tortoise were performed in accordance with USFWS guidance published on October 26, 2018 (USFWS 2018) using a transect width of 20 feet. Per USFWS guidance, the appropriate survey window for this species is from April to May. From April 21 to May 6, an SWCA biologist walked and visually inspected all areas of suitable habitat for desert tortoises that were aboveground (out of burrows or within burrows but still visible) and desert tortoise sign (burrows, scat, carcasses, etc.); the total survey area consisted of 200.6 acres and included a 300-foot buffer.

During the surveys, live desert tortoises were observed on seven occasions, resulting in the documentation of four different individuals (three male and one female) in the south-central part of the survey area. The biologist mapped two pallets (shallow depressions) in the survey area that were actively being used as cover sites. Figure 3-1 illustrates the locations of the desert tortoise sightings and the pallets in relation to the project area. The survey yielded no other signs of desert tortoise in the form of burrows, scat, carcasses, etc.

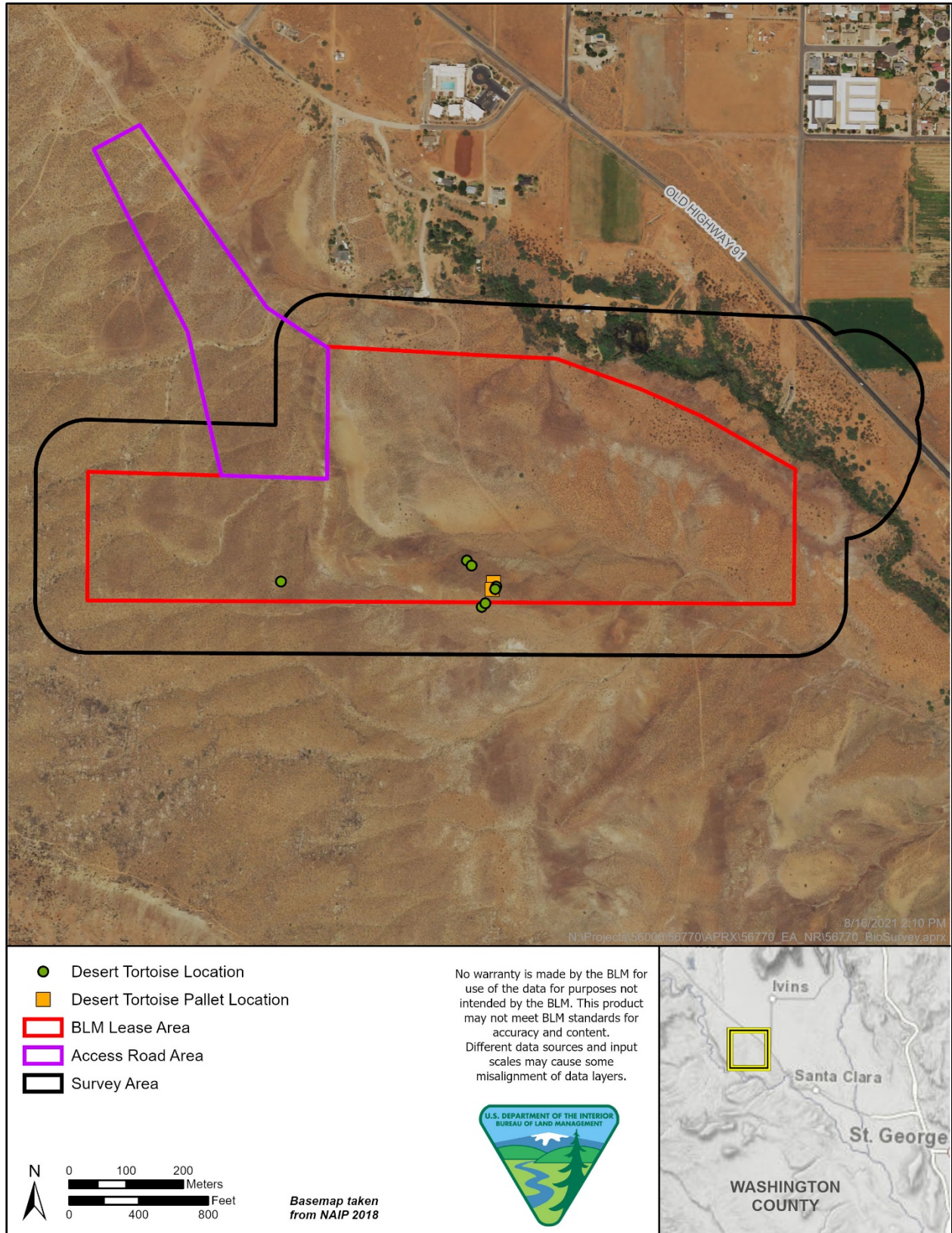


Figure 3-1. Survey results for live desert tortoises and sign.

### **3.6.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant and development of the outdoor recreation area, public works facility and yard, and city cemetery would not occur. In addition, the communication site ROW would not be granted. No loss of desert tortoise habitat would occur from the Proposed Action, and there would be no related activities that displace, disturb, or stress desert tortoises. Existing, approved uses in the project area (e.g., recreational use) would continue; this human activity could impact individual desert tortoises in the area by causing stress and disturbance.

The present and reasonably foreseeable future actions as outlined in Sections 3.6.1 and 3.2.2 are expected to continue in the analysis area. In the analysis area, approximately 2,178.8 acres are classified as Developed, Medium – High Intensity land cover type and 14,550.1 acres are classified as the Developed, Low Intensity land cover type. In addition, approximately 6,231.4 acres are classified as the Agriculture land cover type. These land cover types indicate the potential for past and present adverse impacts to desert tortoise habitat. Reasonably foreseeable future actions that would affect desert tortoise and its habitats in the analysis area are described in Section 3.2.2. These actions include six projects that could have a total of 883.2 acres of estimated surface disturbance, which is assumed to be a loss of desert tortoise habitat. This total acreage is conservative because it is unlikely that all of the reasonably foreseeable future surface disturbance would occur in Mojave desert tortoise habitat. In addition, impacts to desert tortoise from the Northern Corridor Highway ROW project would be offset through the addition of a new zone to the Red Cliffs Desert Reserve.

### **3.6.3. Environmental Impacts—Proposed Action**

The Proposed Action could adversely affect Mojave desert tortoise because individuals have been documented in the project area and because the project area contains suitable habitat. The BLM and Ivins City worked together to develop conservation measures (see Appendix C) to avoid impacts to desert tortoise, including mortality, stress, and disturbance to the species. These conservation measures would be implemented before and during construction of the proposed project to ensure that project activities do not result in take and/or disturbance of individual Mojave desert tortoise. Incidental Take for tortoise in the access road area on private land will be covered by the Washington County Habitat Conservation Plan (HCP), and will observe all terms and conditions including conservation measure commitments of the HCP.

Construction activities associated with the Proposed Action could result in adverse impacts (e.g., mortality, displacement, disturbance, and noise) to Mojave desert tortoises if they are present in or near the project area during the construction period. A permanent, tortoise-proof fence would be constructed around the project area prior to the beginning of construction to ensure exclusion of the species from the project area and to minimize opportunities for take and/or disruption of the species. Once a permanent exclusion fence has been constructed, but before project construction begins, a survey would be conducted to confirm that there are no Mojave desert tortoises inside the fence. Mojave desert tortoise monitoring would also be conducted during construction of the proposed project. If signs of Mojave desert tortoise are identified during the preconstruction survey or at any time during construction activities, all project activities within 300 feet of the tortoise would be halted immediately and appropriate agency staff would be notified to determine the next steps.

There are approximately 125.3 acres of Sonora-Mojave Creosotebush-White Bursage Desert Scrub in the project area, which is suitable habitat for the Mojave desert tortoise. Once construction begins, this habitat would become permanently unavailable to desert tortoises. This habitat loss represents approximately 0.10% of the Sonora-Mojave Creosotebush-White Bursage Desert Scrub in the analysis area. The habitat in the project area is not designated critical habitat. Suitable habitat within the range of this species occurs

throughout Washington County, and habitats adjacent to the project area are also suitable for Mojave desert tortoise.

Construction activities would also result in additional noise and increased human presence, which would have indirect adverse impacts on the Mojave desert tortoise. Desert tortoises in the area exposed to the noise and increased human presence may experience stress and move away. These effects would be temporary (ending with the completion of construction) and would be limited to the areas in and around the project area. The conservation measures in Appendix C would ensure that there are no Mojave desert tortoises in the project area during construction.

Use of the outdoor recreation area, public works facility and yard, and city cemetery after they are developed would result in an increase in the presence of humans, pets, and associated waste. The presence of more waste such as trash could result in an increase in scavenger birds such as common raven, which can prey on young desert tortoises. In compliance with conservation measures, 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 and coyotes. Scheduled project maintenance would occur during the Mojave desert tortoises' less active season (December 1 to February 14) to minimize indirect impacts to tortoise individuals. The public works facility and yard is sited in the north-central portion of the project area, allowing for a spatial buffer between the yard's maintenance activities and habitat adjacent to the southern border of the project area. The presence of humans in the project area would increase for the foreseeable future.

Under the Proposed Action, approximately 125.3 acres of Sonora-Mojave Creosotebush-White Bursage Desert Scrub habitat loss would occur in the project area, which would contribute incrementally to the impacts on desert tortoise habitat from past, present, and reasonably foreseeable future actions as discussed in Section 3.6.2. The 125.3-acre habitat loss from the Proposed Action would represent an approximately 0.5% addition to the combined 22,960.3 acres of past and present surface disturbance and the 883.2 acres of reasonably foreseeable future surface disturbance in the analysis area.

Through additional noise and increased human presence, the Proposed Action would also have an adverse impact on the Mojave desert tortoise when combined with other past, present, and reasonably foreseeable future projects with similar impacts. However, similar habitat is available throughout the analysis area for desert tortoise dispersal (130,421.9 acres of Sonora-Mojave Creosotebush-White Bursage Desert Scrub).

Based on this analysis, the Proposed Action would have direct and indirect effects to the Mojave desert tortoise, resulting in a "may affect and is likely to adversely affect" determination. The BLM has initiated formal Section 7 consultation with the USFWS through the submission of a biological assessment on February 10, 2021.

### **3.7. HOW WOULD SURFACE DISTURBANCE FROM CONSTRUCTION OF THE PROPOSED PROJECT AFFECT NATIVE VEGETATION? HOW WOULD THE PROPOSED ACTION AFFECT THE SPREAD OF NOXIOUS WEEDS AND INVASIVE SPECIES?**

#### **3.7.1. Affected Environment**

The analysis area for vegetation consists of the Eastern Mojave Basins ecoregion, which covers 224,538.2 acres. This analysis area was chosen because it provides a distinct, natural topographic boundary in which to analyze potential impacts to vegetation and it has vegetation communities consistent with the project area.

The Eastern Mojave Basins ecoregion is part of the larger Mojave Basin and Range ecoregion, which includes the Mojave Desert and is composed of basins and scattered mountains that are generally lower, warmer, and drier than those of the Central Basin and Range to the north (Woods et al. 2001). Grasslands and shrublands dominate the Mojave Basin and Range ecoregion (Sleeter and Raumann 2012).

Vegetation communities in the analysis area were identified and described using land cover data developed by the Southwest Regional Gap Analysis Project (SWReGAP), which provides spatial reference and descriptive data for characteristics of the land surface. A total of 36 land cover types are in the analysis area (Figure 3-2). Two of these land cover types are in the project area: 125.3 acres of Sonora-Mojave Creosotebush-White Bursage Desert Scrub (98.9% of the project area) and 1.3 acres of Mojave Mid-Elevation Mixed Desert Scrub (1.1% of the project area). As indicated by the acreages and percentages, the Sonora-Mojave Creosotebush-White Bursage Desert Scrub land cover type covers most of the project area. There are 130,429.1 acres of the Sonora-Mojave Creosotebush-White Bursage Desert Scrub land cover type in the vegetation analysis area.

Plant species observed in the project area during biological surveys were consistent with the dominant land cover type and included blackbrush, burrobrush, white bursage, spiny hopsage, Mojave prickly pear, common fishhook cactus, and limited creosote bush (SWCA 2020b). Representative vegetative cover in the central part of the project area is shown in Figure 3-3. No BLM sensitive plant species are known to occur in the project area.

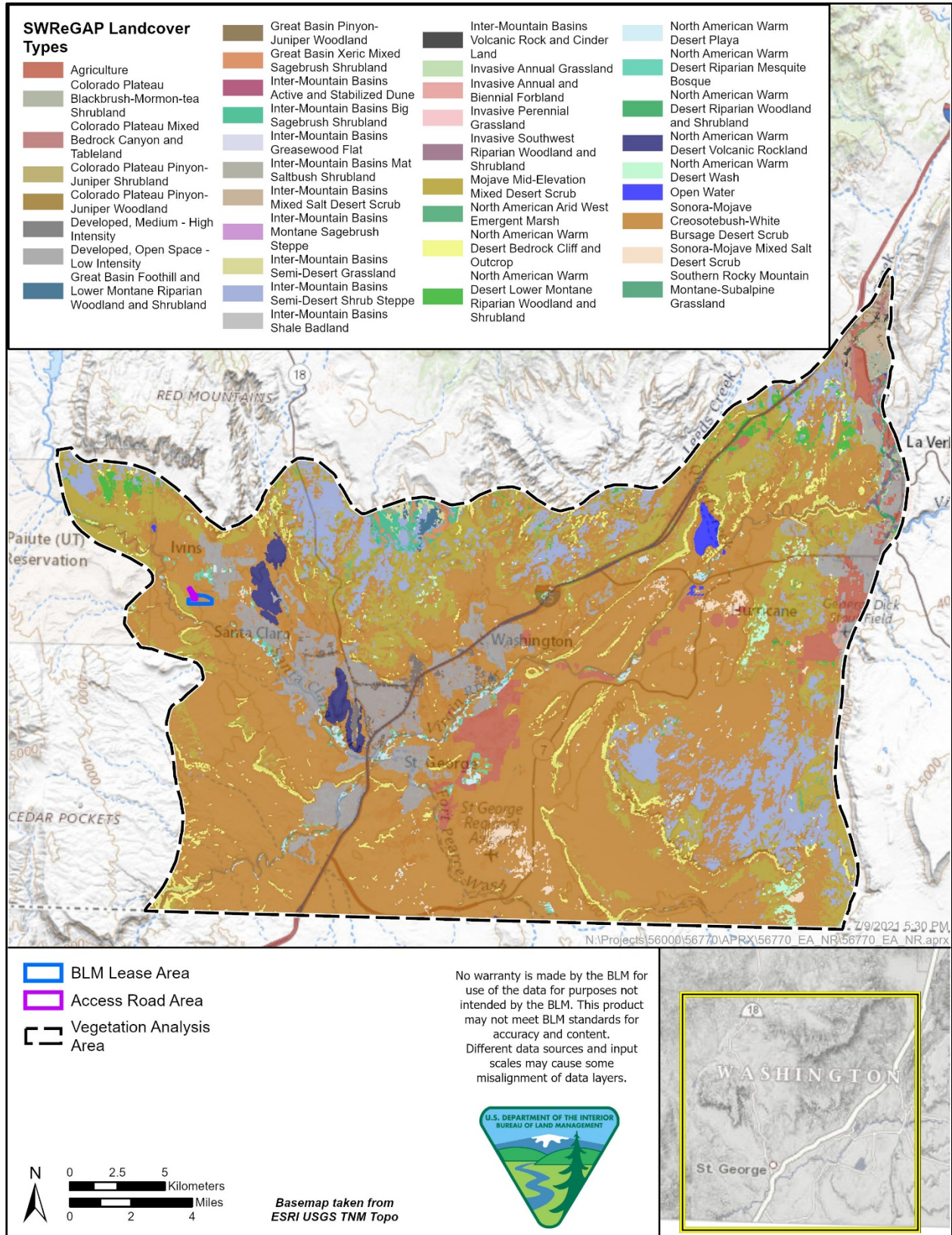


Figure 3-2. Southwest Regional Gap Analysis Project (SWReGAP) land cover types in the analysis area.





**Figure 3-3. Representative vegetative cover in the central part of the project area, view facing south.**

Noxious weeds were not observed in the project area during biological surveys (SWCA 2020b). Species of particular concern on public lands are Scotch thistle (*Onopordum acanthium*) and hoary cress (*Cardaria draba*), or whitetop, because infestations are extensive. Principal invasive species of concern on public lands in Washington County are cheatgrass (*Bromus tectorum*), red brome (*Bromus rubens*), bull thistle (*Cirsium vulgare*), halogeton (*Halogeton glomeratus*), malta starthistle (*Centaurea melitensis*), and silverleaf nightshade (*Solanum elaeagnifolium*).

Past and present actions that have affected vegetation in the analysis area include surface disturbance from residential and urban development, road construction, utilities development, livestock grazing, range improvements, and recreation (e.g., off-highway vehicle use, trail development and use). These activities may have resulted in impacts to vegetation by contributing to reduced soil productivity, soil compaction, loss of biological soil crusts, and soil erosion. Development activities may have modified the composition, structure, and health of vegetation communities and increased the potential for the introduction or spread of noxious weeds or invasive species, especially in disturbed areas and along travel corridors. These past and present actions, along with ongoing landscape-scale phenomena such as climate change and drought, could lead to an increased distribution of altered and degraded vegetation communities in the analysis area over time.

### **3.7.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant and development of the outdoor recreation area, public works facility and yard, and city cemetery would not occur. In addition, the communication site ROW would not be granted. No surface disturbance to vegetation would occur from the Proposed Action, and there would be no temporary or permanent loss of vegetation. No construction activities would occur that could increase the risk of noxious weed or invasive species spread and infestation. Existing, approved uses in the project area (e.g., recreational use, livestock grazing) would continue. Livestock grazing could adversely impact native vegetation communities if not properly managed; it could also introduce or spread noxious weeds and invasive species. Recreational use could also have impacts on vegetation if users introduce or spread noxious weeds or invasive species and do not remain on trails.

The present and reasonably foreseeable future actions as outlined in Section 3.7.1 and 3.2.2 are expected to continue in the analysis area. In the analysis area, 2,178.8 acres are classified as the Developed, Medium – High Intensity land cover type and 14,550.1 acres are classified as the Developed, Low Intensity land cover type. In addition, 6,231.4 acres are classified as Agriculture. These land cover types indicate the likelihood for past and present removal of native vegetation communities and the introduction of noxious weeds and invasive species. Reasonably foreseeable future actions that would affect vegetation in the analysis area are described in Section 3.2.2. These actions include six projects that would have a total of 883.2 acres of estimated surface disturbance, which is assumed to be a loss of native vegetation.

### **3.7.3. Environmental Impacts—Proposed Action**

The Proposed Action would cause approximately 69.6 acres of permanent surface disturbance. This disturbance would be an adverse impact because it would result in the loss of individual plants and could, as a result, include changes to community composition (species composition and plant density) on a localized basis. Clearing would remove protective vegetative cover in a sparsely vegetated landscape and could increase soil erosion and sediment transport. Grading, excavation, and backfilling could result in the mixing of topsoil with subsoil and in the loss and alteration of seed banks, which could result in a long-term reduction of local productivity and the introduction of noxious weeds and invasive species. For the purposes of this analysis, it is assumed that the disturbance would occur entirely in the Sonora-Mojave Creosotebush-White Bursage Desert Scrub land cover type because it covers most of the project area. The proposed project would result in approximately 69.6 acres of surface disturbance in the Sonora-Mojave Creosotebush-White Bursage Desert Scrub land cover type, which comprises 0.05% of the 130,421.9 acres of this land cover type in the analysis area.

Indirect, adverse effects to vegetation could also occur from dust deposition as a result of construction activities. Dust deposition on leaves and other plant structures can inhibit plant growth (Doley and Rossato 2010). Surface application of water to control fugitive dust would minimize dust effects to vegetation. Expected dust deposition effects would be restricted to the project area and the area immediately surrounding the project area; however, dust deposition can vary widely depending on the amounts produced and wind conditions. These effects would be short term and end with the completion of construction.

The Proposed Action would increase the potential for the introduction and spread of invasive species and noxious weeds in the analysis area. The surface disturbance of 69.6 acres and construction activities could provide invasive species the opportunity to establish in the project area and adjacent areas, which would be an adverse effect. The increase in recreational use in the project area (e.g., hikers, mountain bikers) could increase the potential for the introduction and spread of invasive species and noxious weeds because seeds can be transported by such users. The placement of permanent facilities, such as pavilions, parking lots, landscaping, and restrooms, in the project area would likely preclude the growth of weeds in those areas over the long term.

As described in Section 2.2.4, the Applicant would develop and implement a noxious species and invasive weed management plan to prevent the introduction and spread of these species. The plan would likely require the construction contractor and the Applicant to clean construction equipment before entering the project area, use only weed-free material during construction, monitor the area for weed introduction and spread over the life of the project, and appropriately treat weeds that are identified. Implementation of this plan would minimize adverse impacts from noxious weeds and invasive species in the project area.

Additionally, the 69.6 acres of vegetation loss would contribute incrementally to the impacts on vegetation from past, present, and reasonably foreseeable future actions as discussed in Section 3.7.2. The 69.6 acres of vegetation loss from the Proposed Action would represent an approximately 0.3% addition to the combined 22,960.3 acres of past and present surface disturbance and the 883.2 acres of reasonably foreseeable future surface disturbance in the analysis area.

**3.8. HOW MANY ANIMAL UNIT MONTHS (AUMS) WOULD BE AFFECTED BY THE PROPOSED ACTION? HOW WOULD EXISTING LIVESTOCK MANAGEMENT BE AFFECTED?**

**3.8.1. Affected Environment**

The analysis area for livestock grazing is the Land Hill grazing allotment, which covers approximately 1,012.7 acres. The analysis area was chosen because it encompasses the area where livestock grazing would be affected by the project. The project area is in the Land Hill grazing allotment (Figure 3-4). The BLM manages only the BLM-administered land in the Land Hill grazing allotment and does not manage private land in the allotment. Although the 25.2-acre access road portion of the project area is in the Land Hill allotment, it is not part of the allotment's grazing permit and therefore is not included in the environmental impacts analysis.

The current grazing permit allows use on this grazing allotment for 39 AUMs. An AUM is the amount of forage needed to support a cow and calf pair for 1 month. The approximately 101.5 acres of BLM-administered land in the project area accounts for 10.0% of the total acreage of the Land Hill grazing allotment. Based on this information, it is estimated that the project area would support 10.0% percent of total permitted AUMs in the Land Hill allotment, or approximately four AUMs.

The following past and present actions in the Land Hill grazing allotment may have resulted in changes to the amount of acreage and AUMs available on the allotment: development of planned trails, trailheads, and other amenities associated with the Santa Clara River Reserve, off-highway vehicle use and recreational trail use, utilities development, range improvements, and road construction or improvement projects.

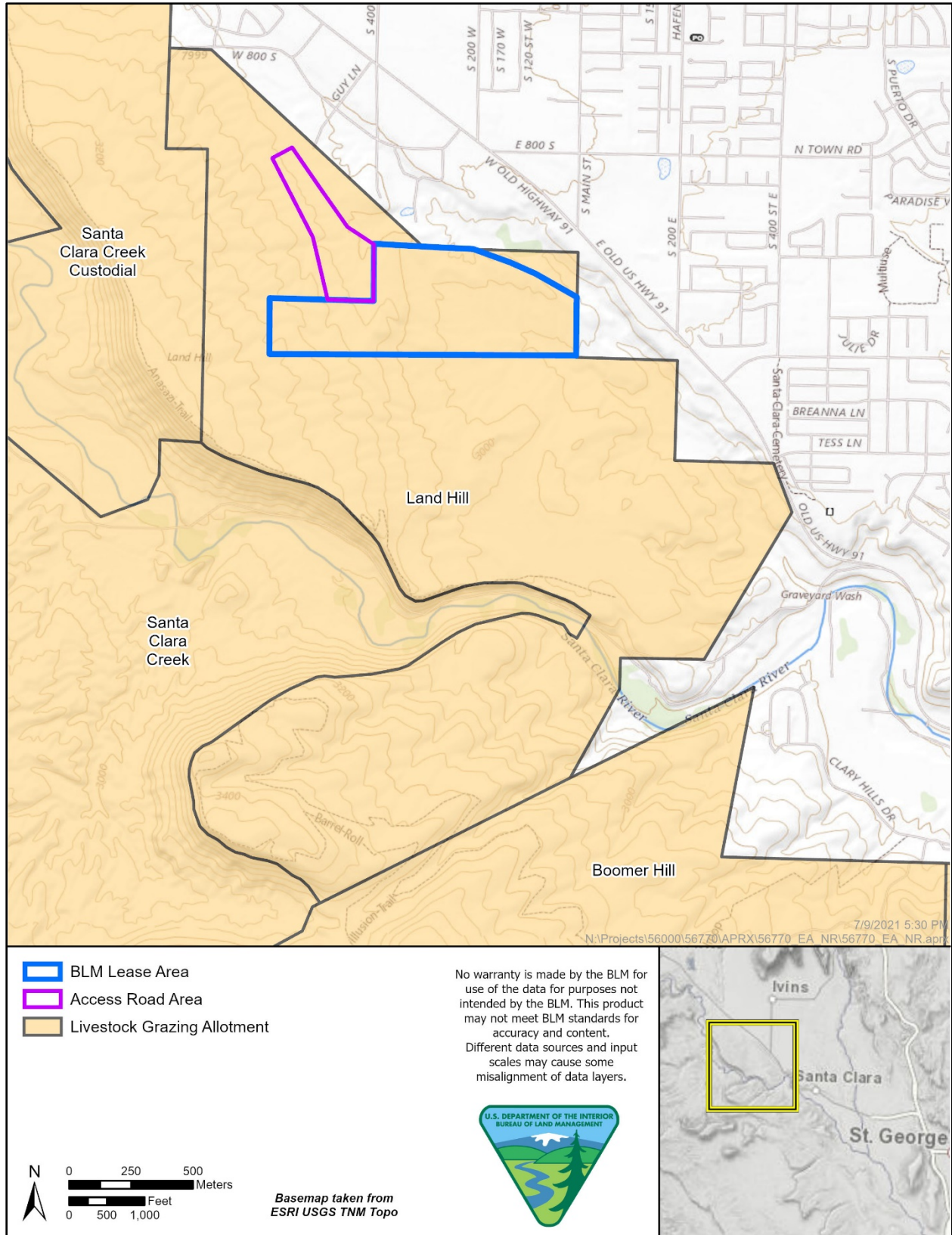


Figure 3-4. Land Hill grazing allotment.

### **3.8.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant and development of the outdoor recreation area, public works facility and yard, and city cemetery would not occur. In addition, the communication site ROW would not be granted. The impacts on livestock grazing management and reduction of AUMs in the Land Hill Allotment under the Proposed Action would not occur. Grazing and livestock management in the Land Hill Allotment would continue under the current grazing permit.

The past, present, and reasonably foreseeable future actions as outlined in Sections 3.8.1 and 3.2.2 are expected to continue in the analysis area. It is unknown how past and present actions have affected the availability of AUMs and livestock management in the analysis area. One reasonably foreseeable future action has the potential to affect livestock grazing and management in the analysis area: the Future Western Corridor Project, which would cause approximately 513 acres of surface disturbance (see Section 3.2.2). Only a small portion of this surface disturbance is expected to occur in the analysis area. In addition, the development of planned trails, trailheads, and other recreational amenities in the Santa Clara River Reserve are also reasonably foreseeable.

Future increased recreational activities in the analysis area may trample and degrade forage vegetation and cause dust deposition on forage vegetation, reducing the area's effectiveness in providing quality livestock grazing. Increased recreational use could also result in harassment of cattle on the Land Hill Allotment. If funded and constructed, the Future Western Corridor Project could reduce available forage and AUMs within the allotment. The exact nature of these impacts would depend on the final location, design, and mitigation measures applied to the Future Western Corridor Project.

### **3.8.3. Environmental Impacts—Proposed Action**

The proposed project would have the direct adverse effect of reducing the acreage of public land available for livestock grazing in the Land Hill Allotment and would require the BLM to modify the terms and conditions of the federal grazing permit and the management of that allotment. The current grazing permit authorizes 39 AUMs, based on the Land Hill Allotment's 1,012.7 acres of public land. If the Applicant is granted an R&PP Act lease and the Proposed Action's amenities are constructed, approximately 101.5 acres of BLM-administered land and forage would no longer be available for grazing, representing a 10.0% reduction in the public land base of this allotment. This reduction would require the BLM to either reduce the number of permitted AUMs by approximately four to a new total of 35 AUMs and alter the existing allotment boundary, or adjust the grazing strategy to fit within the new total of 911.2 acres. The reduction in land available for grazing and AUMs would be permanent, and a new allotment boundary would need to be fenced with an approved livestock fence. Over the past 5 years, the grazing permittee has run close to full numbers on the Land Hill Allotment and has used at least 75% of the 39 permitted AUMs. Monitoring data has shown that the north half of the allotment has typically received between 21% and 40% utilization, while the south half has received less than 20% utilization. The Proposed Action would either reduce the permitted AUMs to 35 and maintain the same utilization levels or keep the total AUMs the same and anticipate an increase in utilization of 10.0%.

After the completion of project construction, recreational use in the project area that transitions outside of the project area (which will be fenced) could result in livestock harassment. Educational materials posted in the outdoor recreation area could limit this potential harassment.

In addition, a possible reduction in AUMs or an increase in utilization under the Proposed Action together with a possible AUM reduction or a utilization increase for the Future Western Corridor Project could result in changes to the existing use, condition, and management of the allotment, but would not prevent future grazing in the Land Hill Allotment.

### **3.9. HOW WOULD THE PROPOSED ACTION AFFECT RECREATIONAL USE AND OPPORTUNITIES, INCLUDING CHANGES TO EXISTING TRAILS, WITHIN THE SANTA CLARA RIVER RESERVE?**

#### **3.9.1. Affected Environment**

The analysis area for recreation is the Santa Clara River Reserve, a distinct boundary which incorporates the project area and captures an area of similar recreation use. The Santa Clara River Reserve is approximately 9,014 acres in size and is used for recreation by the local population and visitors. In addition to recreation, the mission of the Santa Clara River Reserve includes preserving open space, cultural heritage, and resource values (Bureau of Land Management et al. 2005).

There are 58.4 miles of existing trails in the Santa Clara River Reserve that provide opportunities for mountain biking, hiking, trail running, organized races, horseback riding, and motorized use. Of this mileage, approximately 10.7 miles are designated motorized trails. Another 31.4 miles of trails are proposed within the reserve but not yet approved. Of the existing trails, there is currently 0.4 mile of non-motorized existing trail (Cholla Trail) in the project area (Figure 3-5). There are three main trailheads in the Santa Clara River Reserve: Anasazi Valley (off Old U.S. Highway 91, northwest of the project area), Tukupetsi (off Old U.S. Highway 91, southeast of the project area), and Cove Wash (off Gates Lane, south of the Tukupetsi Trailhead). Other recreational uses of the reserve include off-highway vehicle use and seasonal hunting with a valid license in certain management zones.

As discussed in Section 1.5, the project area is in Zone 1 of the Santa Clara River Reserve. Zone 1 (urban recreation) encompasses areas that are immediately adjacent to primary roads and communities and a high amount of change is acceptable (e.g., paved trailheads, paved/unpaved trails, buildings, restrooms, fences, kiosks, and landscaping). High levels of visitation and high densities of diverse groups are expected in Zone 1, along with a high level of management (BLM et al. 2005). The proposed project would generally be consistent with Zone 1 characteristics.

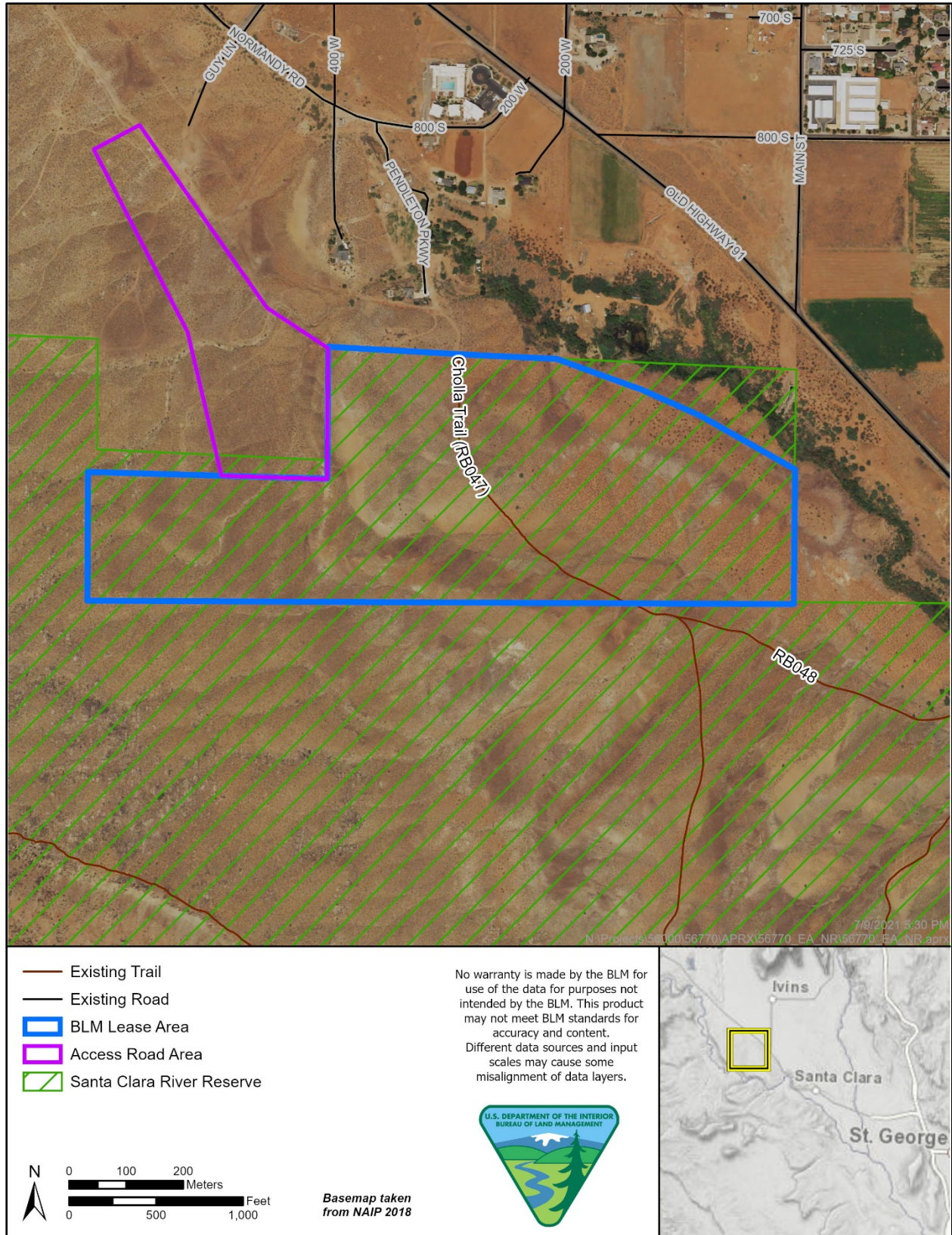


Figure 3-5. Existing Santa Clara River Reserve trails in the project area.

Recreational use in the analysis area has been increasing in association with the growing population in Washington County and local municipalities. The Santa Clara River Reserve trail system has also become increasingly popular with out-of-town visitors. Crowding and overflow occurs at some trailheads. Increases in visitation to and recreational use of the analysis area are expected to continue.

The BLM is currently developing a Travel Management Plan for the general area. Route inventory and preliminary route evaluation work have been done for the St. George Field Office. Some of the alternatives contained in the preliminary draft Travel Management Plan would include approximately 50 additional miles of single-track, non-motorized trails in the Santa Clara River Reserve.

Past and present actions in the analysis area have contributed to the ongoing trend of increased recreational use and associated issues such as human waste management, overcrowding of trailhead parking, and conflicts between user groups. Based on past and present actions, these recreational trends are expected to continue into the future.

### **3.9.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant and development of the outdoor recreation area, public works facility and yard, and city cemetery would not occur. In addition, the communication site ROW would not be granted. No changes to recreation access or opportunities in the Santa Clara River Reserve would occur. Demand for recreation opportunities would likely increase, resulting in continued crowding at some trailheads. The Cholla Trail would continue to lack a formal trailhead and parking.

The present and reasonably foreseeable future actions as outlined in Section 3.9.1 and 3.2.2 are expected to continue in the analysis area. One known reasonably foreseeable future action has the potential to affect recreation in the analysis area: the Future Western Corridor Project, which would cause approximately 513 acres of surface disturbance (see Section 3.2.2). Only a small portion of the 513 acres of disturbance is expected to occur in the analysis area. In addition, road construction and improvement projects and the development of planned trails, trailheads, and other recreational amenities in the Santa Clara River Reserve are also reasonably foreseeable. The Future Western Corridor Project could result in adverse impacts to recreation and the visitor experience in the Santa Clara River Reserve if portions of the highway are constructed in or adjacent to the reserve. The construction of the highway could cause restrictions or changes to visitor access from the closure or alteration of routes or trails.

### **3.9.3. Environmental Impacts—Proposed Action**

Under the Proposed Action, impacts to recreational users would be adverse in the short term and beneficial in the long term. Construction of the public works facility and yard and regional park facilities would eliminate approximately 0.4 mile of the Cholla Trail. While construction is occurring, recreation access would be limited and possibly prevented depending on the construction phase. The recreation experience could also be temporarily and adversely affected by noise, the presence of human activity, and dust.

Once constructed, the Proposed Action would add 2 miles of non-motorized trail and another 3 to 10 miles of mountain biking-specific trail, depending on the final project design. Although 0.4 mile of existing Santa Clara River Reserve trails in the project area would be lost, 2 miles of non-motorized trail would be added, resulting in an overall 1.6-mile increase in available trails in the project area. The mountain biking trail would also add new mileage for mountain bikers. A formalized trailhead for the Cholla Trail with parking and restrooms would be constructed in the southeastern portion of the project area, benefiting recreationists by providing adequate parking to accommodate current and future use levels and easier access to this trail and others in the Santa Clara River Reserve. The project would provide legal trailhead parking and facilitate trailhead access for visitors using the Santa Clara River Reserve.



A separate equestrian parking area is currently planned as part of the project to reduce the potential for user conflict; however, high levels of pedestrian and mountain bike use may not be compatible with equestrian use unless separate trails can be developed. The need for the equestrian parking area must be evaluated in more detail prior to the finalization of the proposed project design. The construction of the regional park (which is proposed to include sport courts, pavilions, playground equipment, and a dog park) and disc golf course would increase the types of recreational opportunities available in the analysis area. These facilities would make the Ivins City area more attractive to local residents and visitors, especially those seeking access to trails and park settings.

Development of the proposed project could reduce the occurrence of activities that degrade the condition of BLM-administered public lands. The proposed project would provide needed restroom and waste management facilities and services for the area.

Overall, the proposed project would be beneficial for recreational users by increasing trail mileage and trailheads, improving recreation access and opportunities, and adding formalized public amenities. Additionally, future trails planned for the analysis area could connect with the new proposed project trailheads.

The impacts from the present and reasonably foreseeable future actions as discussed in Section 3.9.2 are expected to continue in the analysis area. The development of the proposed project would contribute to increased development and visitation at the recreational assets in the Santa Clara River Reserve. Amenities provided by the proposed project would help with issues such as human waste management, the availability of legal access and trailhead parking, and the need for more recreational opportunities, such as disc golf and mountain biking. However, these amenities may attract more recreational users and could contribute to additional crowding in the analysis area from a cumulative perspective. As the Proposed Action is expected to have an overall beneficial incremental effect on recreation in the analysis area, it is not expected to add to adverse impacts when combined with the past, present, and reasonably foreseeable future actions.

### **3.10. HOW WOULD DEVELOPMENT OF THE PROPOSED PROJECT CHANGE THE EXISTING VISUAL CHARACTER OF THE LANDSCAPE?**

#### **3.10.1. Affected Environment**

The visual resources analysis area is a 3-mile buffer from the project area, which corresponds to the BLM's foreground-middleground distance zone.

Past and present actions that may have affected visual resources in the analysis area include residential and urban development, road construction, utilities development, livestock grazing, range improvements, and the development of recreational amenities (e.g., trailheads, restrooms).

##### **3.10.1.1. Background**

As directed by the FLPMA, the BLM is required to consider scenic values of public land as a resource that merits management and preservation, where determined through the land use planning process. BLM Manual 8410-1, *Visual Resource Inventory (VRI)* (BLM 1986a), was developed to address this requirement. BLM Manual 8410-1 first focuses on developing an inventory of scenic values based on the following factors: 1) diversity of landscape features that define and characterize landscapes in a given planning area (scenic quality rating units [SQRUs]), 2) public concern for the landscapes that make up a planning area (sensitivity level rating units [SLRUs]), and 3) landscape visibility from public viewing locations (distance zones). These factors are collectively described as the VRI. Combined, these three factors determine VRI classes, which indicate the existing scenic values of BLM-administered lands. Through the BLM's land use planning process, Visual Resource Management (VRM) classes are

established initially based on the VRI classes and are then adjusted to reflect resource allocation decisions in the RMP process to provide management objectives in terms of allowable levels of disturbance (visual contrast) and noticeability. The definitions of the four VRM class objectives are described in BLM Manual 8410-1.

Compliance with the VRM class objectives is assessed using BLM Form 8400-4 (Visual Contrast Rating Worksheet), as directed by BLM Manual 8431, *Visual Resource Contrast Rating*, from selected key observation points (KOPs), which also include the identification of additional visual mitigation to further reduce visual contrast (BLM 1986b). BLM Manual 8400 defines KOPs as “one or a series of points on a travel route or at a use area or potential use area, where the view of a management activity would be most revealing” (BLM 1984).

The project area is on VRM Class III lands (Figure 3-6). The definition of VRM Class III objective is:

to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape. (BLM 1986a)

### **3.10.1.2. Scenery**

*Scenery* is defined as a continuous unit of land comprising harmonizing features that result in and exhibit a particular character. The BLM St. George Field Office conducted its VRI to identify existing scenic values, including the delineation of SQRUs and SLRUs. The rating of SQRUs is based on the diversity of seven key factors: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modifications to assign a scenic quality rating (Class A [most diverse], Class B, and Class C). SLRUs are inventoried to define the level of concern the public would express toward the visible modification of a particular landscape. The BLM assigns either a high, medium, or low sensitivity level that corresponds to the level of public concern. When reviewed together, SQRUs and SLRUs identify a landscape’s visual appeal as well as the public concern to modification of these landscapes.

The proposed project would be located on VRI Class III lands, specifically in the Questa-Forming Shales SQRU (Class C) and associated high sensitivity SLRU.

The visual resources analysis area is in the Great Basin section of the Basin and Range physiographic province. Within the analysis area, the landscape is comprised of alluvial fans, valleys, and scattered buttes vegetated with creosote bush, Joshua tree (*Yucca brevifolia*), blackbrush, big sagebrush (*Artemisia tridentata*), and associated grasses. The Santa Clara River and Graveyard Wash introduce riparian vegetation with its brighter green color contrasting against the arid plateau lands, where the project area is located. Most development in the area is located east of Old U.S. Highway 91, including the juxtaposition of dense residential and agricultural development, which has modified the existing landscape character, creating a rural agricultural landscape. There is increasing development west of the highway, including residences and commercial buildings as well as a small electrical substation and associated power lines.

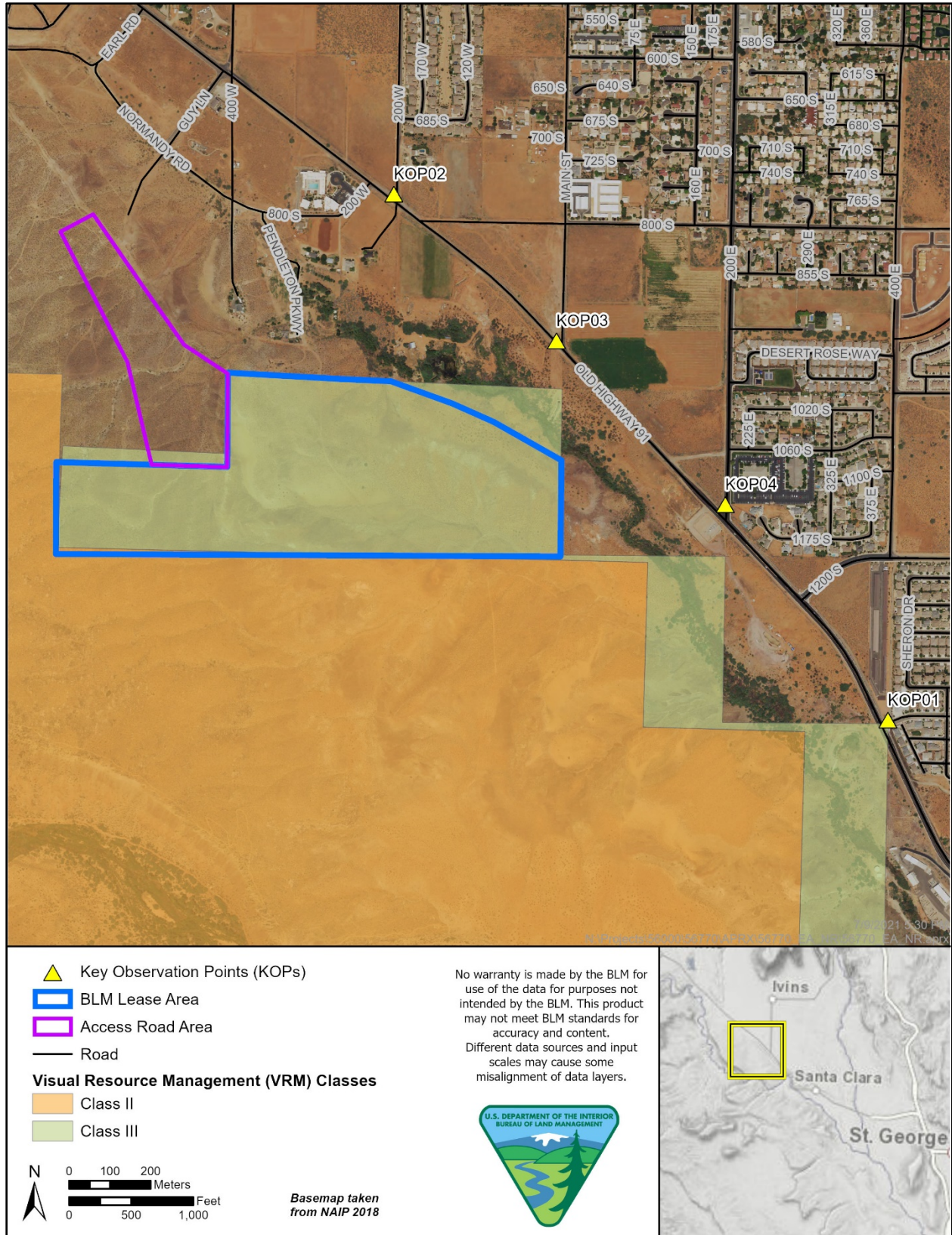


Figure 3-6. Visual Resource Management classes and key observation point locations.

### **3.10.1.3. Viewing Locations**

Viewing locations represent places where the public would have potential views of the proposed project. Four KOP locations were identified to assess both impacts on views and to determine compliance with BLM VRM class objectives (Table 3-1; see Figure 3-6). These KOPs were identified through a combination of GIS analysis and field observation to depict views from Old U.S. Highway 91 as well as from the adjacent residential areas toward the southwest and the Santa Clara River corridor. A Visual Contrast Rating Worksheet was completed for each KOP with the findings of the visual contrast rating process; they can be found in Appendix E.

**Table 3-1. Key Observation Points**

<b>KOP Number</b>	<b>KOP Name</b>
01	Intersection of Rachel Drive and Old Hwy 91
02	Intersection of 200W and Old Hwy 91
03	Intersection of Main Street and Old Hwy 91
04	Intersection of Red Mountain Blvd and Old Hwy 91

### **3.10.2. Environmental Impacts—No Action Alternative**

Under the No Action Alternative, the BLM would not grant an R&PP Act lease with an option to patent to the Applicant and development of the outdoor recreation area, public works facility and yard, and city cemetery would not occur. In addition, the communication site ROW would not be granted. Therefore, impacts on scenery and views would be avoided, and because there would be no change introduced by the No Action Alternative, this alternative would be compliant with BLM VRM class objectives.

The present and reasonably foreseeable future actions as outlined in Sections 3.10.1 and 3.2.2 are expected to continue in the analysis area and would expand the area viewed as developed adjacent to Ivins City and in the analysis area. Reasonably foreseeable future actions in the visual resources analysis area include the Anasazi Trailhead Improvements, the City of Santa Clara ROW Amendment, and the Future Western Corridor Project, as well as continued construction of additional residential developments (including associated roads and utilities) and road improvement projects.

### **3.10.3. Environmental Impacts—Proposed Action**

#### **3.10.3.1. Analysis Methods and Assumptions**

An analysis of visual dominance, scale, and contrast was used in determining to what degree the proposed alternatives would attract attention and in determining the relative change in character compared with the existing characteristic landscape and its inherent scenic quality. The amount of visual contrast created by a project is directly related to the amount of attention that is drawn to a project feature in the landscape. Potential changes in the viewshed from sensitive viewing locations (KOPs) were also evaluated and characterized. Lastly, the analysis of visual impacts was used in the determination of conformance of the BLM VRM objectives where the proposed project would occur on BLM-administered lands.

#### **3.10.3.2. Scenery**

The development of the proposed project would modify the project area's existing landscape character associated with the highly sensitive, Questa-Forming Shales SQRU through the introduction of the public works facility, the irrigated regional park area and landscaping, the city cemetery, and the communications tower. The character of the natural, arid plateau lands, where the proposed project is located, would become

more similar to the residential and agricultural lands north of Old U.S. Highway 91, where buildings and large areas of irrigated turf and ornamental landscaping define the setting. Since the proposed project would occur along the edge of the landscape, adjacent to lands previously developed, the overall character of the Questa-Forming Shales SQRU would be minimally impacted.

### **3.10.3.3. Viewing Locations**

Views from the four KOPs are shown in Figure 3-7.

**KOP 01—Intersection of Rachel Drive and Old Hwy 91.** Impacts on views from this location would result from the introduction of the geometric structures associated with the public works facility and yard; the change in landform from site grading; and the change in vegetation from the olive and sage greens in the existing setting to brighter greens associated with the irrigated regional park area and ornamental landscaping. A weak level of visual contrast would be introduced by the proposed project as viewed from this location since the form of the public works facility and yard would repeat existing patterns present in the adjacent residential areas and plateau lands. After the site has been planted with landscaping, the vegetation patterns would be similar to those in adjacent residential and agricultural areas. The proposed communications tower would be visually evident but would not attract attention because it would be viewed backdropped against the distant mountains.

Visual contrast introduced by the proposed project would be weak; modifications would be similar to the existing setting and would partially retain the existing landscape character. Therefore, the proposed project would meet the objectives associated with BLM VRM Class III land.

**KOP 02—Intersection of 200W and Old Hwy 91.** Impacts on views from this location would be similar to those described for KOP 01. The top of the communications tower may be skylined above the ridge between the KOP and the distant Beaver Dam Mountains. By rising above the ridgeline, the vertical form of the proposed facility would contrast against the horizontal, angular lines present in the existing setting. The existing residential and agricultural structures in the foreground introduce other vertical elements, reducing the relative level of visual contrast. By minimizing the height of the communications tower to the extent practicable, these impacts could be limited, resulting in a weak level of visual contrast.

Similar to KOP 01, visual contrast introduced by the proposed project would be weak because modifications would be similar to the existing setting and would partially retain the existing landscape character. Therefore, the proposed project would meet the objectives associated with BLM VRM Class III land.

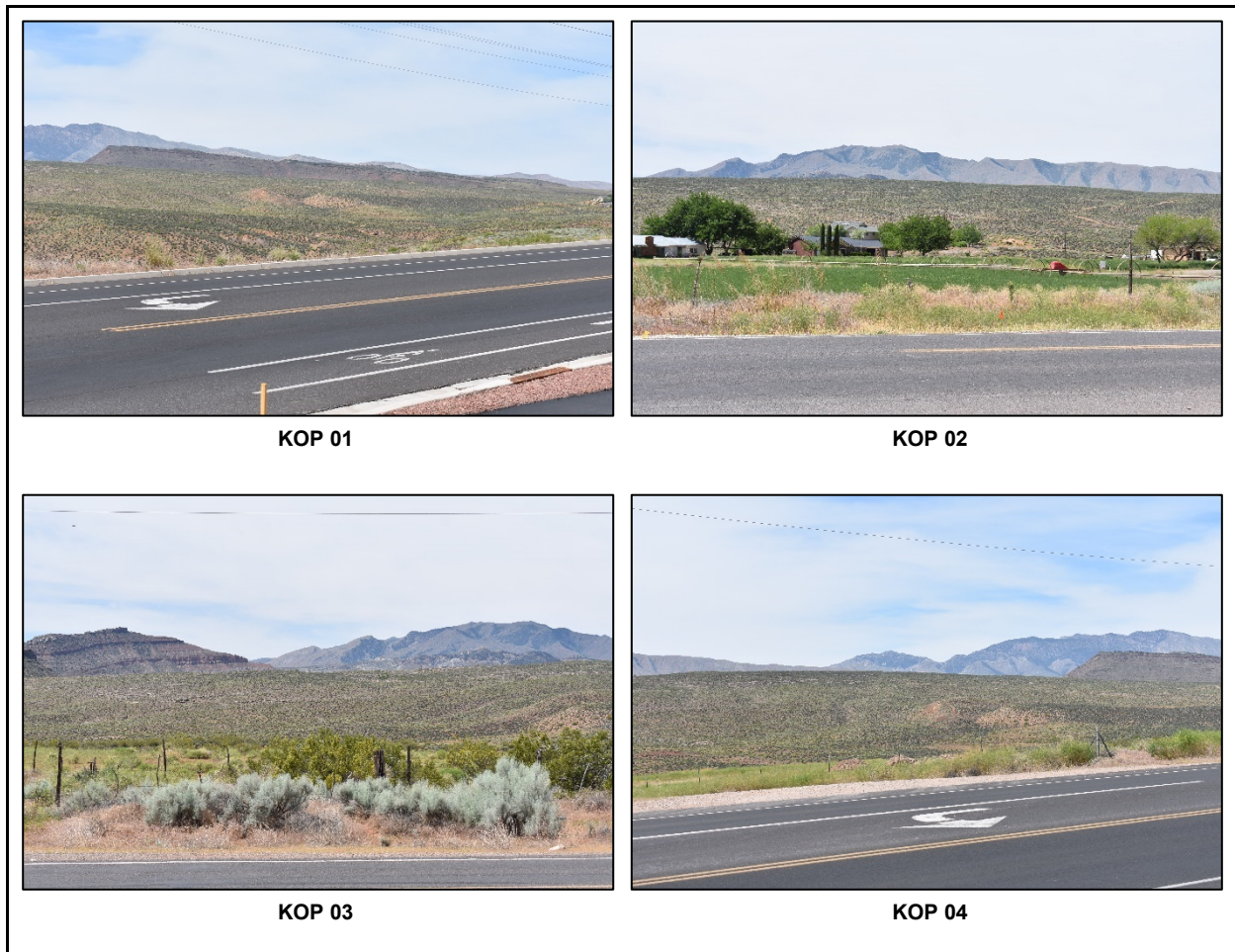
**KOP 03—Intersection of Main Street and Old Hwy 91.** Impacts on views from this location would be similar to those described for KOP 01 but more intense since the proposed project would be located closer to this location. The modifications to landforms from site grading, the change in vegetation to an irrigated ornamental landscape, and the introduction of structures associated with the public works facility and yard would attract attention but would not dominate the view. As such, a moderate level of visual contrast would be introduced by the proposed project at KOP 03. The proposed communications tower would be visually evident but would not attract attention as it would be viewed backdropped against the distant mountains.

Visual contrast introduced by the proposed project, due to the closer viewing distance, would be moderate because the modifications would attract attention but not dominate the view. The existing landscape character would be partially retained; therefore, the proposed project would meet the objectives associated with BLM VRM Class III land.

**KOP 04—Intersection of Red Mountain Blvd and Old Hwy 91.** Impacts on views from this location would be similar to those described for KOP 01, except for additional existing human-made modifications that are located adjacent to this viewpoint, including an electrical substation. A weak level of visual contrast

would be introduced by the proposed project as viewed from this location because the form of the public works facility and yard would repeat existing patterns present in the adjacent residential areas and plateau lands. After the site has been planted with landscaping, vegetation patterns would be similar to adjacent residential and agricultural areas. The proposed communications tower would be visually evident but would not attract attention as it would be viewed backdropped against the distant mountains.

Visual contrast introduced by the proposed project would be weak because the modifications would be similar to the existing setting and would partially retain the existing landscape character. Therefore, the proposed project would meet the objectives associated with BLM VRM Class III land.



**Figure 3-7. Views from the key observation point locations.**

The proposed project would have an additive effect to past, present, and reasonably foreseeable future actions because the new structures and ornamental landscaping would be in the same character as other proposed and existing residential developments.

## **CHAPTER 4.0. CONSULTATION AND COORDINATION**

### **4.1. SUMMARY OF CONSULTATION AND COORDINATION**

#### **4.1.1. Agencies and Organizations Consulted**

Table 4-1 lists the agencies and organizations consulted during the preparation of this EA.

**Table 4-1. List of Agencies and Organizations Consulted**

<b>Name</b>	<b>Purpose and/or Authorities for Consultation or Coordination</b>	<b>Findings and Conclusions</b>
Utah SHPO	Consultation as required by the NHPA (Public Law 89-665; 54 USC 300101 et seq.)	The BLM initiated consultation with Utah SHPO on November 18, 2020. SHPO concurred with the area of potential effects, identification efforts, and eligibilities of three sites on November 30, 2020. Consultation is continuing for the finding of effects, which will include a HPTP and associated Memorandum of Agreement to resolve adverse effects.
Shivwits Band of the Paiute Indian Tribe of Utah	Government-to-government consultation as required by the American Indian Religious Freedom Act of 1978 (42 USC 1531), the Native American Graves Protection and Repatriation Act (25 USC 3001 et seq), and the NHPA (Public Law 89-665; 54 U.S.C. 300101 et seq.) as well as the protocol established in the Memorandum of Understanding (MOU) between the BLM and the Paiute Indian Tribe of Utah	A consultation letter was sent to the Shivwits Band of the Paiute Indian Tribe of Utah on May 11, 2020. Consultation is continuing.
Paiute Indian Tribe of Utah	Government-to-government consultation as required by the American Indian Religious Freedom Act of 1978 (42 USC 1531), the Native American Graves Protection and Repatriation Act (25 USC 3001 et seq), and the NHPA (Public Law 89-665; 54 USC 300101 et seq.) as well as the protocol established in the MOU between the BLM and the Paiute Indian Tribe of Utah	A consultation letter was sent to the Paiute Indian Tribe of Utah on May 11, 2020. Consultation is continuing.
USFWS	Section 7(a)(2) of the Endangered Species Act of 1973 (16 USC 1531 et seq.) directs federal agencies to consult with the USFWS regarding the potential impacts of actions authorized, carried out, or funded by federal agencies on species listed as threatened or endangered under the Endangered Species Act.	The BLM initiated formal Section 7 consultation with the USFWS on February 10, 2021, regarding the potential impacts of issuing the R&PP Act lease on threatened and endangered species. Consultation is almost completed.

#### **4.1.2. Native American Consultation**

All tribal consultation for this project is being conducted on a government-to-government basis by the BLM. Letters were sent on May 11, 2020, to the following Native American tribal groups:

- Hopi Tribe
- Hopi Cultural Preservation Office
- Kaibab Band of Paiute Indians
- Las Vegas Paiute Tribe
- Moapa Band of Paiute Indians
- Navajo Nation
- Navajo Nation Heritage and Historic Preservation Department

- Paiute Indian Tribe of Utah
- Indian Peaks Band of Paiutes
- Cedar Band of Paiutes
- Shivwits Band of Paiutes
- Koosharem Band of Paiutes
- Kanosh Band of Paiutes
- San Jan Southern Paiute Tribe
- Pueblo of Zuni
- Zuni Heritage and Historic Preservation
- Chemehuevi Indian Tribe

The Paiute Indian Tribe of Utah and the Shivwits Band of Paiutes expressed interest in continued consultation and participation in the project.

#### **4.2. SUMMARY OF PUBLIC PARTICIPATION**

The BLM conducted internal scoping on the Proposed Action and completed an ID Team Checklist in March 2019. Issues identified by the ID Team were incorporated into this EA for analysis.

During the preparation of the EA, the public was notified of the Proposed Action through a posting on the BLM’s ePlanning website on November 16, 2020. The BLM provided a 30-day public review and comment period for the draft EA, beginning on August 20, 2021, and ending on September 18, 2021. Copies of the draft EA were available on the BLM’s ePlanning website during the public review and comment period.

##### **4.2.1. Public Comments Analysis**

*To be determined if applicable.*

#### **4.3. LIST OF PREPARERS**

BLM staff specialists who determined the potentially affected resources for this document are listed in the ID Team Checklist in Appendix B. Those who contributed to the preparation of the EA and provided review comments on the EA are listed in Tables 4-2 and 4-3.

**Table 4-2. Bureau of Land Management St. George Field Office Preparers and Reviewers**

<b>Name</b>	<b>Title</b>	<b>Responsibility</b>
Shawna Dao	Realty specialist	BLM project manager, EA technical review, lands and realty
L. Callie Goff	NEPA coordinator	EA technical review
Amber Van Alfen	Archaeologist	Archaeological and cultural resources
Stephanie Taylor	Wildlife biologist	Fish and wildlife; migratory birds; threatened, endangered, and candidate species
Ryan Reese	Range management specialist	Vegetation, noxious weeds, rangeland
Kyle Voyles	Outdoor recreation planner	Recreation, visual resources



**Table 4-3. SWCA Environmental Consultants Preparers and Reviewers**

<b>Name</b>	<b>Title</b>	<b>Responsibility</b>
Gretchen Semerad	Project manager	Project management, document preparation and review
Jeremy Eyre	NEPA specialist	Document preparation
Laren Cyphers	NEPA specialist	Document preparation
KayLee Lavery	NEPA specialist	Document preparation
Kevin Rauhe	Environmental planner	Visual resources
Mary Lane Poe	Biologist	Biological surveys
Amy Harvey	Biologist	Biological assessment
Ralph Burrillo	Archaeologist	Cultural resources survey
Diane Winslow	Cultural resources principal investigator	Historic properties treatment plan
Suzanne Eskenazi	Archaeologist/Principal investigator	Cultural resources lead
Vicki Meyers	Paleontologist	Paleontological resources
Georgia Knauss	Paleontologist	Paleontological resources lead
Reid Persing	Natural resources director	Senior NEPA review
Catherine Smith	GIS specialist	GIS and mapping
Allen Stutz	GIS specialist	GIS and mapping
Diane Bush	Technical editor	Technical editing
Debbi Smith	Production coordinator	Document formatting and production, Section 508 accessibility

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## **APPENDIX A**

### **Letters of Support**

The Section 508 amendment of the Rehabilitation Act of 1973 requires that the information in federal documents be accessible to individuals with disabilities.

The Bureau of Land Management has made every effort to ensure that the information in this document is accessible. If you have any problems accessing information, please contact Shawna Dao at [sdao@blm.gov](mailto:sdao@blm.gov) or (435) 688-3326.

Mayor  
Rick Rosenberg

City Manager  
Edward O. Dickie III



City Council  
Ben Shakespeare  
Herb Basso  
Mary Jo Hafen  
Wendell Gubler  
Jarett Waite

September 10, 2018

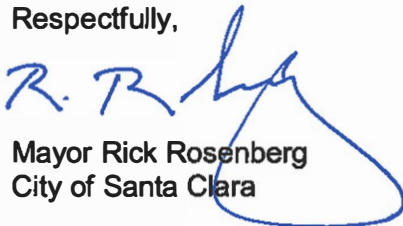
Tereasa Burke  
Bureau of Land Management  
St. George Field Office  
345 E. Riverside Drive  
St. George, UT 84790

Subject: Letter of Support Ivins RP&P Application

Dear Tereasa,

Mayor Hart and the Ivins City Staff have met with me concerning their application pursuant to the Recreation and Public Purposes Act, to purchase public lands located on the south side of Ivins City, not far from the borders of the City of Santa Clara (described as Salt Lake Meridian T 42 S, R 16 W Sec 7, NE ¼, S ½ and Sec. 7 NW ¼, S ½, and SE ¼ consisting of approximately 100 acres). I have reviewed this proposal with the City Council and Staff and hereby submit this letter of support and encourage the Bureau of Land Management to accept the application and, pending all necessary processes and studies, approve the proposed purchase.

Respectfully,

  
Mayor Rick Rosenberg  
City of Santa Clara



ZACHARY RENSTROM, COMMISSION CHAIR | VICTOR IVERSON, COMMISSIONER | DEAN COX, COMMISSIONER

August 29, 2018

Dear BLM Administrators:

We are aware of Ivins City's application, pursuant to the Recreation and Public Purposes Act, to purchase public lands located on the south side of Ivins City, not far from the borders of the City of Santa Clara (described as Salt Lake Meridian T 42 S, R 16 W Sec 7, NE ¼, S ½ and Sec. 7 NW ¼, S ½, and SE ¼ consisting of approximately 100 acres).

We hereby submit this letter of support and encourage the Bureau of Land Management to accept the application and, pending all necessary processes and studies, approve the proposed purchase.

Sincerely,

WASHINGTON COUNTY COMMISSION

Victor Iverson  
Commissioner

Zachary Renstrom  
Commission Chair

Dean Cox  
Commissioner

## **APPENDIX B**

### **Bureau of Land Management Interdisciplinary Team Checklist**

The Section 508 amendment of the Rehabilitation Act of 1973 requires that the information in federal documents be accessible to individuals with disabilities.

The Bureau of Land Management has made every effort to ensure that the information in this document is accessible. If you have any problems accessing information, please contact Shawna Dao at [sdao@blm.gov](mailto:sdao@blm.gov) or (435) 688-3326.

## INTERDISCIPLINARY TEAM CHECKLIST

**Project Title:** Ivins City Outdoor Recreation, Public Works & Cemetery R&PP

**NEPA Log Number:** DOI-BLM-UT-C030-2020-00XX-EA

**File/Serial Number:** UTU-93846

**Project Leader:** Shawna Dao

**Project Location:** South of Ivins, UT

Salt Lake Meridian

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

Sec. 7, S $\frac{1}{2}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ .

The area described contains approximately 95 acres.

**Maps:** See attached maps at end of document.

**Project Description:**

Ivins City has applied for a Recreation and Public Purposes (R&PP) lease/patent for land to be used for a new Public Works yard, a new public cemetery, and additional outdoor recreation space. The city anticipates that within the next 5 years it will need to expand the current Public Works yard, but there is not enough property at the current location to do so. The new proposed site would provide space for future expansions. Likewise, the cemetery is growing and is expected to reach capacity within the next 5-10 years.

The outdoor recreation space would consist of a regional park, trail, and trailhead. The park would likely be an open park concept, consisting of some sport courts, tree groves, grassy areas, playgrounds, pavilions, trails, and restroom facilities. According to the City's zoning and current development projects, this R&PP site represents a great location to service the high-density residential areas of Ivins City. With the limited outdoor recreation space that is associated with high-density residential developments, there will be a great need for a park within this vicinity of the City. Additionally, due to the limited access to the existing trail located at the proposed R&PP site, there is a substantial need for a trailhead. Consequently, the City proposes a trailhead to be constructed to provide a public access point to the existing trail system. In addition to the trailhead, the City would like to construct a trail system through the proposed R&PP site for hiking, mountain biking, and equestrian use.

Additional information including Maps and the Plan of Development can be found at:



**DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)**

NP = not present in the area impacted by the proposed or alternative actions

NI = present, but not affected to a degree that detailed analysis is required

PI = present with potential for relevant impact that need to be analyzed in detail in the EA

NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section D of the DNA form. The Rationale column may include NI and NP discussions.

**Resources and Issues Considered (Includes Supplemental Authorities Appendix 1 H-1790-1)**

Determination	Resource	Rationale for Determination*	Signature	Date
<b>RESOURCES AND ISSUES CONSIDERED (INCLUDES SUPPLEMENTAL AUTHORITIES APPENDIX 1 H-1790-1)</b>				
NI	Air Quality	Fugitive dust emission levels will increase during construction of some of the project components but would not result in long term or measureable changes in air quality or attainment status. The potential impacts on visibility will likely be localized and be limited to the areas of active construction. The application of BMPs that help to minimize soil erosion, such as applying water to control dust on construction sites, would lessen potential impacts. Long term impacts would be minimal but would likely be limited to those areas, following development, that are not paved or otherwise covered with vegetation.	D. Corry	3/27/19
NI	Greenhouse Gas Emissions	Greenhouse Gas Emissions would not increase as a result of this proposal	D. Corry	3/27/19
NI	Wastes (hazardous or solid)	The process of transferring the parcel to the town of Ivins would not increase the potential of hazardous or solid wastes being spilled. However, during construction and day-to-day activities following, the potential for spills would increase especially within the Public Works yard. Any spills that may occur should be cleaned up in accordance State of Utah hazardous and solid waste clean-up standards.	D. Corry	3/27/19
PI	Water Resources/Quality (drinking/surface/ground)	The Santa Clara River is located approximately 1/2 mile south of the project but is unlikely to be directly impacted by the proposed action. However, the project would involve a portion of Graveyard Wash, which is a perennial water source that does eventually empty into the Santa Clara River. As proposed, all of Graveyard Wash located on public land would be included in the R&PP Lease and the process of transferring the land would not be an impact to Water Quality however, if retained in BLM ownership is likely that during construction some sediment would access the drainage and impact Water Quality at least temporary.	D. Corry	4/2/19

Determination	Resource	Rationale for Determination*	Signature	Date
NI	Areas of Critical Environmental Concern	The parcel borders, but is not within, the Santa Clara Land Hill ACEC.	J. Kellam	4/8/19
PI	Cultural Resources	Very little cultural resource survey has been done in this area, but moderate to high site densities are expected. A cultural resource survey will need to be completed (to include the portion on private land where the access road is located) and BLM will need to consult with the Utah SHPO as directed under the implementing regulations for Section 106 of the NHPA.	D. Ferris-Rowley	3/25/19
PI	Native American Religious Concerns	Because of the projects proximity to the Shivwits Reservation and the potential for sites that are important to the Shivwits Band of the Paiute Indian Tribe of Utah, the Hopi Tribe, and other American Indian Tribes that claim cultural affiliation to southwestern Utah, the BLM must engage in Tribal Consultations relating to this proposal.	D.Ferris-Rowley	3/25/2019
PI	Paleontology	<p>The area of the proposed action (apx. 95 acres) is divided into two Potential Fossil Yield Classes (PFYC). Approximately 48 acres, (50.52%) is within PFYC 4. The remaining 47 acres (49.48%) is within PFYC 2.</p> <p>There are 3 recorded paleontological sites within one mile of the project area, the closest being .6 miles NW. two of the sites are within PFYC 4 and one is in class 2. These sites primarily contain vertebrate trackways and petrified wood.</p> <p><b>Class 2 – Low.</b> Geologic units that are not likely to contain paleontological resources. Units assigned to Class 2 typically have one or more of the following characteristics:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Field surveys have verified that significant paleontological resources are not present or are very rare.</li> <li><input type="checkbox"/> Units are generally younger than 10,000 years before present.</li> <li><input type="checkbox"/> Recent aeolian deposits.</li> <li><input type="checkbox"/> Sediments exhibit significant physical and chemical changes (i.e., diagenetic-alteration) that make fossil preservation unlikely.</li> </ul> <p>(1) Except where paleontological resources are known or found to exist, management concerns for paleontological resources are generally low and further assessment is usually unnecessary except in occasional or isolated circumstances.</p> <p>(2) Paleontological mitigation is only necessary where paleontological resources are known or found to exist.</p> <p>The probability of impacting significant paleontological resources is low. Localities containing important paleontological resources may exist, but are occasional and should be managed on a case-by-case basis. An assignment of Class 2 may not trigger further analysis unless paleontological resources are known or found to exist. However, standard stipulations should be put in place prior to authorizing any land use action in order to accommodate unanticipated discoveries.</p>	K. Voyles	3/18/19

Determination	Resource	Rationale for Determination*	Signature	Date
		<p><b>Class 4 – High.</b> Geologic units that are known to contain a high occurrence of paleontological resources. Units assigned to Class 4 typically have the following characteristics:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Significant paleontological resources have been documented, but may vary in occurrence and predictability.</li> <li><input type="checkbox"/> Surface disturbing activities may adversely affect paleontological resources.</li> <li><input type="checkbox"/> Rare or uncommon fossils, including nonvertebrate (such as soft body preservation) or unusual plant fossils, may be present.</li> <li><input type="checkbox"/> Illegal collecting activities may impact some areas.</li> </ul> <p>(1) Management concerns for paleontological resources in Class 4 are moderate to high, depending on the proposed action.</p> <p>(2) Paleontological mitigation strategies will depend on the nature of the proposed activity, but field assessment by a qualified paleontologist is normally needed to assess local conditions.</p> <p>The probability for impacting significant paleontological resources is moderate to high, and is dependent on the proposed action. Mitigation plans must consider the nature of the proposed disturbance, such as removal or penetration of protective surface alluvium or soils, potential for future accelerated erosion, or increased ease of access that could result in looting. Detailed field assessment is normally required and on-site monitoring or spot-checking may be necessary during land disturbing activities. In some cases avoidance of known paleontological resources may be necessary.</p>		
NP	Geology / Mineral Resources/Energy Production	There are no mineral resources or energy production within the project boundary.	K. Voyles	3/18/19
NP	Cave and Karst	There are no caves or karstic geology in the proposed project area.	K. Voyles	3/18/19
NI	Environmental Justice	<p>According to the EPA Region VIII, State of Utah, Environmental Justice Map, the region has been categorized as a minority population area of 10-20% and a poverty population area of 10-20%. 5-10% of the population speaks English "Less than Well". This data shows that low income and high minority populations are generally located in the St. George/Santa Clara/Washington areas in locations not adjacent to BLM managed lands. (see <a href="http://epamap14.epa.gov/ejmap/entry.html">http://epamap14.epa.gov/ejmap/entry.html</a>, 11/29/12).</p> <p>However, it is likely that a low income, minority population is also present in the housing area on the east side of the Shivwits Paiute Reservation, and a low income population exists in the Hildale/Colorado City area. These populations are not distinct on census data due to having been lumped in with higher income low-minority areas in Ivins, Apple Valley, and Springdale.</p>	D. Kiel	3/19/19

Determination	Resource	Rationale for Determination*	Signature	Date
		No minority or economically disadvantaged communities or populations are present which could be affected by the proposed action or alternatives.		
NI	Socio-Economics	It is difficult to quantify the economic impacts of the proposed action. The proposed park is adjacent to, and easily accessible from the majority of housing developments in Ivins. The park would offer urban recreation alternatives while also serving as a trailhead/access point to the Land Hill Cultural Site and the associated trail system in this area. In addition, a city park at this location would make an already popular recreation destination even more attractive. It is likely that the City of Ivins would see the most economic benefit from this project, but in the overall context of Washington County, the economic impacts are expected to be negligible.	D. Kiel	3/19/19
NI	Farmlands (Prime or Unique)	There is no designated Prime or Unique Farmlands within or adjacent to the proposed R&PP	D. Corry	3/27/19
PI	Soils	<p>The proposed Ivins R&amp;PP is located on what has been identified in the Washington County Soil Survey at Eroded land-Shalet complex, warm (EB). Eroded land consists of stratified shale and gypsum. Slopes are gently rolling to steep and are strongly dissected. Erosion is active, and sediment production is high.</p> <p>The process of transferring the selected R&amp;PP parcel to the City of Ivins would not impact the Soil Resource. However, once transferred and construction begins it is very likely that, according to the POD, the soil on a large portion of the acres transferred would be impacted. The actual amount of soil disturbed and to what degree is difficult to quantify. It is likely that once disturbed some soil would be lost from the site due to wind and water erosion. It is recommended that as a process of developing the EA that an analysis be completed on the impacts to the soil resource and the potential for erosion once disturbed.</p>	D. Corry	4/2/19
NI	Floodplains	There is no designated floodplains within or adjacent to the proposed R&PP	D. Corry	3/27/19
PI	Wetlands/Riparian Zones	<p>The Santa Clara River and its associated riparian area is located approximately 1/2 mile south of the proposed R&amp;PP parcel but it is unlikely to be directly impacted by the proposed action. However, the project would involve a portion of Graveyard Wash, which is a perennial water source that does support riparian vegetation. As proposed, all of Graveyard Wash located on public land would be included in the R&amp;PP Lease. The Utah BLM riparian policy recommends that land transfers involving riparian areas generally not be permitted unless proven to benefit the Public Land. I would recommend that the portion of the proposed R&amp;PP involving the riparian vegetation on Graveyard Wash remain in federal ownership, as the POD does not incorporate it. However, this would create a small isolated riparian area that may it difficult to manage in an effective manner. See Riparian Resources (RP 01 – RP 11) in the SGFO RMP (1999, as amended 2016).</p>	D. Corry	4/2/19

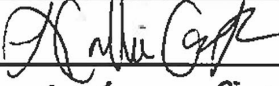

Determination	Resource	Rationale for Determination*	Signature	Date
PI	Fish and Wildlife Excluding USFW Designated Species	<p>The following Utah BLM Sensitive Species may occur in the project area: Zebra-tailed lizard (<i>Callisaurus draconoides</i>, permanent resident, uncommon), Western banded gecko (<i>Coleonyx variegatus</i>, permanent resident, uncommon), Gila Monster (<i>Heloderma suspectum</i>, permanent resident, rare), bald eagle (<i>Haliaeetus leucocephalus</i>, winter resident, uncommon), ferruginous hawk (<i>Buteo regalis</i>, transient, fairly common), Big free-tailed bat (<i>Nyctinomops macrotis</i>, summer resident, rare) Fringed myotis (<i>Myotis thysanodes</i>, permanent resident, uncommon), Spotted bat (<i>Euderma maculatum</i>, permanent resident, rare), Western red bat (<i>Lasiurus blossevillii</i>, permanent resident, very rare), Allen's big-eared bat (<i>Idionycteris phyllotis</i>, probable permanent resident, very rare), and Townsend's Big-eared bat (<i>Corynorhinus townsendii</i>, permanent resident, fairly common). The project area provides habitat for a variety of resident mammals, birds, and reptiles. The more common of these species may include: desert cottontail (<i>Sylvilagus audubonii</i>), antelope ground squirrels (<i>Ammospermophilus leucurus</i>), kangaroo rats (<i>Dipodomys ordii</i>), deer mice (<i>Peromyscus maniculatus</i>), desert wood rats (<i>Neotoma lepida</i>), Gambel's quail (<i>Lophortyx gambelii</i>), mourning doves (<i>Zenaida macroura</i>), common ravens (<i>Corvus corax</i>), wrens (<i>Catherpes mexicanus</i>, <i>Salpinctes obsoletus</i>), and side-blotched lizards (<i>Uta stansburiana</i>). Infrequently, larger animals such as raptors, coyotes (<i>Canis latrans</i>), gray fox (<i>Urocyon cinereoargenteus</i>), and mule deer (<i>Odocoileus hemionus</i>) may use the area year-round or for a portion of the year. During construction, some small mammals, birds, and reptiles (including BLM Sensitive Species) could be disturbed, injured, or killed and some dens or nests destroyed. Larger animals would be temporarily disturbed and displaced to adjacent habitats. Once construction is completed, larger animals may return to the area. Disturbance to small mammals, birds, and reptiles would be long-term and permanent. Overall impacts to populations of BLM Sensitive Species and general wildlife would be direct, negative, and moderate.</p>	J. Kellam	4/8/19
PI	Migratory Birds	<p>A number of migratory birds species may use the project area yearlong, or for a portion of the year. Within Washington County, the migratory bird nesting season can be divided into 2 major timeframes: (1) Early Nesting Season: January 1–March 31, e.g., raptors (eagles, owls, falcons, and hawks); and (2) Primary Nesting Season: April 01–July 15, e.g., songbirds, flycatchers, cuckoos, raptors, and the majority of species. However, the maximum time period for the migratory bird nesting season can extend from January 1–August 31. Project construction could result in migratory bird species being disturbed, injured, or killed and some nests destroyed. In order to avoid take of migratory birds and/or minimize the loss, destruction, or degradation of migratory bird habitat, it is recommended that construction activities occur outside of the primary nesting season. If project construction occurs during the maximum migratory bird nesting season, a pre-construction survey by a qualified biologist (&lt; 7–10 days prior to when work actually begins on the project site) is to be conducted</p>	J. Kellam	4/8/19

Determination	Resource	Rationale for Determination*	Signature	Date
		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. Disturbance to Migratory Birds and their habitat would be long-term and permanent. Overall impacts to Migratory Birds and their habitat would be direct, negative, and moderate.		
PI	Threatened, Endangered or Candidate Plant Species	Two federally listed Endangered species Dwarf bear-poppy ( <i>Arctomecon humilis</i> ) and Holmgren milk-vetch ( <i>Astragalus holmgreniorum</i> ) are known to occur near the proposed R&PP action area and suitable habitat and/or individuals may be impacted—therefore, USFWS protocol T&E plant surveys need to be conducted by a qualified botanist within the proposed R&PP action area. If Dwarf bear-poppy and/or Holmgren milk-vetch are present within the action area, impacts to these species would likely be direct, negative, long-term, and moderate—and USFWS Section 7 consultation would be required.	J. Kellam	4/9/19
PI	Threatened, Endangered or Candidate Animal Species	Mojave desert tortoises ( <i>Gopherus agassizii</i> ; tortoise) may be present in the proposed R&PP project area. Recent (2017, 2018) tortoise surveys conducted by UDR and HCP staff near the proposed R&PP project area and proposed Zone 6 area, as well as recent "citizen science" tortoise observations, have located tortoises (adult, juvenile) on public land in the vicinity of the proposed R&PP—therefore, USFWS protocol (2017) 10-meter belt-transect tortoise surveys need to be conducted within the proposed R&PP action area. If tortoise are present within the action area, impacts to tortoise would likely be direct, negative, long-term, and moderate—and USFWS Section 7 consultation would be required.	J. Kellam	4/8/19
PI	Vegetation Excluding USFW Designated Species	No BLM Sensitive plant species are known to occur in the project area. The proposed action would result in short-term and permanent loss of native vegetation that needs to be addressed in the EA.	R. Reese	4/11/19
NI	Woodland / Forestry	The proposed action would not impact the Woodland or Forestry resource in the area.	D. Corry	3/27/19
NI	Fuels/Fire Management	The proposed action would not impact Fuels or Fire Management in the area.	D. Corry	3/27/19
PI	Invasive Species/Noxious Weeds (EO 13112)	A plan should be put into place for the prevention and control of invasive species/noxious weed that may encroach as a result of increased disturbance.	R. Reese	3/21/19
NI	Lands/Access	There is one other authorized land use in this project area—a storm drain Right-of-Way (ROW) granted to Ivins City (applicant). The ROW would continue to be managed in accordance with the terms and conditions of the grant during an R&PP lease of the parcel, but transferred to the City in the case of a patent of the parcel.	S.Dao	3/18/2019
PI	Livestock Grazing	The area is part of an active federal grazing allotment. The proposed action would slightly reduce the number of AUM's available for livestock use. Additionally, the increase in public use would further stress the current livestock operation. An emphasis will need to be placed on easy access	R. Reese	3/21/19

Determination	Resource	Rationale for Determination*	Signature	Date
		gates or cattle guards to prevent livestock wandering. The new allotment boundary will need to be fenced with an approved livestock fence. Guidance should be available to the users of the trail system to deter livestock harassment and educate the public on how to interact with livestock.		
NI	Rangeland Health Standards	It is not anticipated that the proposed action will have a significant impact on rangeland health standards.	R. Reese	3/21/19
PI	Recreation	<p>The proposed R&amp;PP is within the Santa Clara River Reserve (SCRR), managed under a Recreation and Open Space Management Plan (ROMP). Ivins City, through representatives, actively participated in the developed of the ROMP. The Ivins City General Plan provides guidance concerning the SCRR that should be referenced in the EA as appropriate.</p> <p>The ROMP specifically identified the proposed R&amp;PP lands as acceptable for R&amp;PP, if the proposed uses would be compatible to the SCRR's mission.</p> <p>"To preserve the cultural heritage, open space, recreational opportunities, and resource values of the Santa Clara River Reserve for our communities through a Recreation and Open Space Management Plan that provides for resource protection, interpretive education, traditional use, and planned recreation."</p> <p>The proposed R&amp;PP would eliminate approximately 0.4 miles of the non-motorized Cholla trail and approximately 0.9 miles of proposed future trails. It would also eliminate 1.1 miles of protective fencing, which is currently used to restrict motorized access to the SCRR.</p> <p>Elements of the proposed R&amp;PP would enhance recreation opportunities by providing public access and a public trailhead with facilities such as parking, restrooms, and additional non-motorized trails. The POD also plans for potential equestrian facilities. While the ROMP did identify equestrian trails from a future trailhead in this area, today, the growing urban interface makes equestrian use in this section of the SCRR questionable. The growing number of pedestrian and mountain biking visitors are not compatible with equestrians unless trail separation can be established.</p> <p>The proposed cemetery and public works yard do not appear to be compatible with the SCRR's mission.</p>	L. Scott	3/20/19
PI	Visual Resources	<p>The proposed action is entirely within Visual Resource Management Class III.</p> <p>Class III Objective: To partially retain the existing character of the landscape.</p> <ol style="list-style-type: none"> <li>1) The level of change to the landscape can be moderate.</li> <li>2) Management activities may attract attention, but should not dominate the view of the casual observer.</li> <li>3) Any changes should repeat the basic elements found in the natural landscape – form, line, color, and texture.</li> </ol>	D. Kiel/L. Scott	3/20/19

Determination	Resource	Rationale for Determination*	Signature	Date
		The proposed development would likely meet VRM Class objectives, but the location has high visibility given its proximity to Old Highway 91. The analysis should include KOPs from the highway addressing the form, line, color, texture, and scale of proposed structures. During the development of the SCRR, preservation of the scenic quality was an important community issue.		
		<b>NLCS</b>		
NP	National Conservation Areas	There are no National Conservation Areas affected by the proposed action	D. Kiel	3/19/19
NP	National Historic Trails (Old Spanish Trail)	The proposed R&PP is approximately 8 miles from the Armijo Route and approximately 3 miles from the Northern Route of the Old Spanish National Historic Trail.	L.Scott	3/20/19
NP	National Recreational Trails (Gooseberry Mesa)	The National Recreation Trail (Gooseberry) is not within the proposed project area.	K. Voyles	3/18/19
NP	Wild and Scenic Rivers	There are no eligible or designated WSR segments in the proposed project area.	K. Voyles	3/18/19
NP	Wilderness/WSA	The proposed project is not in or near any Wilderness Areas.	K. Voyles	3/18/19
NP	Lands with Wilderness Characteristics	There are no designated, proposed, or inventoried lands with wilderness characteristics within the proposed project area.	D. Kiel	3/19/19

**FINAL REVIEW:**

Reviewer Title	Signature	Date	Comments
Environmental Coordinator		12/10/19	N/A
Authorized Officer		12/12/19	

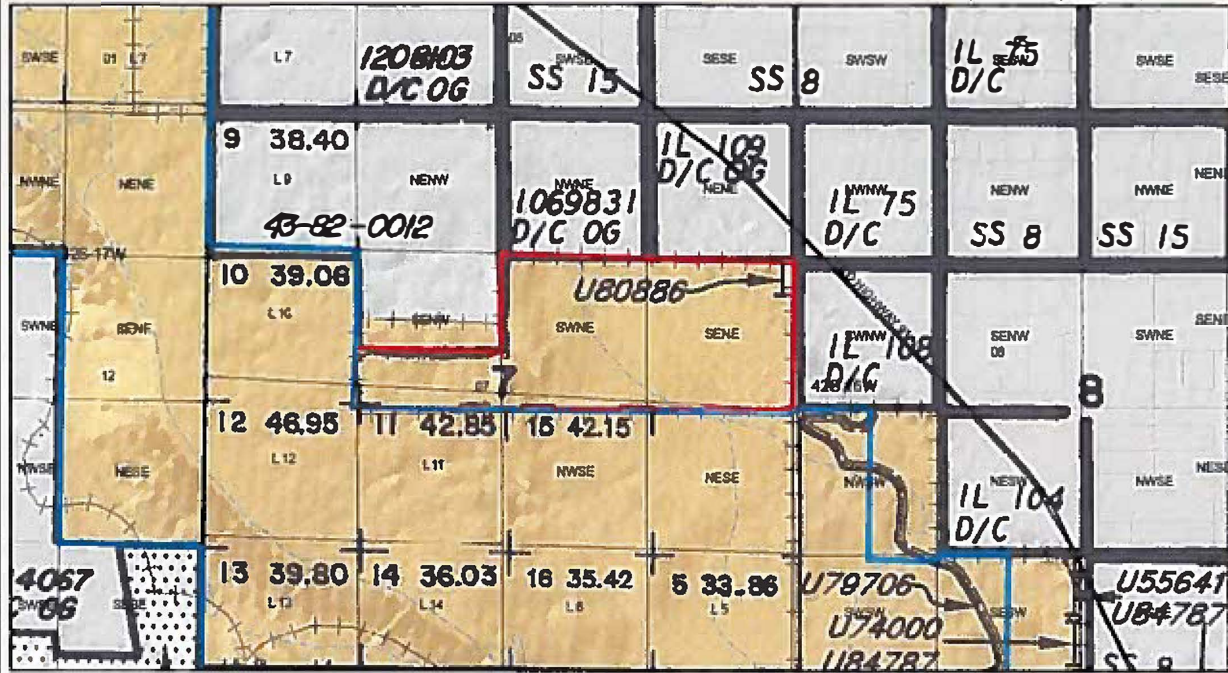


# Proposed Ivins City R&PP UTU-93846

BLM- St. George Field Office

3/20/2019

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 misalignments of data layers.



Location within St. George Field Office



Santa Clara Land Hill ACEC  
 Proposed\_RPP\_IvinsCity\_UTU93846  
 Santa Clara River Reserve Zone 1  
 PLSSSecondDivision\_SGFO

**SGFO Authorized Transportation**

- Primary Road Paved
- Secondary Road Unpaved
- Singletrack
- Other

**Surface Management**

- BLM
- Private

**\*\* Map note:** the surface management layer appears to be incorrect for the SENW of S. 7 according to MTP patent information. The UTSO cadastral staff was going to contact the GIS folks to look into and correct this.

## **APPENDIX C**

### **Mojave Desert Tortoise Conservation Measures (to be added when finalized)**

## **APPENDIX D**

### **State Historic Preservation Office Concurrence Letters**

The Section 508 amendment of the Rehabilitation Act of 1973 requires that the information in federal documents be accessible to individuals with disabilities.

The Bureau of Land Management has made every effort to ensure that the information in this document is accessible. If you have any problems accessing information, please contact Shawna Dao at [sdao@blm.gov](mailto:sdao@blm.gov) or (435) 688-3326.



GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

Jill Remington Love  
*Executive Director*  
*Department of*  
*Heritage & Arts*



*Christopher Merritt*  
*State Historic Preservation Office*

Kevin Fayles  
*Interim Director*

November 30, 2020

Keith Rigtrup  
Field Office Manager  
Bureau of Land Management - St. George Field Office  
345 East Riverside Dr  
St. George, Utah 84790

RE: Class III Cultural Resources Survey in Support of the Ivins City Environmental Assessment and Phase I Environmental Assessment, Washington County, Utah; U20ST0337

For future correspondence, please reference Case No. 20-4066

Dear Mr. Rigtrup,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on November 28, 2020.

We concur with your determination of the Area of Potential Effects, identification efforts, and eligibility of 42WS626, 42WS3709, and 42WS6465 for this undertaking. We look forward to your forthcoming official determination of effect for above-reference undertaking.

This letter serves as our comment on the determinations you have made within the consultation process specified in §36CFR800.4. If you have questions, please contact me at 801-245-7246 or by email at [sagardy@utah.gov](mailto:sagardy@utah.gov).

Sincerely,

Savanna Agardy  
Compliance Archaeologist



Spencer J. Cox  
*Governor*

Deidre Henderson  
*Lieutenant Governor*

Jill Remington Love  
*Executive Director*  
*Utah Department of Cultural  
and Community Engagement*



Jennifer Ortiz  
*Director*

Christopher Merritt  
*State Historic Preservation Officer*

July 22, 2021

Keith Rigtrup  
Field Office Manager  
Bureau of Land Management - St. George Field Office  
345 East Riverside Dr  
St. George, Utah 84790

RE: Addendum Class III Cultural Resources Survey of 114 Acres in Support of the Ivins City Environmental Assessment and Phase I Environmental Site Assessment, Washington County, Utah; U20ST0337, Parent Case No. 20-4066

For future correspondence, please reference Case No. 21-1565

Dear Mr. Rigtrup,

The Utah State Historic Preservation Office received your request for our comment on the above-referenced undertaking on July 22, 2021.

From the information you provided, it appears that no historic properties were located in the undertaking's Area of Potential Effects. As such, we concur with your determination of "No Historic Properties Affected" for this undertaking as per §36CFR800.4(d)(1).

This letter serves as our comment on the determinations you have made, within the consultation process specified in §36CFR800.4. If you have questions, please contact me at 801-245-7246 or by email at [sagardy@utah.gov](mailto:sagardy@utah.gov).

Sincerely,

Savanna Agardy  
Compliance Archaeologist

## **APPENDIX E**

### **Visual Contrast Rating Worksheets**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**VISUAL CONTRAST RATING WORKSHEET**

Date: 5/5/2020

District/ Field Office: St. George Field Office

Resource Area:

Activity (program):

## SECTION A. PROJECT INFORMATION

1. Project Name <b>Ivins City EA</b>	4. Location Township <u>42</u>	5. Location Sketch
2. Key Observation Point 01: Intersection of Rachel Drive and Old Hwy 91	Range <u>16 West</u>	KOP UTM location: 12 South 0262856 4114053
3. VRM Class III	Section <u>7</u>	

## SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rolling hills to rugged terrain in buttes and distant mountains	Hillsides covered in low, rounded shrubs with blackbrush, burrobrush, and bursage dominating the landscape; invasive cheatgrass visible in the foreground along Old Hwy 91	Geometric forms associated with residential structures
LINE	Horizontal and diagonal	Dense and even in some places and uneven and sparse in other places	Hard, straight, vertical and horizontal
COLOR	Hues of dark gray and soft tones of light brown	Hues of pale green and gray with some areas of vivid green and yellow	Beige and hues of gray
TEXTURE	Medium textures with isolated coarse textures along the edges of the buttes	Fine-textured where vegetation is dense, coarser on steeper slopes where vegetation is sparse and uneven	Medium-textured, sparse west of the highway; more dense, regular to the east

## SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Geometric excavations for proposed facilities and work areas would be apparent in the short term during the construction period. After these areas are revegetated, the geometric form would be softened.	Geometric clearings for parking areas; regular, rounded form associated with row of ornamental trees and shrubs adjacent to roadways	Geometric, clustered buildings, including the utility yard, restrooms, and other facilities
LINE	Angular, geometric lines would result from excavations in the project area. After these areas are revegetated, the angular lines would be softened.	A butt edge would be formed where new landscaping would meet adjacent natural lands; band of vegetation along roadways and adjacent to other built elements	Series of horizontal and vertical lines introduced by the new structures, including the proposed communications tower
COLOR	Existing light brown soil would be exposed during construction but would be revegetated over the long term. Black pavement associated with parking lots and roadways.	Bright greens in irrigated ornamental tree and turf grass areas	Predominately grays and browns with occasional colors with a higher chroma associated with the playground and other park facilities
TEXTURE	Fine-textured pavement and medium-textured earthwork associated with cut and fill for construction of roadways and structures	Fine-textured turf grass, coarse-textured ornamental trees; planted trees would be even, ordered along new roadways and other built elements	Medium- to coarse-textured proposed structures, including the communications tower

SECTION D. CONTRAST RATING  SHORT TERM  LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverses side)	
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE		
ELEMENTS	FORM			X			X						X		3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverses side)
	LINE			X			X						X		
	COLOR			X				X			X				
	TEXTURE			X				X					X		
														Evaluator's Names _____ Date _____	

SECTION D. (Continued)

Comments from item 2.





UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**VISUAL CONTRAST RATING WORKSHEET**

Date: 5/5/2020

District/ Field Office: St. George Field Office

Resource Area:

Activity (program):

## SECTION A. PROJECT INFORMATION

1. Project Name <b>Ivins City EA</b>	4. Location Township <u>42</u>	5. Location Sketch
2. Key Observation Point 02: Intersection of 200W and Old Hwy 91	Range <u>16 West</u>	KOP UTM location: 12 South 0261644 4115344
3. VRM Class III	Section <u>7</u>	

## SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rolling hills to rugged terrain in buttes and distant mountains	Hillsides covered in low, rounded shrubs with blackbrush, burrobrush, and bursage dominating the landscape; invasive cheatgrass visible in the foreground along Old Hwy 91	Geometric forms associated with residential structures
LINE	Horizontal and diagonal	Dense and even in some places and uneven and sparse in other places	Hard, straight, vertical and horizontal
COLOR	Hues of dark gray and soft tones of light brown	Hues of pale green and gray with some areas of vivid greens	Beige and hues of gray
TEXTURE	Medium textures with isolated coarse textures along the edges of the buttes	Fine-textured where vegetation is dense, coarser on steeper slopes where vegetation is sparse and uneven	Medium-textured, sparse west of highway; more dense, regular to the east

## SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Geometric excavations for proposed facilities and work areas would be apparent in the short term during the construction period. After these areas are revegetated, the geometric form would be softened.	Geometric clearings for parking areas; regular, rounded form associated with row of ornamental trees and shrubs adjacent to roadways	Geometric, clustered buildings, including the utility yard, restrooms, and other facilities; vertical, prominent communications tower
LINE	Angular, geometric lines would result from excavations in the project area. After these areas are revegetated, the angular lines would be softened.	A butt edge would be formed where new landscaping would meet adjacent natural lands; band of vegetation along roadways and adjacent to other built elements	Series of horizontal and vertical lines introduced by the new structures, including the proposed communications tower
COLOR	Existing light brown soil would be exposed during construction but would be revegetated over the long term. Black pavement associated with parking lots and roadways.	Bright greens in irrigated ornamental tree and turf grass areas	Predominately grays and browns with occasional colors with a higher chroma associated with the playground and other park facilities
TEXTURE	Fine-textured pavement and medium-textured earthwork associated with cut and fill for construction of roadways and structures	Fine textured turf grass, coarse-textured ornamental trees; planted trees would be even, ordered along new roadways and other built elements	Medium- to coarse-textured proposed structures, including the communications tower

SECTION D. CONTRAST RATING  SHORT TERM  LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverses side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	
ELEMENTS	FORM			X		X					X		3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverses side)	
	LINE			X		X				X		Evaluator's Names _____ Date _____		
	COLOR			X			X				X			
	TEXTURE			X			X				X			

SECTION D. (Continued)

Additional Mitigating Measures (See item 3)



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**VISUAL CONTRAST RATING WORKSHEET**

Date: 5/5/2020

District/ Field Office: St. George Field Office

Resource Area:

Activity (program):

## SECTION A. PROJECT INFORMATION

1. Project Name <b>Ivins City EA</b>	4. Location Township <u>42</u>	5. Location Sketch
2. Key Observation Point 03: Intersection of Main Street and Old Hwy 91	Range <u>16 West</u>	KOP UTM location: 12 South 0262043 4114984
3. VRM Class III	Section <u>7</u>	

## SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rolling hills to rugged terrain in buttes and distant mountains	Hillsides covered in low, rounded shrubs with blackbrush, burrobrush, and bursage dominating the landscape; invasive cheatgrass visible in the foreground along Old Hwy 91	Geometric forms associated with residential structures
LINE	Horizontal and diagonal	Dense and even in some places and uneven and sparse in other places	Straight, vertical and horizontal
COLOR	Hues of dark gray and soft tones of light brown	Hues of pale green and gray with some areas of vivid greens	Beige and hues of gray
TEXTURE	Medium textures with isolated coarse textures along the edges of the buttes	Fine-textured where vegetation is dense, coarser on steeper slopes where vegetation is sparse and uneven	Medium-textured, sparsely placed

## SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Geometric excavations for proposed facilities and work areas would be apparent in the short term during the construction period. After these areas are revegetated, the geometric form would be softened.	Geometric clearings for parking areas; regular, rounded form associated with row of ornamental trees and shrubs adjacent to roadways	Geometric, clustered buildings, including the utility yard, restrooms, and other facilities
LINE	Angular, geometric lines would result from excavations in the project area. After these areas are revegetated, the angular lines would be softened.	A butt edge would be formed where new landscaping would meet adjacent natural lands; band of vegetation along roadways and adjacent to other built elements	Series of horizontal and vertical lines introduced by the new structures, including the proposed communications tower
COLOR	Existing light brown soil would be exposed during construction but would be revegetated over the long term. Black pavement associated with parking lots and roadways.	Bright greens in irrigated ornamental tree and turf grass areas	Predominately grays and browns with occasional colors with a higher chroma associated with the playground and other park facilities
TEXTURE	Fine-textured pavement and medium-textured earthwork associated with cut and fill for construction of roadways and structures	Fine-textured turf grass, coarse-textured ornamental trees; planted trees would be even, ordered along new roadways and other built elements	Medium- to coarse-textured proposed structures, including communications tower

SECTION D. CONTRAST RATING  SHORT TERM  LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverses side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	
ELEMENTS	FORM		X			X				X			3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverses side)	
	LINE		X			X				X				
	COLOR			X		X					X			
	TEXTURE			X		X				X				
												Evaluator's Names _____ Date _____		

SECTION D. (Continued)

Additional Mitigating Measures (See item 3)



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**VISUAL CONTRAST RATING WORKSHEET**

Date: 5/5/2020

District/ Field Office: St. George Field Office

Resource Area:

Activity (program):

## SECTION A. PROJECT INFORMATION

1. Project Name <b>Ivins City EA</b>	4. Location Township <u>42</u>	5. Location Sketch
2. Key Observation Point 04: Intersection of Red Mountain Blvd and Old Hwy 91	Range <u>16 West</u>	KOP UTM location: 12 South 0262457 4114582
3. VRM Class III	Section <u>7</u>	

## SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Rolling hills to rugged terrain in buttes and distant mountains	Hillsides covered in low, rounded shrubs with blackbrush, burrobrush, and bursage dominating the landscape; invasive cheatgrass visible in the foreground along Old Hwy 91	Geometric forms associated with residential structures and adjacent electrical substation
LINE	Horizontal and diagonal	Dense and even in some places and uneven and sparse in other places	Straight, vertical and horizontal
COLOR	Hues of dark gray and soft tones of light brown	Hues of pale green and gray with some areas of vivid greens	Beige and hues of gray
TEXTURE	Medium textures with isolated coarse textures along the edges of the buttes	Fine-textured where vegetation is dense, coarser on steeper slopes where vegetation is sparse and uneven	Medium-textured, sparse west of highway; more dense, regular to the east

## SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Geometric excavations for proposed facilities and work areas would be apparent in the short term during the construction period. After these areas are revegetated, the geometric form would be softened.	Geometric clearings for parking areas; regular, rounded form associated with row of ornamental trees and shrubs adjacent to roadways	Geometric, clustered buildings, including the utility yard, restrooms, and other facilities
LINE	Angular, geometric lines would result from excavations in the project area. After these areas are revegetated, the angular lines would be softened.	A butt edge would be formed where new landscaping would meet adjacent natural lands; band of vegetation along roadways and adjacent to other built elements	Series of horizontal and vertical lines introduced by the new structures, including the proposed communications tower
COLOR	Existing light brown soil would be exposed during construction but would be revegetated over the long term. Black pavement associated with parking lots and roadways.	Bright greens in irrigated ornamental tree and turf grass areas	Predominately grays and browns with occasional colors with a higher chroma associated with the playground and other park facilities
TEXTURE	Fine-textured pavement and medium-textured earthwork associated with cut and fill for construction of roadways and structures	Fine-textured turf grass, coarse-textured ornamental trees; planted trees would be even, ordered along new roadways and other built elements	Medium- to coarse-textured proposed structures, including communications tower

SECTION D. CONTRAST RATING  SHORT TERM  LONG TERM

1. DEGREE OF CONTRAST		FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverses side)
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	
ELEMENTS	FORM			X		X					X		3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverses side)	
	LINE			X		X					X			
	COLOR			X			X			X				
	TEXTURE			X			X				X			
												Evaluator's Names _____ Date _____		

SECTION D. (Continued)

Additional Mitigating Measures (See item 3)

