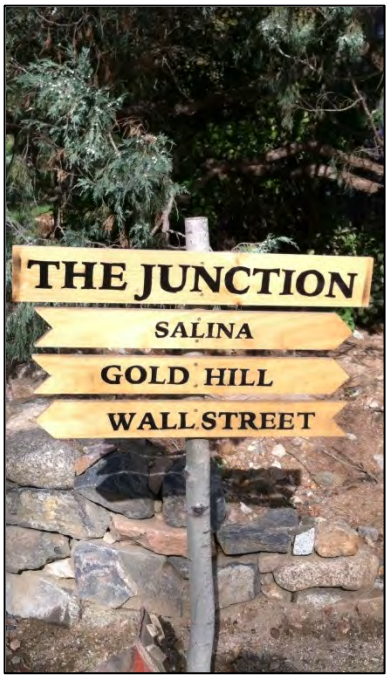
Environmental Planning and Historic Preservation (EHP) Document

Salina Junction Flood Recovery Project
Boulder County, Colorado



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1.0 Introduction

The Salina Junction Flood Recovery Project is part of the emergency repair work being performed by Boulder County in response to flood events that occurred in September 2013. Boulder County is repairing damage to the intersection of Gold Run Road and Fourmile Canyon Drive at Salina Junction. This purpose of the project is to permanently improve the roadway and drainage in the Salina Junction intersection area. The project will provide a new structure that can pass a larger flood event and reduce the maintenance needs for this crossing.

The project is funded through Federal Emergency Management Agency (FEMA) funds. Therefore, provisions of the National Environmental Policy Act (NEPA) must be followed. As the intensity of environmental impacts will likely be minimal, documentation as a Categorical Exclusion (CATEX) is anticipated under 44 CFR Ch. I (10–1–10 Edition) § 10.8. The Salina Junction Flood Recovery Project is assumed to qualify as a FEMA CATEX *(XVI) Improvements to existing facilities and the construction of small scale hazard mitigation measures in existing developed areas with substantially completed infrastructure, when the immediate project area has already been disturbed, and when those actions do not alter basic functions, do not exceed capacity of other system components, or modify intended land use; provided the operation of the completed project will not, of itself, have an adverse effect on the quality of the human environment*. The purpose of this document is to document the project's compliance with NEPA regulations and other state and federal regulations and/or Executive Orders (EOs).

1.1 Project Description

Salina Junction Flood Recovery Project study area is located in the Town of Salina, Boulder County, Colorado (see **Figure 1**). The Town of Salina is a former mining town approximately 7 miles west of Boulder, Colorado. The intersection of Four Mile Canyon Drive and Gold Run Road, which accesses the Town of Salina, is also known as Salina Junction. The study area encompasses approximately 3.7 acres and includes roadway and drainage improvements, temporary construction easements, and permanent easements.

The geographic location of the project is centered at decimal degree coordinates latitude 40.050809° and longitude -105.372492° (World Geodetic Systems of 1984 [WGS 1984]), in Section 17, Township 1 North, Range 71 West of the 6th Principle Meridian, on the Boulder USGS 24K topographic map (see **Figure 2**). The elevations within the study area range from 6,580 ft to 6,700 ft above mean sea level (msl).

As a result of the September 2013 floods, Gold Run no longer entered the 42-inch culvert under the Salina Junction intersection to meet Fourmile Creek and flows overtopped the roadway. As a temporary solution, Boulder County directed Gold Run into a roadway ditch along the north side of Fourmile Canyon Drive that eventually drained to Fourmile Creek through a culvert. In the Spring of 2014, the 42-inch culvert entrance was restored to allow Gold Run to once again flow under the Salina Junction intersection to Fourmile Creek. Permanent repairs are now required to provide a roadway and structure that will meet Boulder County codes and standards and be able to endure future storm events.

Figure 1: Study Area Location

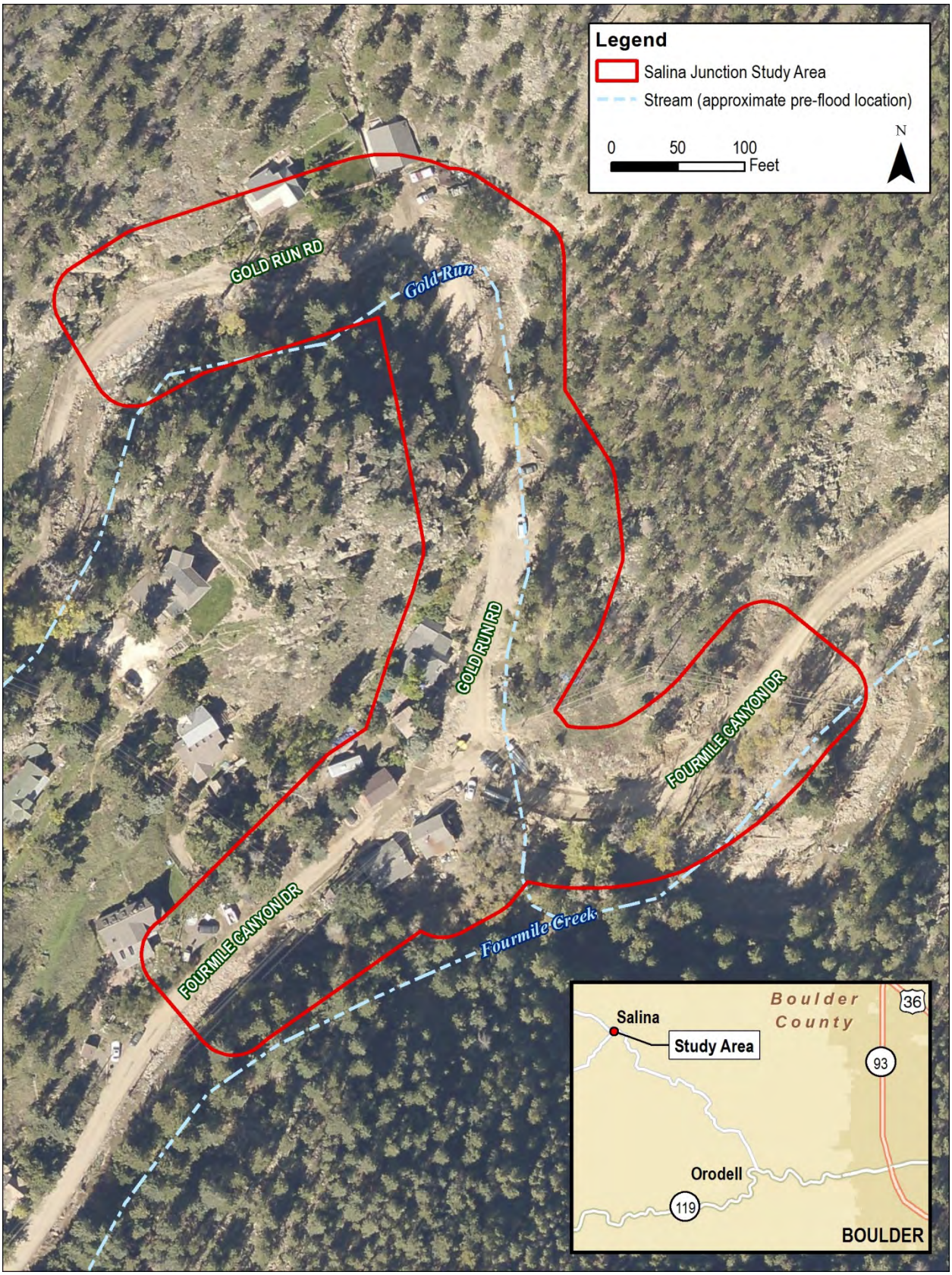
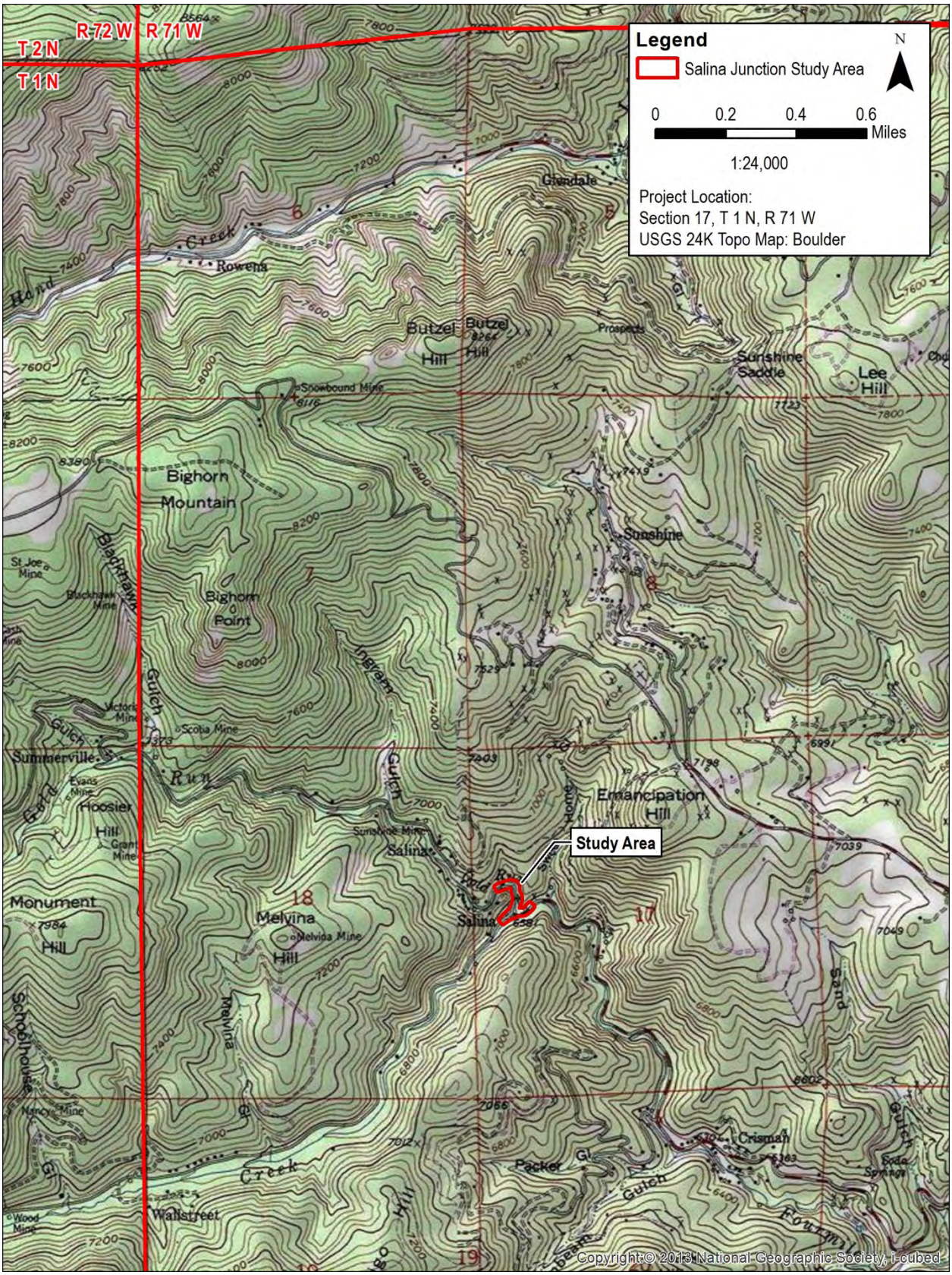


Figure 2: USGS 24K Topo Map



2.0 Purpose and Need

2.1 Need for the Project

This project is needed to provide a reliable roadway and drainage in the area. This intersection of Gold Run Road and Fourmile Canyon Drive at Salina has had historic drainage and flooding challenges. The floods of September 2013 plugged the 42-inch culvert under Salina Junction intersection and the floodwaters overtopped the roadway which drastically altered the channel of Gold Run and Fourmile Creek and caused severe damage to the roadway and homes in the area.

2.2 Purpose of the Project

The purpose of the project is to restore and improve the roadway and to provide a new structure that can pass a larger flood event which will improve the safety for vehicles and home owners in the area. The project will include construction of new drainage features, improvements to the roadway along Gold Run and Fourmile Canyon Drive, channel alteration and stabilization of Gold Run, and installation of an energy dissipator for the outfall at Fourmile Creek.

3.0 Proposed Action

The winter road construction that took place immediately after the floods was a temporary fix to get the roads open and was not meant to be a permanent solution. This temporary construction does not meet the purpose and need of this project. The Proposed Action would restore and improve the roadway along Gold Run and Fourmile Canyon Drive and replace the existing 42-inch culvert under the Salina Junction intersection with a concrete box culvert (CBC) which will improve the safety for vehicles and home owners in the area. The total extent of ground disturbance is approximately 38,600 square feet (SF) (0.89 acres). The area within the ROW and Permanent Easements is approximately 45,200 SF (1.04 acres) and the temporary disturbance area is approximately 13,375 SF (0.31 acres). The proposed permanent repairs would include:

- **Roadway improvements to Gold Run**: Gold Run Road would consist of an approximately 18 to 24-foot total width, with two 9 to 9.5-foot lanes. This will include approximately 575 feet of new asphalt pavement and 24 feet of asphalt tie in. A bridge rail will be installed on the east side of the road for a length of 81 feet. The depth of ground disturbance would be 1 to 2-feet in depth.
- **Roadway improvements to Fourmile Canyon Drive:** Fourmile Canyon Drive would consist of a 18 to 27-foot total width, with two 9 to 11-foot lanes and two 1 to 4-foot shoulders. This will include approximately 232 feet of new asphalt pavement and 38 feet of asphalt tie in. The depth of ground disturbance would be 1 to 2-feet in depth. A boulder barrier will be installed on the south side of Fourmile Canyon Drive above the proposed energy dissipator. The boulder barrier will consist of 12 boulders. Each boulder will be approximately 4 feet in diameter and placed 4 feet apart.
- **Constructing a drainage gutter to collect runoff flows**: The gutter will be installed parallel to Gold Run Road on the west side and is designed to convey seepage from the canyon rock and runoff flows from the road. The gutter will be approximately 175 feet in

length. The runoff will then be conveyed to an inlet and will flow under Gold Run Road for a length of 27 feet by an 18-inch reinforced concrete pipe (RCP) to outfall into Gold Run. A second gutter will be installed parallel to Fourmile Canyon Drive on the north side and is designed to convey runoff flows from the road. The gutter will be approximately 92 feet in length. The runoff will then be conveyed to an existing inlet and will flow under Fourmile Canyon Drive to outfall to Fourmile Creek.

- **Altering the channel and stabilizing the channel bank of Gold Run**: The Gold Run channel banks between Gold Run and Gold Run Road will be rebuilt for approximately 270 feet and will be protected by 24-inch soil riprap. The bottom of the channel will vary between 5 to 8-foot in width and the channel will connect to the new concrete embankment and 8-foot x 8-foot CBC.
- **Replacing the existing 42-inch culvert under Fourmile Canyon Drive**: Install an 8-foot x 8-foot CBC under Fourmile Canyon Drive. The CBC will be approximately 110 feet in length and be installed at a 10-foot depth. Two wingwalls (walls 1 and 2) and a concrete embankment will be constructed upstream of the CBC and two wingwalls (walls 3 and 4) will be built downstream of the CBC. Wall 1 is located on the east side of Gold Run Road, west side of Gold Run channel and is 26 feet in length and a maximum of 10.5 feet tall. Wall 2 is located on the east side of Gold Run Road, east side of Gold Run channel and is 32 feet in length and a maximum of 12.5 feet tall. Wall 3 is located on the south side of Fourmile Canyon Drive, east side of Gold Run channel and is 26.5 feet in length and a maximum of 15.75 feet tall. Wall 4 is located on the south side of Fourmile Canyon Drive, west side of Gold Run channel and is 45.5 feet long and a maximum of 15.75 feet tall.
- **Constructing an energy dissipator before Gold Run outfalls into Fourmile Creek**: The energy dissipator will be protected by approximately 226 cubic yards of 12-inch standard riprap and approximately 64 cubic yards of 12-inch soil riprap.

Figure 3 shows the proposed project design. See Site Plans for additional details regarding location and type of improvements in **Appendix E**. The proposed roadway improvements would generally follow the existing alignment of the road and will be completed within the County's existing 60-foot statutory right-of-way (ROW), except for permanent easements (PEs) for drainage and maintenance and temporary easements (TEs) for construction impacts beyond the ROW. There are four permanent and three temporary easements required for the proposed project. No new ROW would be required for the construction of the project. The permanent and temporary easement calculations are presented in **Table 1**.

Construction is scheduled to start the Summer of 2015 and be completed in the Fall of 2015. The future-contractor will use one access route and establish the construction staging within the disturbed project area. This will minimize impacts to existing vegetation. Disturbed areas which may be impacted will be reseeded as needed. Two trees are reportedly anticipated for removal in order to construct the concrete embankment for the 8 x 8 concrete box culvert (see **Figure 3**).

Figure 3: Proposed Project Design

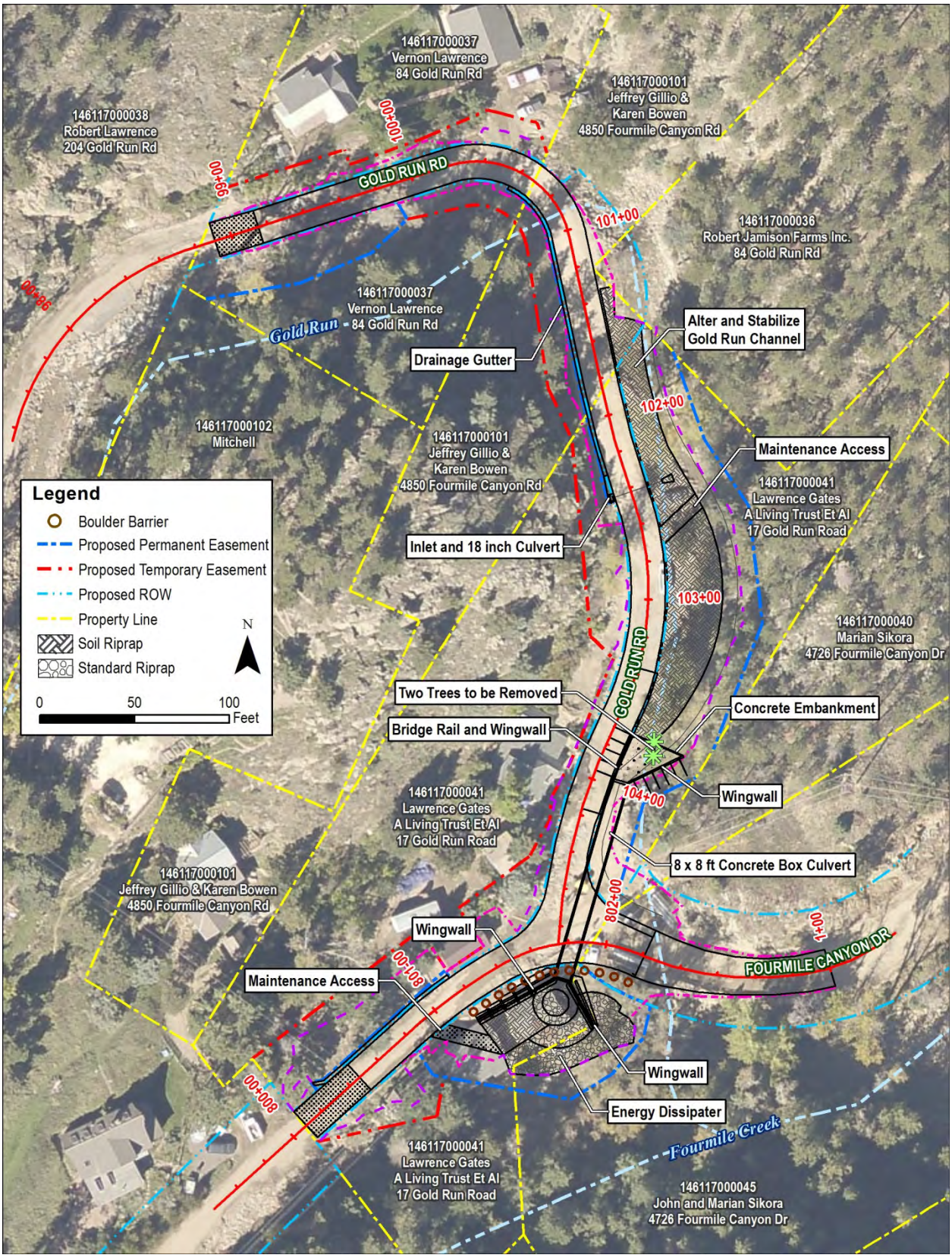


Table 1: Permanent and Temporary Easements

Location	Easement Type	Purpose	Easement Size: Square Feet (SF) / Acres
146117000037 84 Gold Run Road	PE TE	Drainage gutter Tie-in slopes	2,480 SF / 0.06 Acres 3,100 SF / 0.07 Acres
14611700101 4850 Fourmile Canyon Road	PE TE	Drainage gutter Tie-in slopes	179 SF / 0.004 Acres 1,593 SF / 0.04 Acres
146117000041 17 Gold Run Road	PE TE	Drainage gutter and inlet; Gold Run channel alteration and stabilization; 8 x 8 CBC; Four wingwalls; Energy dissipator; Boulder barrier, and Access for maintenance of drainage features Tie-in slopes	15,050 SF / 0.35 Acres 8,690 SF / 0.20 Acres
146117000045 4726 Fourmile Canyon Drive	PE	Energy dissipator; Wingwall; and Boulder barrier	2,299 SF / 0.05 Acres
		Total PE:	20,008 SF / 0.46 Acres
		Total TE:	13,383 SF / 0.31 Acres
		Total Easements:	33,391 SF / 0.77 Acres

There will be two major construction phases for the project. Phase I will consist of shifting traffic to the north side of Fourmile Canyon Drive and east side of Gold Run Road while construction occurs on the south side of Fourmile Canyon Drive and the west side of Gold Run Road. This phase will include construction of the drainage gutter and inlet, a portion of the CBC, the energy dissipator, and the two downstream wingwalls. During Phase II of the project, traffic will shift to the completed sides of Fourmile Canyon Drive and Gold Run Road while construction is completed on the other sides. This phase will include the remainder of the CBC, the two upstream wingwalls, and altering and stabilizing the channel of Gold Run. Temporary impacts include construction activities that are necessary to install the CBC, energy dissipator, and altering and stabilizing the channel of Gold Run.

4.0 Environmental Resources

The proposed project has been designed to avoid or minimize impacts to sensitive environmental resources. Coordination meetings have been held with affected homeowners and Boulder County Transportation maintenance and engineering staff to identify opportunities to minimize impacts to the extent possible. The Proposed Action has been evaluated for potential environmental impacts within the study area using aerial imagery, Geographic Information Systems (GIS), desktop review, and field surveys. **Table 2** provides a summary of impacts to these resources for the Proposed Action. For more detailed information on the impacts, see the corresponding technical documentation in the appendices.

Table 2: Environmental Impacts of the Proposed Action

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Air Quality	*Clean Air Act (CAA)* An air quality analysis is not necessary because this project will not substantially alter the vertical or horizontal alignment of an existing bridge and roadway; will not increase the number of through traffic lanes, or affect level of service at any nearby intersections.	During the construction, temporary increases in air pollutant emissions may occur from construction activities. The primary construction-related emissions are particulate matter (fugitive dust) from site preparation. These emissions are temporary in nature. It is not anticipated that emissions from construction of this project will have any significant impact on air quality in the area.	The potential impacts of particulate matter emissions will be minimized by using fugitive dust control measures such as covering or treating disturbed areas with dust suppression techniques, sprinkling, covering loaded trucks, and other dust abatement controls, as appropriate.
Farmlands	*Farmland Protection Policy Act (FPPA)* According to the US Department of Agriculture (USDA) web soil survey there is no designated prime or unique farmland within the study area (USDA 2014).	Not Applicable	Not Applicable
Geologic Resources and Soils	The geology of the study area consists of Boulder Creek Granodiorite of Precambrian geological age. According to the USDA web soil survey, the soils consist of Juget-Rock outcrop complex. This soil type occurs on mountain slopes and ridges and is made up of gravelly sandy loam, gravelly sand above granite bedrock (USDA 2014).	Construction of the project will disturb soils surrounding the roadway, Gold Run, and the location of the energy dissipator. Soil rip rap will be placed along the channel bank and standard riprap will be placed in the energy dissipator to reduce erosion and sediment transfer.	Erosion and sediment transfer will be reduced by Best Management Practices (BMPs) and implementing a Stormwater Management Plan (SWMP).

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Water Quality	*Section 401 of the Clean Water Act* The sections of Gold Run and Fourmile Creek that fall within the study area are not listed on the Colorado Department of Public Health and Environment (CDPHE) Section 303(d) List of Impaired Waters.	The proposed project will include approximately 750-feet of new asphalt pavement; altering the channel of Gold Run; stabilizing the channel bank of Gold Run between Gold Run and Gold Run Road; installing a drainage gutter parallel to Gold Run Road on the west side; replacing the existing 42-inch culvert under Fourmile Canyon Drive with an 8-foot x 8-foot CBC; and constructing an energy dissipator before Gold Run outfalls into Fourmile Creek (see Appendix E for the Design Plans). Construction impacts resulting from construction of the proposed project include a temporary increase in sediment.	Temporary sediment impacts will be reduced by BMPs and implementing a SWMP. BMPs that would be utilized include silt fencing, gravel bags, check dams, inlet protection, seeding and mulching.
Wetlands/Waters of the US	*Section 404 of the Clean Water Act and Executive Order (EO) 11990: Protection of Wetlands* Two waters of the U.S., Gold Run and Fourmile Creek, occur within the study area. No wetlands were indicated on the National Wetlands Inventory (NWI) Wetlands Mapper (NWI 2014). Additionally, a wetland survey was completed on October 1, 2014. No wetlands were observed within or adjacent to the project area.	The project will include altering the channel of Gold Run, stabilizing the channel bank of Gold Run with 24-inch soil riprap between Gold Run and Gold Run Road, replacing the existing 42-inch culvert under Fourmile Canyon Drive with an 8-foot x 8-foot CBC, and constructing an energy before Gold Run outfalls into Fourmile Creek (see Appendix D for the Drainage Report and Appendix E for the Design Plans).	Boulder County will request authorization to utilize US Army Corps of Engineers (USACE) Nationwide Permit (NWP) 3 and a Pre-Construction Notification (PCN) will be submitted to the USACE requesting authorization under provisions of Section 404 of the Clean Water Act. Additional information is found in the Biological Resources Report in Appendix B. During construction, there may be a temporary increase in sediment; however BMPs and a SWMP will be put into place prior to construction to minimize any sediment entering waterways.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Floodplains	*EO 11988: Floodplain Management* A portion of the project is located within Zone AE as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) on panel 08013C0390J, dated 12/18/12 (FEMA 2012).	Construction will occur within the 100-year floodplain (see Appendix D for the FIRM and more detailed information). Coordination with the project engineer and the local floodplain authority will be completed to ensure the project is developed consistent with local floodway plans and floodplain management programs.	Obtain floodplain permit since work within Fourmile Creek floodplain is anticipated. Preparation of a Letter of Map Revisions (LOMRS) may be required if there is a change to the floodplain.
Vegetation	The vegetation present is typical for a mountain terrain habitat. Vegetation within and surrounding the project area consists of mature trees with herbaceous understory. Dominant trees within the project area include Ponderosa pine (Pinus ponderosa) and Douglas fir (Pseudotsuga menziesii). See Appendix B for additional details.	Approximately 0.38 acres of vegetation will be disturbed by the project, which includes 0.32 acres of upland habitat and 0.06 acres of likely riparian habitat before the flood. Approximately 0.3 acres of vegetation will be re-seeded, this includes seeding 0.11 acres of soil riprap along Gold Run and 0.03 acres for the energy dissipator. Currently, two trees are anticipated to be removed during the construction of the project.	Removal of existing trees and vegetation during construction will be limited. Access routes, staging areas, etc. will be located within previously disturbed areas to the extent possible. Disturbed areas will be restored using native plant materials.
Noxious Weeds	*Colorado Noxious Weed Act* Boulder County currently has 22 species of plants that are listed in the Boulder County Noxious Weed Management Plan.	Construction activities may cause noxious weeds to spread into disturbed areas.	In compliance with the Colorado Noxious Weed Act and local guidance, BMPs and approved preventive measures would be used to prevent the spread of noxious weeds and minimize the potential effects from control treatments during construction of the project. These measures and practices include, but are not limited to, minimizing soil disturbance to the maximum extent possible, cleaning construction equipment, and re-seeding all disturbed soil with a certified weed-free seed mix.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Threatened/ Endangered Species	*Endangered Species Act (ESA)* *Colorado State Statue 33* A US Fish and Wildlife (USFWS) Information Planning and Conservation System (IPaC) search was completed for the project site. According to the IPaC search, 11 species are listed as candidate, potentially threatened, threatened, or endangered in Boulder County. Currently, there is no suitable habitat for any listed federally threatened or endangered species within the study area due to scouring from the September 2013 floods. However, as the area recovers and with the succession of shrubs and riparian vegetation, there is a potential for suitable habitat to be re-established. Colorado Parks and Wildlife (CPW) maintains a list of state threatened and endangered species and species of concern. There are three species that are state listed threatened and endangered and two listed species of concern that have the potential to occur within the study area. See Appendix B for more detailed information.	The project *may affect, but is not likely to adversely affect* Preble's meadow jumping mouse. Based on the habitat present for the other five listed species that have a potential to occur within Boulder County, the project will have *no effect* on the other five species. In regards to the five species that would be considered under the ESA for water-related activities/use, onsite sources of water will not be used for any construction activity. Therefore, the project will have *no effect* on the five species.	A list of conservation measures that will be implemented are included in the Biological Resources Report (see Appendix B). Onsite sources of water will not be used for any construction activity, including storing or using onsite water for dust abatement, soil compaction, concrete mixing, or other activities.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Migratory Birds	*Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act* An on-site nest survey was completed and two inactive bird nests were located within the study area along Fourmile Canyon Drive. Additional migratory bird and/or raptor nests may be present since suitable habitat is located within the study area. See Appendix B for additional information.	Currently no impacts are expected to occur to migratory birds. Although no active nests have been observed at this time, there is a potential for active nests to be present at the time of construction.	Tree trimming and/or removal activities shall be completed before birds begin to nest or after the young have fledged. In Colorado, most nesting and rearing activities occur between April 1 and August 31, however, since some birds nest as early as February 15, a nesting bird survey shall be conducted by a qualified biologist before any tree trimming or removal activities begin. The contractor shall follow the provisions of the Migratory Bird Treaty Act (MBTA) throughout the duration of construction. If construction-related activities occur between February 15 and August 31 then a pre-construction survey for nesting birds must be completed by a qualified biologist. No construction activities will occur within 50 feet of an active nest until the nest becomes inactive or the young have fledged. A pre-construction survey for nesting raptors must be completed within a half-mile buffer of the project limits. If any nesting raptors occur within the buffer area, then CPW "Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors" guidelines should be followed. CPW may reduce the buffer requirements based on conditions of the study area and type of work being done, but must be consulted for approval prior to construction within the recommended buffer zone of an active nest.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Wildlife	Common wildlife within the project area includes chipmunks (*Tamias sp.*), rabbits (*Sylvilagus sp.),* mule deer (*Odocoileus hemionus*), elk (*Cervus Canadensis*), and wild turkeys (*Meleagris Gallopavo*). There have also been sightings of mountain lions (*Puma concolor*), moose (*Alces alces*), and black bears (*Ursus americanus*). More information can be found in the Biological Resources Report in Appendix B.	The proposed project is along existing roadways and will not create a new barrier to normal travel patterns. This project is unlikely to permanently impact or cause displacement to wildlife species in the area. Wildlife may avoid the area during construction, but this will be temporary and wildlife can return to the area once construction is complete.	Not Applicable
Paleontological Resources	The project area was previously disturbed during the initial project construction and subsequently during the September 2013 flood; it is unlikely that paleontological fossils are located in the project footprint.	No permanent or temporary impacts to paleontological resources are anticipated by the proposed project.	Once construction begins, if any subsurface paleontological materials are encountered (e.g., vertebrate, invertebrate, or plant fossils), work should be halted immediately in the vicinity of the find, and a qualified professional paleontologist should be promptly notified to examine the artifacts or feature. The site of the find should be secured and work should not resume until the discovery can be evaluated and/or removed by a qualified paleontologist. If warranted, additional paleontologist testing or data recovery may be necessary before work can be resumed in the vicinity of the find.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Historic and Archaeological Resources	*National Historic Preservation Act (NHPA) Section 106* Appendix C describes the Area of Potential Effect and research completed to evaluate potential impacts to historic and archeological resources. This is an area rich in historic mining ruins, and a short, stacked rock retention wall and two possible prospect pits were observed upslope and east of the creek /Gold Run Road. Three historic sites were noted within the APE. These sites are the Scottish-Colorado Mining and Smelting Residence/Gates House; Beckman Residence/Lawrence House; and Black Cloud Mill Site/Gillio-Bowen Residence. These three resources are considered not eligible to the NRHP.	While these may technically be within the APE, because the work will be performed on the other side of the creek, it is not likely to impact the wall or possible prospect pits. Awareness that such features do exist in the immediate vicinity of the project APE is important; care should be taken to avoid historic features such as these, in order to preserve the remaining material culture associated with Boulder's historic mining era. Because the three resources are not eligible to the NRHP, the project will result in a finding of *no historic properties affected*. The eligibility and effects recommendations have not been consulted on with the SHPO. The eligibility of and effects to each resource should be consulted on with the SHPO to obtain concurrence..	Once construction begins, if any subsurface archaeological materials are encountered (e.g., artifacts such as [but not limited to] historic trash such as bottles, dishware, household or mining items, etc; prehistoric stone tools such as projectile points or other flaked stone items; or historic or prehistoric features, such as foundations, stone wall remains, mine adits or prospect pits, hearths, etc.), work should be immediately halted in the vicinity of the find, and a qualified professional archaeologist should be promptly notified to examine the artifacts or feature. The site of the find should be secured and work should not resume until the discovery can be evaluated and/or removed by a qualified archaeologist. If bones of potential human origin are encountered during construction, ground-disturbing work must be stopped in the vicinity of the discovery, and the Boulder County Sheriff and Coroner, and the Colorado State Archaeologist should be promptly notified. Work cannot resume near human remains until clearance is granted. If any historic features (mining-related or otherwise) such as building foundations, trails, wagon roads, stone wall remains, mine adits, or prospect pits that may be encountered within or immediately adjacent to the APE, the appropriate measures should be taken to comply with Section 106. In addition, care should be taken to avoid them in order to preserve the remaining material culture associated with the historic mining era.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Land Use	Current use of land within the project area primarily involves transportation into and out of Salina. Land outside of the existing ROW is developed as an unincorporated mountain community.	The proposed project is not expected to change existing land uses. Additionally, the project is consistent with local planning efforts.	Not Applicable
Social Resources and Environmental Justice	*EO 12898: Environmental Justice for Low Income Populations* The town of Salina is a former mining town, approximately 7 miles west of Boulder, Colorado. The local population of this mountain community is 60 residents (Salina, 2015). There are no social or community facilities within or immediately adjacent to the proposed project.	Community impacts would be expected to be beneficial with the most notable being improved drainage flow. The roadway is an established corridor and the project would not divide, separate, or isolate any distinct neighborhoods, ethnic groups, or other specific groups. Community cohesion would not be disturbed. No relocations of residences or businesses would occur as a result of this project. During construction of the proposed project, local streets would remain open to traffic and access to homes would remain open.	The public will be notified about any necessary changes in access during construction. The entire town of Salina will benefit from the completion of this project.
Right-of-Way	Boulder County currently maintains the existing ROW at Salina Junction along Gold Run Road and Fourmile Canyon Drive. The County also has existing permanent easements for maintenance of drainage along Gold Run.	The proposed roadway improvements would generally follow the existing alignment of the road and will be completed within the County's existing ROW, except for 4 PEs for drainage and maintenance and 3 TEs for construction impacts beyond the ROW. No new ROW would be required for the construction of the project.	Access routes, staging areas, and work areas will be located within previously disturbed or modified areas when feasible. Permanent easements and temporary construction easements will be limited to the extent possible.
Utilities	Existing overhead electrical lines exist within the project area.	The proposed project will not impact the existing overhead electrical lines.	The overhead electrical lines will be protected in place.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Transportation Resources	Salina Junction is the intersection of Fourmile Canyon Drive and Gold Run Road, which currently serves the town of Salina. These roadways are maintained by Boulder County. The design will restore and improve the roadways.	The proposed project will benefit the entire community of Salina and will improve the safety and reliability of Fourmile Canyon Drive and Gold Run in this area.	Not Applicable
Hazardous Materials	*Resource Conservation and Recovery Act (RCRA)* *6 Code of Colorado Regulations (CCR) 1007* A visual survey was conducted of the project area, as well as a review of recent and historical aerial images. The project area does not have a history of past commercial or industrial use. During the field visits no potential sources of hazardous materials and/or petroleum contamination were observed. However, there is a legacy of mining in the general vicinity of this project. Several small mine "prospects" are known to occur near the project; however, significant processing or occurrences of mine wastes are not expected. Therefore, there is low potential for any hazardous materials to be disturbed during construction of the proposed projects.	There is a low potential for safety, occupational health or hazardous material concerns within the project area.	The contractor will take appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction area. The use of construction equipment within sensitive areas will be minimized or eliminated. All construction materials used for this project will be removed as soon as the work schedule permits. Any unanticipated hazardous materials and/or petroleum contamination encountered during construction will be handled according to applicable federal and state regulations for handling emergency discovery of hazardous materials.

Resource	Context	Proposed Action	Mitigation Commitment / Avoidance / Minimization/ Conservation Measures
Riparian Habitat and SB40	*Senate Bill 40* Senate Bill 40 (SB40) requires any agency of the state to obtain wildlife certification from CPW when the agency plans construction in a jurisdictional stream, its banks or tributaries. Gold Run meets the criteria for a jurisdictional stream under SB40.	The Gold Run channel banks between Gold Run and Gold Run Road will be rebuilt for approximately 270 feet and an 8-foot x 8-foot CBC will replace the existing 42-inch culvert under Fourmile Canyon Drive. The CBC will be approximately 110 feet in length. Approximately 0.06 acres of likely riparian habitat before the flood will be disturbed by the project. Approximately 0.3 acres of vegetation will be re-seeded, this includes seeding 0.11 acres of soil riprap along Gold Run and 0.03 acres for the energy dissipator. Currently, two trees are anticipated to be removed during the construction of the concrete embankment for the 8 x 8 concrete box culvert.	Coordination with CPW is recommended to determine if an application for SB40 Wildlife Certification needs to be submitted to CPW.
Visual Resources/ Aesthetics	The project area is a mountain community transportation corridor.	No visual resource changes are anticipated.	Not Applicable
Noise	*Noise Control Act* There are 15 potential sensitive noise receptors (residential homes) within 500 feet of the proposed project. A noise assessment is not necessary as the project will not increase capacity and does not result in a substantial change in vertical or horizontal changes.	Noise associated with the construction of the proposed project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. Any extended disruption of normal activities is not expected.	Provisions will be included in the plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

5.0 References

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