Median Regrading on I-40 from Post Mile R25 to Post Mile R50 Project

San Bernardino County, California
District 08-SBd-40 (PM R25.0/R50.0)
EA 08-0R170/PN 0812000028

Initial Study [with Proposed] Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

November 2020

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General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in San Bernardino County, California. The project is to regrade the existing median slope within the clear recovery zone of Interstate 40 (I-40) from Post Mile (PM) R25 to PM R50 between Newberry Springs and Ludlow. The document describes the project, the existing environment that could be affected by the project, potential impacts from the project, and proposed measures.

What you should do:

- Please read this document.
- Additional copies of this document and the related technical studies are available for review at the Barstow Branch Library, 304 East Buena Vista Street, Barstow, 92311 and Caltrans District 8 Office, 464 West 4th Street, San Bernardino, 92401.
- We welcome your comments. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline below.
- Submit comments via U.S. mail to Caltrans at the following address:

  Gabrielle Duff, Senior Environmental Planner
  California Department of Transportation, District 8
  464 West 4th Street
  San Bernardino, CA 92401-1400

- Submit comments via email to: gabrielle.duff@dot.ca.gov
- Submit comments by the deadline: December 30, 2020.

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could design and build all or part of the project.

Alternative formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Gabrielle Duff, Senior Environmental Planner, 464 West Fourth Street, San Bernardino, 92401, or use the California Relay Service 1(800) 735-2929 (TTY to Voice), 1(800) 735-2922 (Voice to TTY), 1(800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1(800) 854-7784 (Spanish and English Speech-to-Speech) or 711.

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SCH#XXXXXXX
08-SBd-40 (PM R25.0/R50.0)
EA 08-0R170/ PN 0812000028

Regrade median on Interstate 40 from Post Mile R25.0 to PM R50.0 in San Bernardino County, California

INITIAL STUDY
with (Proposed) Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

11/24/2020
Date of Approval

David Bricker
Deputy District Director, Environmental Planning
California Department of Transportation, District 8
CEQA Lead Agency

The following persons may be contacted for more information about this document:

Gabrielle Duff, Senior Environmental Planner
California Department of Transportation, District 8
464 West 4th Street
San Bernardino, CA 92410-1400
Phone: (909) 383-6933

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CEQA Environmental Checklist

PROJECT DESCRIPTION AND BACKGROUND

Project Title: Median Regrading on I-40 from Post Mile (PM) R25 to Post Mile R50

Lead agency name: Caltrans District 8 **Address:** 464 West 4th Street, San Bernardino, CA, 92401

Contact person: Gabrielle Duff **Phone number:** (909) 383-6933

Project sponsor's name: Caltrans District 8 **Address:** 464 West 4th Street, San Bernardino, CA 92401

Project Location: Along I-40 from PM R25 to PM R50 in San Bernardino County.

General plan description: N/A

Zoning: N/A

Description of project:

The project would regrade the existing median slopes within the clear recovery zone (CRZ) of I-40 from PM R25 to PM R50 between Newberry Spring and Ludlow, in San Bernardino County. The existing median slopes within the clear recovery zone would be regraded from existing 6:1 slope or steeper gradient to 10:1 or flatter to reduce the severity and the number of run-off-road accidents in the median on I-40. The project will also include drainage modifications to accommodate the flatter median slopes, the replacement of the existing Metal Beam Guardrails (MBGR) with Midwest Guardrail Systems (MGS), and improving existing California Highway Patrol (CHP) crossings in the median. Approximately 1.9 miles along I-40 from PM R25.6 to PM R27.5, occurs within Troy Dry Lake and would not be improved as part of the project.

Surrounding land uses and setting:

Surrounding land use is composed of undeveloped, open space lands dominated by native desert scrub vegetation with ephemeral washes flowing north to south from the Cady Mountains and south to north from the Bullion Mountains, Rodman Mountains, and Pisgah Crater. Troy Lake, a dry lake bed is located north of the western end of the project. Railroad tracks are located to the north of the project on the western end of the alignment, then crosses the center of the project and occurs to the south of the project on the eastern portion of the alignment.

Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements)**:**

California Department of Fish and Wildlife, State Water Resources Control Board.

NATIVE AMERICAN CONSULTATION

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) section 21080.3.1? ☒ Yes ☐ No

If yes, ensure that consultation and heritage resource confidentiality follow PRC sections 21080.3.1 and 21080.3.2 and California Government Code 65352.4

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the checklist beginning on page 4 for additional information.

- ☐ Aesthetics
- ☐ Air Quality
- ☒ Cultural Resources
- ☐ Geology/Soils
- ☐ Hazards and Hazardous Materials
- ☐ Land Use/Planning
- ☐ Noise
- ☐ Public Services
- ☐ Transportation
- ☐ Utilities/Service Systems
- ☐ Mandatory Findings of Significance
- ☐ Agriculture and Forestry
- ☒ Biological Resources
- ☐ Energy
- ☐ Greenhouse Gas Emissions
- ☐ Hydrology/Water Quality
- ☐ Mineral Resources
- ☐ Population/Housing
- ☐ Recreation
- ☒ Tribal Cultural Resources
- ☐ Wildfire

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number:

DIST-CO-RTE-PM: 08-SBd-40-PM R25.0/R50.0

EA: 0R170

Project Description

The California Department of Transportation (Caltrans) proposes to regrade the existing median slopes within the clear recovery zone of Interstate 40 (I-40) from Post Mile (PM) R25 to PM R50 between Newberry Springs and Ludlow, in San Bernardino County (refer to Figures 1 and 2).

The project would regrade the existing median slopes within the clear recovery zone from existing 6:1 slope or steeper gradient to 10:1 or flatter to reduce the severity and the number of run-off-road accidents in the median on I-40 from 1.6 miles east of Fort Cady Road (PM R25.0) to Crucero Road (PM R50.0) near the City of Barstow, San Bernardino County. The project is within the median of the I-40 westbound and eastbound lanes and covers a distance of 25 miles. Throughout the majority of the project, the median would be filled with imported soil materials. The proposed median regrading will also require modifications to existing drainage systems in the median to accommodate the proposed grading. The work will consist of extending the existing cross culverts and inlets/outlets in the median to be compatible with the proposed regrading. Drainage modification will also include installing rock slope protection at culverts and washes to protect streambeds of these facilities. No slope regarding is proposed at the existing bridges and at locations where the MBGR already exists in the median. The project will also preserve and improve existing CHP crossovers and constructing new CHP locations, as needed. All existing MBGR in the median affected by the regrading work will be replaced with MGS. Existing MGBR in the median between Pisgah Crater Road Undercrossing (PM R37.27) and Pisgah Overhead (PM R37.41) and on the eastside of Pisgah Overhead (PM R37.41) will be upgraded to MGS. No improvements are proposed at the on- and off-ramps or rest areas. The project includes proposed staging areas adjacent to the rest stops on the westbound and eastbound lanes of I-40. The proposed project would not require additional right of way and would not increase traffic capacity. Approximately 1.9 miles along I-40, from PM R25.6 to PM R27.5, occurs within Troy Dry Lake and would not be improved as part of the project.

The proposed project is within the following U.S. Geological Survey (USGS) 7.5-minute quadrangles: Troy Lake, Hector, Sleeping Beauty, Lavic Lake, and Ludlow. The project would cross through several ranges and townships, as indicated below.

Table 1. Project Township, Range, and Section Data

USGS 7.5-minute Quadrangle	Township	Range	Section(s)
Troy Lake	8N	4E	4,5,10,11,12
	8N	5E	7
Hector	8N	6E	5,7,8,13,14,15,16,17,18,19,20
Sleeping Beauty	8N	6E	20,21,27,28
Lavic Lake	8N	6E	27,34,35,36
	7N	6E	4,5,6
Ludlow	7N	7E	1,2,3,4
	7N	8E	5,6

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have no effect on Aesthetics, Agriculture and Forest Resources, Energy, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

- In addition, the proposed project would have less-than-significant effects on Air Quality, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, and Transportation.

- With the following mitigation measures incorporated, the proposed project would have less-than-significant effects on Biological Resources, and Cultural Resources:

  BIO-1: Prior to clearing or construction, the outer perimeter of the project work area will be demarcated to prevent damage to adjacent habitat and to provide visual orientation to the project limits. No construction activities (including grading or fill activity), materials, or equipment storage of any type will be permitted outside of the designated construction work area and staging areas. All construction equipment will be operated in a manner to prevent accidental damage to nearby preserved areas. Areas where native vegetation is immediately

adjacent to planned grading activities will be protected from accidental deposition of fill material.

BIO-2: A biologist will monitor construction in the vicinity of native vegetation communities prior to and during vegetation removal to ensure that vegetation removal, BMPs, and all avoidance and minimization measures are properly implemented.

BIO-3: A pre-construction presence/absence plant survey will be performed within the project limits prior to ground-disturbing activities. If special-status plant species are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization, and mitigation measures required for the project.

BIO-4: Caltrans will submit the names and qualifications of biologists that it believes meet the minimum requirements to serve as a Contractor Supplied Biologists to USFWS for review and authorization under the Biological Opinion prior to beginning onsite activities (forms at http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/). Caltrans will determine whether the presence of a Contractor Supplied Biologists and approved desert tortoise monitors will be required during project activities as outlined in the "criteria for use in reaching appropriate determination" section of the Programmatic Biological Opinion and the submitted Appendix I notification form to USFWS. In general, where the risk to desert tortoises is low, the Contractor Supplied Biologist or an approved biological monitor will be present at the onset of the project to ensure protective measures are in place and will, if necessary (for example, for projects that will require a substantial length of time to complete), conduct periodic field checks to ensure compliance.

BIO-5: Caltrans will designate a Contractor Supplied Biologist to be responsible for overseeing compliance with all protective measures. The Contractor Supplied Biologist will immediately notify the Caltrans Resident Engineer of project activities that may be in violation of the PLACs (Permits, Licenses, Agreements, Contracts). In such an event, the Resident Engineer can halt all construction activities until all protective measures are being fully implemented, as determined by the Contractor Supplied Biologist.

BIO-6: The Contractor Supplied Biologist will have the authority to halt any activity, through the coordination with the Resident Engineer, that may pose a threat to desert tortoises and to direct movements of equipment and personnel to avoid injury or mortality to desert tortoise.

BIO-7: Immediately prior to the start of any ground-disturbing activities and prior to the installation of any material demarcating the work area (e.g., staking, lath, fencing), clearance surveys for the desert tortoise will be conducted by the Contractor Supplied Biologist, as appropriate. The entire project area will be surveyed for desert tortoise and their burrows by a Contractor Supplied Biologist or approved desert tortoise monitor before the start of any ground-disturbing activities following the 2010 field survey protocol (USFWS 2010) or more current approved protocol. If burrows are found, they will be examined by a Contractor Supplied Biologist to determine if desert tortoises are present. If a tortoise is present and the

burrow cannot be avoided, USFWS and CDFW will be contacted. If desert tortoises are found at a project site where Caltrans (or the Contractor Supplied Biologist) had previously concluded they were unlikely to occur, Caltrans will contact USFWS and CDFW to determine if the implementation of additional protective measures would be appropriate.

BIO-8: A Worker Environmental Awareness Program will be developed and presented by the Contractor Supplied Biologist prior to the start of construction activities. All onsite personnel, including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel, employed for the project will be required to participate in the program prior to performing any onsite work. The program will consist of a class presented by a Contractor Supplied Biologist or a video, provided the Contractor Supplied Biologist is present to answer questions. At a minimum, the program will include the following topics: (1) biology, conservation, identifying characteristics, legal status, and regulations protecting special-status species occurring or potentially occurring within the project site, including nesting birds; (2) responsibilities of the biological monitor; (3) delineation and flagging of adjacent habitat; (4) limitations on all movement of those employed on site, including ingress and egress of equipment and personnel, to designated construction zones (personnel will not be allowed access to adjacent native habitats); (5) onsite pet prohibitions; (6) use of trash containers for disposal and removal of trash; (7) project features and avoidance and minimization measures designed to reduce the impacts on special-status species and habitat and promote continued successful occupation of adjacent habitat areas; (8) the process required for construction personnel to report special-status species detections, including a chain of command and criteria for stopping work/minimizing impacts; and (9) the penalties for violations of state and federal laws. Supporting materials (e.g., wallet-sized cards or a one-page handout) with important information regarding special-status species will be provided to all construction personnel during the training program as a future reference and a reminder of the program's content.

BIO-9: Workers will check under the vehicle each time prior to moving the equipment or vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the Contractor Supplied Biologist or an approved desert tortoise monitor, who will notify the Resident Engineer. The Resident Engineer must notify the Caltrans Environmental Stewardship and Biological Monitoring Branch. Workers will not be allowed to capture, handle, or relocate tortoises. Any such handling must be reported as described in the Reporting Requirements section of the Programmatic Biological Opinion (8-8-10-F-59; USFWS 2018).

BIO-10: The area of disturbance will be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. This measure includes temporary haul roads, staging/storage areas, or access roads. Work area boundaries will be clearly and distinctly demarcated to minimize surface disturbance associated with vehicle movement. To the extent possible, a previously disturbed areas within the Caltrans right of way will be used for equipment storage, office trailer locations, and vehicle parking. The development of all temporary access and work roads associated with construction will be minimized and constructed without blading where

feasible. Project-related vehicle traffic will be restricted to established roads, construction areas, staging/storage areas, and parking areas. The Resident Engineer, Contractor Supplied Biologist, or approved desert tortoise monitor will ensure that blading is conducted only where necessary.

BIO-11: The Resident Engineer is responsible for ensuring that all protective measures are being fully implemented. If the Resident Engineer determines, or is notified by the Contractor Supplied Biologist, that one or more protective measures are not being fully implemented, he or she will halt all activities that are out of compliance until all problems have been remedied. All workers, Contractor Supplied Biologists, and biological monitors will be required to notify the Resident Engineer of any such problem they notice. The Resident Engineer must always contact the Caltrans Environmental Stewardship and Biological Monitoring Branch to resolve any unforeseen issues.

BIO-12: Permanent or temporary exclusion fencing may be used to prevent entry by desert tortoises into a work site, if Caltrans and the Contractor Supplied Biologist determine this measure is appropriate. Exclusion fencing, should it be deemed necessary, will be installed following USFWS guidelines (2005) or more current protocol. The Contractor Supplied Biologist will ensure that desert tortoises cannot pass under, over, or around the fence. If such a fence is used, Contractor Supplied Biologists or desert tortoise monitors will not be required to be present at the site at all times. However, the Contractor Supplied Biologist must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction surveys for tortoise and tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground-disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction surveys will be performed.

BIO-13: Upon locating a dead or injured tortoise within a project site, the Resident Engineer will immediately notify the Contractor Supplied Biologist who will then contact the Caltrans Environmental Stewardship and Biological Monitoring Branch. The Contractor Supplied Biologist will also notify USFWS within 24 hours of the observation via telephone. Written notification must be made to the appropriate USFWS field office within 5 days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).

BIO-14: If working outside of a desert tortoise-proof fenced area, auger holes or other excavations will be covered following inspection at the end of each workday to prevent desert tortoises from becoming trapped.

BIO-15: When feasible or practicable, construction vehicles will be cleaned of all mud, dirt, and debris from other sites prior to entering the project area. The purpose of this measure is to minimize the spread of weedy plant species that may degrade desert tortoise habitat.

BIO-16: Desert tortoise exclusion fence construction, should it be deemed necessary, would follow the guidelines in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2010), which is available at the Ventura Fish and Wildlife Office website (www.fws.gov/ventura). If needed, fencing that is tortoise-proof would be installed along any fence gate bottoms beginning at least 2 feet above the fence bottom and extending toward the ground, leaving less than a 1-inch gap (USFWS 2010). All desert tortoise exclusion fences and gates would be regularly maintained at a frequency sufficient to ensure that they would continually provide an effective barrier to passage of desert tortoises. Any installed desert tortoise exclusion fences would not cross washes. If washes and culverts are encountered, the desert tortoise exclusion fence would follow the wash to the roadway and either tie into the existing bridge or cross over the top of a culvert.

BIO-17: During inspections and repairs of the demarcated work area, if any desert tortoises are observed, workers are to notify the Contractor Supplied Biologist and Resident Engineer. Any such incident will be reported to the Caltrans Environmental Stewardship and Biological Monitoring Branch and in the annual report.

BIO-18: After each shift, surveyor flagging tape will be attached to a conspicuous place on each piece of equipment in order to remind the operator and/or the Contractor Supplied Biologist to check under the equipment for desert tortoises prior to operating equipment during the next shift.

BIO-19: To determine if burrowing owls are occupying the project limits or adjacent areas prior to construction, the first take avoidance survey following CDFW protocol (2012) will be conducted no more than 14 days prior to initiating ground disturbance activities, and a second survey will be conducted within 24 hours prior to ground disturbance. The survey will be conducted from civil twilight to 10 a.m. or 2 hours before sunset until evening civil twilight within areas providing suitable habitat for burrowing owl. The survey will include the proposed project limits and a 300-foot buffer if performed between February 1 and August 31 (nesting season) and a 100-foot buffer if conducted outside of the nesting season. If burrowing owls are present within 300 feet of project activities during the breeding season or within 100 feet of project activities outside of the nesting season, Measure BIO-21 or BIO-22 will be implemented, as applicable.

BIO-20: If burrowing owls are found during pre-construction take avoidance surveys during the nesting season (BIO-20), the burrowing owls will be fully avoided by establishing an appropriate buffer in coordination with CDFW.

BIO-21: If burrowing owls are found during pre-construction take avoidance surveys outside of the nesting season (BIO-20), passive relocation by a qualified avian biologist will be conducted once it has been confirmed that pairing activities have not begun. Passive relocation efforts will be conducted in coordination with CDFW. If the burrowing owl is found to be paired and exhibiting potential nesting behavior, construction disturbance will not occur within a designated buffer determined in coordination with CDFW of the active

burrow(s) until it is confirmed by the avian biologist that the pair is not nesting and that young are not present, or if present are independently foraging.

BIO-22: Prior to the start of project construction, a daytime assessment will be conducted by a qualified bat biologist to reexamine structures that are suitable for bat use. If bat sign is observed at that time, then nighttime bat surveys will be conducted to confirm whether the structures with suitable habitat identified during the preliminary assessment are utilized by bats for day roosting and/or night roosting, to ascertain the level of bat foraging and roosting activity at each of these locations, and to perform exit counts to visually determine the approximate number of bats utilizing the roosts. Acoustic monitoring will also be used during these surveys to identify the bat species present and to determine an index of relative bat activity for that site on that specific evening.

BIO-23: The Contractor Supplied Biologist will survey the BSA prior to construction to assess the potential for maternity roosts in the BSA. The surveys may include a combination of structure and structure inspection, sampling, exit counts, and acoustic surveys.

BIO-24: The removal of mature trees and snags will be minimized to the greatest extent practicable. Prior to tree removal or trimming, large trees and snags will be examined by a qualified bat biologist to ensure that no roosting bats are present.

BIO-25: If bat maternity sites are identified during the preconstruction bat habitat assessment, then no construction activities at that location will be allowed during the maternity season (i.e., April 1–August 31) unless a qualified bat biologist has determined the young have been weaned. If maternity sites are present, and it is anticipated that construction activities cannot be completed outside of the maternity season, then bat exclusion at maternity roost sites will be completed by the Contractor Supplied Biologist in consultation with CDFW either as soon as possible after the young have been weaned or outside of the maternity season or as otherwise approved by the qualified bat biologist in coordination with CDFW.

BIO-26: A Nesting Bird Management Plan will be drafted to provide a comprehensive approach to handling nesting birds prior to the commencement of construction. It will include the following items:

- If vegetation clearing is to occur during the avian nesting season (i.e., February 1–September 15), the designated biologist will conduct a preconstruction survey of construction areas and adjacent habitat in the near vicinity no more than 72 hours prior to construction to identify the locations of avian nests. Should nests be found, an appropriate buffer will be established around each nest site by a qualified biologist/biological monitor until nesting is completed.
- Nesting bird habitat within the BSA will be resurveyed during the breeding bird season if there is a lapse in construction activities longer than 7 days.

BIO-27: Preconstruction clearance surveys for sensitive wildlife species will be performed by a qualified biologist within 48 hours prior to construction to flush the species from the construction footprint. No nesting birds will be flushed during the nesting season. Bats will not be flushed but will be protected as specified in Section 4.3.3 of the Natural Environment Study. Amphibians, reptiles, and burrowing wildlife will be relocated from the site of temporary or permanent impacts as feasible during preconstruction clearance surveys. Relocation sites will be within the project vicinity and will consist of suitable habitat to support these species.

BIO-28: Equipment maintenance, lighting, and staging will occur only in designated areas, and will not block or impede movement through wildlife corridors.

BIO-29: The project limits of disturbance, including the upstream, downstream, and lateral extents on either side of any stream adjacent to the project footprint, will be clearly defined and marked in the field. The biological monitor will review the limits of disturbance prior to initiation of construction activities. The upstream and downstream limits of project disturbance, plus the lateral limits of disturbance on either side of the stream, will be clearly defined and marked in the field to ensure avoidance of jurisdictional areas.

CR-1: Treatment of Previously Unidentified Cultural Resources. If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

CR-2: Treatment of Human Remains. In the event that human remains are found, the county coroner shall immediately be notified and all construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify NAHC, who will then notify the Most Likely Descendant. The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909) 383-2647 and Gary Jones, DNAC: (909) 383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

CR-3: Treatment of Identified Cultural Resources. All archaeological sites within the Project Area of Direct Impacts (ADI), regardless of eligibility for the National Register of Historic Places, shall be preserved in place through capping (placement of fill). No grubbing or vegetation clearing shall be conducted within the documented boundaries of archaeological sites prior to the placement of fill.

CR-4: Environmentally Sensitive Areas (ESAs). Environmentally Sensitive Areas shall be established around the portions of archaeological sites P-36-001908, P-36-002328, P-36-005598, P-36-014561, P-36-014564, and P-36-020873 located outside of the Project ADI to prevent inadvertent adverse effects. Because there are no planned construction activities outside the I-40 median and travel lanes, the ESAs will not be fenced during construction.

Rather, the ESAs will be delineated on construction plan layouts in the contractor's specifications. No project activities shall occur within the boundaries of ESAs.

CR-5: Archaeological Monitoring Areas (AMAs). Archaeological Monitoring Areas shall be established for archaeological sites within the Project ADI. The AMAs shall include a 50-foot buffer. The AMAs will be shown on Project plans and delineated appropriately in the field through discussion with the Archaeological Monitor. Native American and Archaeological Monitoring will be required within the AMAs to ensure archaeological sites are protected in place through soil capping. Monitoring of soil capping will ensure that subsurface components remain intact and undisturbed while keeping surface components in place and protected by local soil. No clearing or grubbing will occur within the AMAs.

Signature

David Bricker
Deputy District Director
Caltrans District 8

Date

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Table of Contents

Appendices

Tables and Figures

Acronyms and Abbreviations

AB	Assembly Bill
ACM	asbestos-containing materials
APE	Area of Potential Effects
ARB	California Air Resources Board
Basin	Mojave Desert Air Basin
BLM	Bureau of Land Management
BMP	Best Management Practice
BSA	Biological Study Area
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CDCA	California Desert Conservation Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	methane
CHP	California Highway Patrol
CO	carbon monoxide
CO_2	carbon dioxide
CTP	California Transportation Plan
DP-30	Director's Policy 30
ECR	Environmental Commitments Record
EO	executive order
FHWA	Federal Highway Administration
GHG	greenhouse gas
H&SC	Health and Safety Code
HFCs	hydrofluorocarbons
I-40	Interstate 40
IPCC	Intergovernmental Panel on Climate Change
LBP	lead-based paint
LCFS	low carbon fuel standard
LRA	Local Responsibility Area
LUST	leaking underground storage tank
MDAQMD	Mojave Desert Air Quality Management District
$MMTCO_2e$	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System

PM	Post Mile
PM10 and PM2.5	particulate matter
PS&E	Plans, Specifications, and Estimates
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
Safeguarding California Plan	Safeguarding California: Reducing Climate Risk
SB	Senate Bill
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SLR	sea-level rise
SLR Guidance	California Sea-Level Rise Interim Guidance Document
SO_2	sulfur dioxide
SSC	Species of Special Concern
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDA	tributary drainage area
TMP	Transportation Management Plan
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGCRP	U.S. Global Change Research Program
VMT	vehicle miles traveled
WDR	Waste Discharge Requirements
WEMO	West Mojave Planning Area

Chapter 1 Introduction

Project Description and Background

Project Title:	Median Regrading on I-40 from Post Mile R25 to Post Mile R50 Project
Lead Agency Name and Address:	California Department of Transportation, District 8 464 West 4th Street San Bernardino, CA 92401-1400
Contact Person and Telephone Number:	Gabrielle Duff, Senior Environmental Planner Email address: gabrielle.duff@dot.ca.gov
Project Location:	Interstate 40 (I-40) from Post Mile (PM) R25 to PM R50 between Newberry Springs and Ludlow, in San Bernardino County.
Project Sponsor's Name and Address:	California Department of Transportation, District 8 464 West 4th Street San Bernardino, CA 92401-1400
General Plan Description:	N/A
Zoning:	N/A
Description of Project:	The proposed project consists of regrading the existing median slopes within the clear recovery zone from existing 6:1 or steeper gradient to 10:1 or flatter to reduce the severity and number of run-off-road accidents in the median of I-40 from 1.6 miles east of Fort Cady Road (PM R25.0) to Crucero Road (PM R50.0) near the City of Barstow. The project will also include drainage modifications to accommodate the flatter median slopes, the replacement of the existing MBGR with MGS, and improving existing CHP crossings in the median. Approximately 1.9 miles along I-40, rom PM R25.6 to PM R27.5, occurs within Troy Dry Lake and would not be improved as part of the project.
Surrounding Land Uses and Setting:	The proposed project is on I-40 near the City of Barstow in the western Mojave Desert. Surrounding land uses are composed of undeveloped, open space lands. Troy Lake, a dry lake bed, is just north of the western end of the project and lava flow outcroppings originating from Pisgah Crater are present in the central and western portions of the project area. Railroad tracks are also to the north of the project on the western end of the alignment, then cross the center of the project, and occur to the south of the project on the eastern portion of the alignment. Elevations range from approximately 1,780 feet above mean sea level at the western end of the project area to a high of 2,240 feet above mean sea level where the roadway traverses the southern flank of the Cady Mountains to a low of 1,730 feet above mean sea level at the eastern end of the project.
Other Agencies Whose Approval is Required for Regulatory Permits:	California Department of Fish and Wildlife, State Water Resources Control Board.

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Chapter 2 CEQA Environmental Checklist

DIST-CO-RTE: 08-SBd-40 **PM/PM:** R25.0/R50.0 **EA/Project No.:** EA 08-0R170/PN 0812000028

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

I. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

Response to Item a) No Impact. Visual impacts on scenic vistas are not anticipated, as the project would involve regrading the existing median cross-slopes. The median would be filled with imported soil material. The project would also extend existing culverts within the I-40 median and improve existing CHP crossings in the median. The project improvements would not require additional right of way and no improvements are proposed at the on- and off-ramps or rest areas. The proposed staging areas would be within disturbed lands in the westbound and eastbound rest areas at PM R28.3 to R28.6. Construction personnel would also access the project site using existing roadways, and no detour routes would be used. The proposed improvements would look the same characteristically as the existing roadway. The proposed improvements would not have a significant impact on a scenic vista or obscure significant views.

Response to Item b) No Impact. I-40 is not designated as a state scenic highway (Caltrans 2019) and is not noted in the County of San Bernardino General Plan as a County-designated Scenic Route. Within the project limits, I-40 consists of a four-lane divided freeway. The project site does not contain any structures and would not damage any scenic resources or historic buildings.

Response to Item c) No Impact. The existing visual character or quality of the site and its surroundings would remain the same as existing conditions; therefore, the project would not substantially degrade the area.

Response to Item d) No Impact. The project would not implement or create any new sources of light or glare that would adversely affect day or nighttime views in the area.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Aesthetics.

II. Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Question	CEQA Determination
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

Response to Item a) No Impact. According to the California Department of Conservation Farmland Mapping and Monitoring Program, there are no farmlands or vacant lands that are mapped as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, or Farmlands of Local Importance in the vicinity of the proposed project.

Response to Item b) No Impact. There are no areas within the study area under Williamson Act contract.

Response to Item c) No Impact. There are no forest lands, timberlands, or timberland production areas adjacent to or within the project site. The proposed project would not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production.

Response to Item d) No Impact. The proposed project would not result in the loss or conversion of forest land.

Response to Item e) No Impact. There are no forest lands, timberlands, or agricultural lands within or adjacent to the project site. The proposed project would not involve changes that would result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Agriculture and Forest Resources.

III. Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No Impact

Response to Item a) No Impact. California is divided geographically into 15 air basins for the purpose of managing the air resources of the state on a regional basis. Each air basin generally has similar meteorological and geographic conditions throughout. Local districts are responsible for preparing the portion of the State Implementation Plan applicable within their boundaries.

The proposed project is located in the Mojave Desert Air Basin (Basin). The Mojave Desert Air Quality Management District (MDAQMD) has responsibility for managing the air resources for the portion of the Basin in which the project is located, and is responsible for bringing the Basin into attainment for federal and state air quality standards. To achieve this goal, MDAQMD prepares plans for the attainment of air quality standards, as well as maintenance of those standards once achieved.

The proposed project is listed, as currently proposed, in the region's conforming Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy and 2019 Federal Transportation Improvement Program regional transportation planning documents under project numbers REG0701 and SBDLS01, respectively. Furthermore, this proposed project is exempt from the requirement to demonstrate transportation conformity per 40 Code of Federal Regulations (CFR) 93.126 (projects that correct, improve, or eliminate a hazardous location or feature). As such, project emissions are consistent with applicable air quality plans.

Response to Item b) Less-than-Significant Impact

Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other

construction-related activities. Emissions from construction equipment also are expected and would include carbon monoxide (CO), nitrogen oxides (NO_X), volatile organic compounds (VOCs), directly emitted particulate matter (PM10 and PM2.5), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO_X and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involve clearing; cut-and-fill activities; grading, removing, or improving existing roadways; building bridges; and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM10, PM2.5, and small amounts of CO, sulfur dioxide (SO_2), NO_X, and VOCs to be of concern.

Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

In addition to dust-related PM10 emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_X, VOCs, and some soot particulate (PM10 and PM2.5) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO_2 is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and California Air Resources Board (ARB) regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 parts per million of sulfur), so SO_2-related issues due to diesel exhaust would be minimal.

Most of the construction impacts on air quality are short term in duration and, therefore, would not result in long-term adverse conditions. Implementation of the standardized measures, such as compliance with MDAQMD Rule 403.2 to reduce onsite fugitive dust, would reduce any air quality impacts resulting from construction activities to a less-than-significant level.

Operation

Because the project would not increase the number of travel lanes on I-40, Therefore, the proposed project would not increase roadway capacity on I-40 and would not increase emissions

of criteria pollutants and their precursors following the construction period. No operational impacts related to violation of air quality standards would occur.

As discussed above, project construction would generate criteria pollutants and their precursors. However, such emissions would be short term and transitory, and fugitive dust would be limited through compliance with MDAQMD Rule 403.2. No net increase in operational emissions would occur, as traffic volumes would be the same under the Build Alternative and No-Build Alternative. Implementation of the proposed project would not increase roadway capacity on I-40 and would not increase emissions of criteria pollutants and their precursors following the construction period. Because project construction would result in short-term generation of emissions, but no increases would occur for project operation, impacts related to a cumulatively considerable net increase of any criteria pollutants would be less than significant.

Response to Item c) No Impact. ARB characterizes sensitive land uses as simply as possible by using the example of residences, schools, day care centers, playgrounds, and medical facilities. However, a variety of facilities are encompassed. For example, residences can include houses, apartments, and senior living complexes. Medical facilities can include hospitals, convalescent homes, and health clinics. Playgrounds could be play areas associated with parks or community centers.

No land uses sensitive to air pollutant emissions are within 500 feet of proposed project improvements. As such, no impacts related to exposure of sensitive receptors to substantial pollutant concentration would occur.

Response to Item d) No Impact. According to ARB, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. Because the project would not include any of these types of uses, and no sensitive land uses are located along the project alignment, no impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

The following standard Air Quality measures would be implemented to minimize potential impacts, as stated in Section 14-9, “Air Quality,” of Caltrans’ 2018 Standard Specifications and Special Provisions:

AQ-1: Fugitive Dust: Contractor must abide.

AQ-2: Implement and follow Erosion Control and Air Quality Best Management Practices (BMPs).

AQ-3: Comply with MDAQMD Rule 403.2 for Fugitive Dust and Caltrans Standard Specification Section 14-9.

AQ-4: Comply with the Caltrans Standard Specification Section 10.4.

IV. Biological Resources

Would the project:

Question	CEQA Determination
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant with Mitigation Incorporated
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant with Mitigation Incorporated
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

Response to Items a), b), d) Less than Significant with Mitigation Incorporated. The information from this section is based on the Natural Environment Study (Caltrans 2020a). The proposed project is located in the western Mojave Desert. The Biological Study Area (BSA) consists of the entire median between the I-40 westbound and eastbound lanes from PM R25 to PM R50, as well as the proposed staging areas. The BSA excludes the 1.9 mile portion of I-40 from PM R25.6 to PM R27.5 that occurs within the Troy Dry Lake. The BSA consists of relatively flat lands with slight variations occurring at bisecting wash crossings, road crossings, railroad track crossings, fill slopes of the eastbound and westbound lanes of I-40, and within the lava flow outcroppings.

Natural Communities

The BSA is within the Mojave Desert biome of Southern California. A total of 79 plant species within eight vegetation communities were identified in the BSA. Six of these are native vegetation communities: allscale scrub, bush seepweed scrub, cheese bush-sweetbush scrub, creosote bush-white bursage scrub, mesquite thicket, and scale broom scrub. Creosote bush-white bursage scrub was the dominant vegetation community found in the BSA, covering approximately 207 acres. Many of the vegetation communities within the BSA are moderately to greatly disturbed, as they are within a few feet of the median shoulder. Some areas have been partially cleared, or highly disturbed with only patches of sparse herbaceous vegetation.

Plants Species

A background literature review of the area determined that 19 special-status plant species have the potential to occur within the BSA. None are federally and/or state-listed as endangered or threatened and one [western Joshua tree (*Yucca brevifolia*)] is a state candidate species. No federally or state-listed or candidate plant species have a potential to occur within the BSA. Western Joshua tree, a state candidate species was determined to be absent based on the species current distribution and negative survey results.Eight of the 19 special-status plants identified in the literature review were determined to be absent from the BSA due to a lack of suitable habitat. The BSA supports suitable to marginally suitable habitat for several special-status plant species associated with desert scrub vegetation communities. The remaining 11 special-status plant species were determined to have habitat present in the BSA; however, they were not detected during surveys and are considered absent within the BSA. Temporary and permanent impacts would occur within habitat determined to be potentially suitable habitat for special-status plant species. However, focused surveys conducted in 2019 were negative and none are expected to occur within the project BSA. No impacts on special-status plants are anticipated as a result of the project. Furthermore, measure **BIO-3** would ensure that no special-status plants are present within the project limits prior to the start of ground disturbance.

Invasive Species

Invasive species occur mostly within areas that have been disturbed by human uses throughout the BSA. Thirteen plant species observed within the BSA are classified as invasive exotic plant species. Mediterranean schismus (*Schismus barbatus*) was the most common weed species within the BSA. Other invasive and non-native species observed within the BSA include Russian thistle (*Salsola tragus*), red brome (*Bromus madritensis* var. *rubens*), foxtail barley (*Hordeum murinum*), non-native mustards (*Sisymbrium* spp. and *Brassica* spp.), and hairy tamarix (*Tamarix ramosissima*). Construction disturbance has the potential to increase populations of invasive plants and to cause invasive species to spread. To ensure the project does not promote the introduction of invasive species to open space within the BSA, a weed abatement plant to minimize the spread and importation of non-native plant material during and after construction would be implemented and would include measure **BIO-15**.

Animal Species

Twenty species of wildlife were detected within the BSA, with the majority being birds followed by mammals and reptiles. Representative wildlife species detected include desert iguana (*Dipsosaurus dorsalis*), side-blotched lizard (*Uta stansburiana*), mourning dove (*Zenaida macroura*), horned lark (*Eremophila alpestris*), common raven (*Corvus corax*), round-tailed ground squirrel (*Xerospermophilus tereticaudus*), and coyote (*Canis latrans*). Based on literature reviews, 17 State special-status wildlife species may potentially occur within the BSA. Eight of the 17 special-status wildlife species were determined to be absent from the BSA due to a lack of suitable habitat and include Mohave tui chub (*Siphateles bicolor mohavensis*), Western pond turtle (*Emys marmorata*), Mojave fringe-toed lizard (*Uma scoparia*), Tricolored blackbird

(*Agelaius tricolor*), California condor (*Gymnogyps californianus*), Vermilion flycatcher (*Pyrocephalus rubinus*), Le Conte's thrasher (*Toxostoma lecontei*), and Mountain lion (*Puma concolor*). The remaining nine State special-status wildlife species were determined to have potential habitat present, including desert tortoise (*Gopherus agassizii*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), Bendire's thrasher (*Toxostoma bendirei*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), desert bighorn sheep (*Ovis Canadensis nelson*), and American badger (*Taxidea taxus*). No listed or special-species were detected during protocol surveys or general field surveys within the BSA.

The natural vegetation communities present within the right of way and immediately adjacent areas along the project limits provide suitable desert tortoise habitat, a species listed as threatened by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). No live desert tortoises or their signs of burrows, scat, carcasses, tracks, eggshells, courtship rings, or drinking depressions were found within the BSA during surveys conducted in May 2019. All project-related work would occur within the median and entirely within the right of way and outside of the USFWS-designated desert tortoise critical habitat areas. The staging areas are located at PM R28.3 to R28.6, within disturbed lands adjacent to the westbound and eastbound I-40 rest areas and outside of any desert tortoise critical habitat. Standard BMPs would be implemented to reduce any potential indirect impacts as a result of construction activities. Impacts on desert tortoise habitat are not anticipated to occur with implementation of **BIO-1**, **BIO-2**, and **BIO-15**. As suitable habitat is present within the BSA and desert tortoises are known to occur in the region, they also have the potential to occur within the BSA at any time. Desert tortoises present to the north and south of I-40 may continue to be harmed as a result of collisions with vehicles. However, the proposed project would not contribute to or increase the number of collisions. Substantial impacts on desert tortoise or its suitable habitat are not anticipated with implementation of appropriate avoidance and minimization measures **BIO-1**, **BIO-2**, and **BIO-4** through **BIO-19**.

Surveys were conducted in May 2019 for potential suitable habitat to support burrowing owl within the BSA. No burrows were detected during field surveys. The only potential sheltering opportunities for burrowing owls were at a wash near the eastern end of the BSA lined with broken concrete slabs that could potentially support burrowing owl. However, no live burrowing owls or their sign were detected within the BSA during the surveys. It is unlikely that burrowing owls would establish burrows within the BSA due to the disturbances from I-40 on either side of the median. Furthermore, because neither burrowing owl nor its sign were observed during surveys conducted, it is considered absent from the BSA. Although no burrowing owls were observed within the BSA, they could subsequently inhabit the areas that were previously determined to be unoccupied. With implementation of avoidance and minimization measures **BIO-1**, **BIO-2**, **BIO-8**, **BIO-16**, **BIO-20**, and **BIO-22**, impacts on burrowing owls are not anticipated to occur.

As there are special-status bat species with the potential to occur in the BSA, a bat habitat assessment was conducted in May 2019. Bridges, undercrossings, and culverts greater than 5 feet

in diameter within the BSA were inspected. The BSA generally lacks trees of sufficient stature and density to support bat roosting; however, a few thickets of vegetation are present at the western end of the BSA and proposed staging areas adjacent to the rest stops, which could be used as temporary stops during bat migration. No bats or their sign were observed within the BSA during the habitat assessment. However, bats could move into the area prior to construction and removal or trimming of vegetation could harm bats should they be present. Temporary indirect effects such as noise, vibration, and dust from construction could disturb any roosting bats within the BSA. No construction would occur on the existing bridges, overpasses, or culverts. With implementation of measures **BIO-1**, **BIO-2**, **BIO-8**, and **BIO-23** to **BIO-26**, the project is not expected to affect bats or their roosting habitat.

Although the BSA does not occur within the known range of mountain lions and no suitable breeding habitat or predicted habitat for this species is present, a discussion is included as the mountain lion was state listed as a candidate species under CESA by CDFW in April 2020. No records of occurrence for mountain lion are reported within the area and known to occur approximately 20 miles to the east within the Mojave National Preserve, more than 60 miles to the north within Death Valley National Park, more than 90 miles to the west within the southern Sierra Nevada Mountains, and 30 miles to the south within the San Bernardino Mountains. Based on this species known range and lack of suitable habitat within the BSA, the mountain lion is not expected to occur within the BSA and impacts on this species are not anticipated to occur. Construction-related disturbances would be minimal and would be limited to possible presence of equipment within wildlife crossings. However, implementation of measure **BIO-29** would avoid and minimize this impact.

Other Wildlife Species of Special Concern

The golden eagle, loggerhead shrike, Bendire's thrasher, American badger, desert bighorn sheep and other non-listed special-status wildlife species that were determined to have a potential for occurrence within the BSA. Suitable habitat is present within the BSA as foraging grounds for the golden eagle; however, it is unlikely that this species would occur given the disturbance from I-40 and that open areas outside of the BSA and I-40 median area are more suitable to support foraging golden eagle. Given that project construction would occur entirely within the I-40 median, the project would not substantially reduce foraging habitat for golden eagle. Substantial impacts on golden eagle are not anticipated, and avoidance and minimization measures would further ensure that impacts are minimized if the species were to be present. Suitable foraging and nesting habitat for loggerhead shrike and Bendire's thrasher is also present within the BSA. However, given the disturbance from I-40, it is unlikely that either loggerhead shrike or Bendire's thrasher would nest within the BSA. If nesting does occur, temporary impacts including loss of nesting habitat, nest destruction, nest abandonment, disturbance from construction noise and activities, increased risk of predation, and degradation of habitat could occur. Implementation of measures including preconstruction nesting bird surveys would ensure impacts on loggerhead shrike and Bendire's thrasher are minimized. Vegetation communities within the BSA are suitable for the American badger, but no burrows of suitable size were detected during the field surveys. Temporary and permanent impacts on the American badger

could occur if present within the BSA. Construction activities could result in loss and degradation of suitable habitat and an increased risk of predation. Implementation of measures would ensure impacts on American badger are minimal. No potential habitat to support desert bighorn sheep is present within the BSA, as it prefers rocky areas within the surrounding mountain ranges. However, desert bighorn sheep could potentially traverse the I-40 median while moving between foraging, bedding, and lambing grounds to the north and south of the BSA.

Implementation of measures **BIO-8**, **BIO-16**, **BIO-27**, and **BIO-28** would ensure there is no direct mortality of special-status wildlife species. Measures **BIO-20** to **BIO-22** and **BIO-27** would ensure there is no direct mortality of nesting birds and/or abandonment of nests with eggs or young, and the project would comply with the Migratory Bird Treaty Act and California Fish and Game Code. Implementation of measures **BIO-1** and **BIO-2** would minimize potential indirect impacts on special-status wildlife species and their habitat adjacent to the project limits.

Habitat Connectivity/Wildlife Corridors

The project is near the southern border of the Clipper Valley, which, including the BSA area, occurs within portions of the Mojave Desert Ecoregion that has been identified as an Essential Connectivity Area and Natural Landscape Block as mapped by the Essential Habitat Connectivity Project. The BSA is dominated by widely spaced shrubs, which do not pose a physical barrier to the movement of most wildlife species, and scattered washes that run northwest to southeast and northeast to southwest. The washes are landscape features that are likely to represent wildlife movement corridors locally. The project would not permanently affect existing wildlife movement within the BSA or surrounding area because no new barriers to wildlife movement would be created and no existing culverts that allow wildlife crossing under I-40 would be permanently reduced or eliminated by the project. Construction activities would occur during daylight hours, with no nighttime construction anticipated. No bridge work would occur and no construction activities would occur within the large channel washes that flow under the bridges. Although some existing culverts will be extended, the length of the culverts underneath the interstate will not change. As such, wildlife movement corridors will not be substantially reduced in their ability to facilitate movement under I-40 and no permanent impacts to existing wildlife movement corridors are anticipated. Construction may temporarily affect wildlife corridors within the smaller washes in the BSA due to increased presence of construction noise, equipment, and personnel, which may temporarily deter wildlife movement within the area. These impacts would be temporary and wildlife could avoid the construction zones and use the surrounding area for movement. Implementation of measure **BIO-29** would further avoid and minimize impacts on wildlife movement corridors.

Response to Item c): No Impact

Wetlands and Other Waters

The BSA is in the Troy Lake and Broadwell Lake hydrologic units within the Mojave River Watershed. A portion of the BSA near the center of the project occurs within the Sunshine Peak-Lavic Lake hydrologic unit within the Southern Mojave Watershed. A total of 76 features were mapped within the BSA, including ephemeral/intermittent drainages, two-parameter state wetlands, and three-parameter wetlands. Sixty-four of the features are potentially subject to federal jurisdiction with a total of 4.14-acres (8,162-linear feet) of non-wetland and wetland resources potentially subject to USACE jurisdiction occurring within the BSA. All of the features are potentially subject to state jurisdiction with a total of 8.29-acres (11,791-linear feet) of non-wetland and wetland resources potentially subject to SWRCB jurisdiction occurring within the BSA, including 4.15-acres (3,629-linear feet) of two-parameter wetlands. Fifty-one of the features are potentially subject to CDFW jurisdiction with a total of 3.02-acres (5,694-linear feet) of streambed and riparian resources potentially subject to CDFW jurisdiction identified within the BSA. These drainages flow into dry lake beds, which are most likely not considered as Traditional Navigable Waters and are therefore would not be federally jurisdictional. The project area occurs in both the Colorado River Regional Water Quality Control Board (RWQCB) (Region 7) and the Lahontan RWQCB (Region 6). Permanent and temporary impact areas were not available; as such, impact acreages for jurisdictional features have not yet been calculated. Although permanent and temporary impact acreages cannot be determined at this time, impacts on potential State Water Resources Control Board (SWRCB) and CDFW jurisdictional features would likely occur as a result of project construction, including modifications to existing drainage facilities, improvement work, and fill material. A compensatory mitigation plan will be developed during the permitting phase to address temporary and permanent impacts on these jurisdictional waters. Implementation of measure **BIO-30** would be incorporated to avoid and minimize effects on waters of the state.

The following permits are anticipated to be required for the project: CDFW 1602 Agreement for Streambed Alteration, and SWRCB Waste Discharge Requirements.

Response to Item e): No Impact

San Bernardino County Development Code – Plant Protection and Management

Chapter 88.01 of the San Bernardino County Development Code provides regulations and guidelines for the management of plant resources in the unincorporated areas of the county on property or combinations of property under private or public ownership. The intent of the regulations is to promote and sustain the health, vigor, and productivity of plant life and aesthetic values within the county through appropriate management techniques. Section 88.01.060 provides regulations for the removal or harvesting of specified desert native plants in order to preserve and protect the plants and to provide for the conservation and wise use of desert resources. Desert native plants or any part of them, except the fruit, shall not be removed except

under a Tree or Plant Removal Permit in compliance with Section 88.01.050 (Tree or Plant Removal Permits). However, removal of regulated trees or plants shall not apply to lands owned by the United States or State of California and is exempt under Section 88.01.030. Therefore, Caltrans is exempt under Section 88.01.030. Furthermore, a majority of the vegetation communities on site are moderately to greatly disturbed; several thickets of honey mesquite, desert holly, catclaw, palo verde trees, and pencil cholla were also observed within the BSA. These species are regulated by the San Bernardino Development Code; however, as Caltrans is exempt, no impacts are anticipated in this regard.

Response to Item f): No Impact. The BSA occurs within the boundaries of the California Desert Conservation Area (CDCA). The CDCA consists of 25 million acres within Imperial, San Diego, Los Angeles, Riverside, San Bernardino, Kern, Inyo, and Mono Counties, of which 12 million acres are lands managed by the Bureau of Land Management (BLM). The CDCA Plan was created to establish guidance for the management of the CDCA land. The goal of the CDCA Plan is to provide economic, educational, scientific, and recreational uses of the public lands in a manner that enhances and does not diminish the environmental, cultural, and aesthetic value of the California desert and its productivity. The West Mojave Planning Area (WEMO) is an amendment to the CDCA Plan and covers over 9 million acres of the western Mojave Desert, stretching from Owens Lake in Inyo County to south of Joshua Tree National Park in Riverside County. The BSA also falls within the WEMO boundaries. The proposed project would occur within the I-40 median and staging areas, outside of any CDCA or WEMO protected lands. Impacts on CDCA or WEMO lands are not anticipated to occur with implementation of measures and standard BMPs that would ensure that no degradation of nearby habitat occurs as a result of construction activities.

Avoidance, Minimization, and/or Mitigation Measures

BIO-1: Prior to clearing or construction, the outer perimeter of the project work area will be demarcated to prevent damage to adjacent habitat and to provide visual orientation to the project limits. No construction activities (including grading or fill activity), materials, or equipment storage of any type will be permitted outside of the designated construction work area and staging areas. All construction equipment will be operated in a manner to prevent accidental damage to nearby preserved areas. Areas where native vegetation is immediately adjacent to planned grading activities will be protected from accidental deposition of fill material.

BIO-2: A biologist will monitor construction in the vicinity of native vegetation communities prior to and during vegetation removal to ensure that vegetation removal, BMPs, and all avoidance and minimization measures are properly implemented.

BIO-3: A pre-construction presence/absence plant survey will be performed within the project limits prior to ground-disturbing activities. If special-status plant species are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization, and mitigation measures required for the project.

BIO-4: Caltrans will submit the names and qualifications of biologists that it believes meet the minimum requirements to serve as Contractor Supplied Biologists to USFWS for review and authorization under the Biological Opinion prior to beginning onsite activities (forms at http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/). Caltrans will determine whether the presence of Contractor Supplied Biologists and approved desert tortoise monitors will be required during project activities as outlined in the "criteria for use in reaching appropriate determination" section of the programmatic Biological Opinion and the submitted Appendix I notification form to USFWS. In general, where the risk to desert tortoises is low, the Contractor Supplied Biologist or an approved biological monitor will be present at the onset of the project to ensure protective measures are in place and will, if necessary (for example, for projects that will require a substantial length of time to complete), conduct periodic field checks to ensure compliance.

BIO-5: Caltrans will designate a Contractor Supplied Biologist to be responsible for overseeing compliance with all protective measures. The Contractor Supplied Biologist will immediately notify the Caltrans Resident Engineer of project activities that may be in violation of the PLACs (Permits, Licenses, Agreements, Contracts). In such an event, the Resident Engineer can halt all construction activities until all protective measures are being fully implemented, as determined by the Contractor Supplied Biologist.

BIO-6: The Contractor Supplied Biologist will have the authority to halt any activity, through the coordination with the Resident Engineer, that may pose a threat to desert tortoises and to direct movements of equipment and personnel to avoid injury or mortality to desert tortoise.

BIO-7: Immediately prior to the start of any ground-disturbing activities and prior to the installation of any material demarcating the work area (e.g., staking, lath, fencing), clearance surveys for the desert tortoise will be conducted by the Contractor Supplied Biologist, as appropriate. The entire project area will be surveyed for desert tortoise and their burrows by a Contractor Supplied Biologist or approved desert tortoise monitor before the start of any ground-disturbing activities following the 2010 field survey protocol (USFWS 2010) or more current approved protocol. If burrows are found, they will be examined by a Contractor Supplied Biologist to determine if desert tortoises are present. If a tortoise is present and the burrow cannot be avoided, USFWS and CDFW will be contacted. If desert tortoises are found at a project site where Caltrans (or the Contractor Supplied Biologist) had previously concluded they were unlikely to occur, Caltrans will contact USFWS and CDFW to determine if the implementation of additional protective measures would be appropriate.

BIO-8: A Worker Environmental Awareness Program will be developed and presented by the Contractor Supplied Biologist prior to the start of construction activities. All onsite personnel, including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel, employed for the project will be required to participate in the program prior to performing any onsite work. The program will consist of a class presented by a Contractor Supplied Biologist or a video, provided the Contractor Supplied Biologist is present to answer questions. At a minimum, the program will

include the following topics: (1) biology, conservation, identifying characteristics, legal status, and regulations protecting special-status species occurring or potentially occurring within the project site, including nesting birds; (2) responsibilities of the biological monitor; (3) delineation and flagging of adjacent habitat; (4) limitations on all movement of those employed on site, including ingress and egress of equipment and personnel, to designated construction zones (personnel will not be allowed access to adjacent native habitats); (5) onsite pet prohibitions; (6) use of trash containers for disposal and removal of trash; (7) project features and avoidance and minimization measures designed to reduce the impacts on special-status species and habitat and promote continued successful occupation of adjacent habitat areas; (8) the process required for construction personnel to report special-status species detections, including a chain of command and criteria for stopping work/minimizing impacts; and (9) the penalties for violations of state and federal laws. Supporting materials (e.g., wallet-sized cards or a one-page handout) with important information regarding special-status species will be provided to all construction personnel during the training program as a future reference and a reminder of the program's content.

BIO-9: Workers will check under the vehicle each time prior to moving the equipment or vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the Contractor Supplied Biologist or an approved desert tortoise monitor, who will notify the Resident Engineer. The Resident Engineer must notify the Caltrans Environmental Stewardship and Biological Monitoring Branch. Workers will not be allowed to capture, handle, or relocate tortoises. Any such handling must be reported as described in the Reporting Requirements section of the Programmatic Biological Opinion (8-8-10-F-59; USFWS 2018).

BIO-10: The area of disturbance will be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. This measure includes temporary haul roads, staging/storage areas, or access roads. Work area boundaries will be clearly and distinctly demarcated to minimize surface disturbance associated with vehicle movement. To the extent possible, a previously disturbed areas within the Caltrans right of way will be used for equipment storage, office trailer locations, and vehicle parking. The development of all temporary access and work roads associated with construction will be minimized and constructed without blading where feasible. Project-related vehicle traffic will be restricted to established roads, construction areas, staging/storage areas, and parking areas. The Resident Engineer, Contractor Supplied Biologist, or approved desert tortoise monitor will ensure that blading is conducted only where necessary.

BIO-11: The Resident Engineer is responsible for ensuring that all protective measures are being fully implemented. If the Resident Engineer determines, or is notified by the Contractor Supplied Biologist, that one or more protective measures are not being fully implemented, he or she will halt all activities that are out of compliance until all problems have been remedied. All workers, Contractor Supplied Biologists, and biological monitors will be required to notify the Resident Engineer of any such problem they notice. The Resident Engineer must always contact the Caltrans Environmental Stewardship and Biological Monitoring Branch to resolve any unforeseen issues.

BIO-12: Permanent or temporary exclusion fencing may be used to prevent entry by desert tortoises into a work site, if Caltrans and the Contractor Supplied Biologist determine this measure is appropriate. Exclusion fencing, should it be deemed necessary, will be installed following USFWS guidelines (2005) or more current protocol. The Contractor Supplied Biologist will ensure that desert tortoises cannot pass under, over, or around the fence. If such a fence is used, Contractor Supplied Biologists or desert tortoise monitors will not be required to be present at the site at all times. However, the Contractor Supplied Biologist must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction surveys for tortoise and tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground-disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction surveys will be performed.

BIO-13: Upon locating a dead or injured tortoise within a project site, the Resident Engineer will immediately notify the Contractor Supplied Biologist who will then contact the Caltrans Environmental Stewardship and Biological Monitoring Branch. The Contractor Supplied Biologist will also notify USFWS within 24 hours of the observation via telephone. Written notification must be made to the appropriate USFWS field office within 5 days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).

BIO-14: If working outside of a desert tortoise-proof fenced area, auger holes or other excavations will be covered following inspection at the end of each workday to prevent desert tortoises from becoming trapped.

BIO-15: When feasible or practicable, construction vehicles will be cleaned of all mud, dirt, and debris from other sites prior to entering the project area. The purpose of this measure is to minimize the spread of weedy plant species that may degrade desert tortoise habitat.

BIO-16: Desert tortoise exclusion fence construction, should it be deemed necessary, would follow the guidelines in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2010), which is available at the Ventura Fish and Wildlife Office website (www.fws.gov/ventura). If needed, fencing that is tortoise-proof would be installed along any fence gate bottoms beginning at least 2 feet above the fence bottom and extending toward the ground, leaving less than a 1-inch gap (USFWS 2010). All desert tortoise exclusion fences and gates would be regularly maintained at a frequency sufficient to ensure that they would continually provide an effective barrier to passage of desert tortoises. Any installed desert tortoise exclusion fences would not cross washes. If washes and culverts are encountered, the desert tortoise exclusion fence would follow the wash to the roadway and either tie into the existing bridge or cross over the top of a culvert.

BIO-17: During inspections and repairs of the demarcated work area, if any desert tortoises are observed, workers are to notify the Contractor Supplied Biologist and Resident Engineer. Any

such incident will be reported to the Caltrans Environmental Stewardship and Biological Monitoring Branch and in the annual report.

BIO-18: After each shift, surveyor flagging tape will be attached to a conspicuous place on each piece of equipment in order to remind the operator and/or the Contractor Supplied Biologist to check under the equipment for desert tortoises prior to operating equipment during the next shift.

BIO-19: To determine if burrowing owls are occupying the project limits or adjacent areas prior to construction, the first take avoidance survey following CDFW protocol (2012) will be conducted no more than 14 days prior to initiating ground disturbance activities, and a second survey will be conducted within 24 hours prior to ground disturbance. The survey will be conducted from civil twilight to 10 a.m. or 2 hours before sunset until evening civil twilight within areas providing suitable habitat for burrowing owl. The survey will include the proposed project limits and a 300-foot buffer if performed between February 1 and August 31 (nesting season) and a 100-foot buffer if conducted outside of the nesting season. If burrowing owls are present within 300 feet of project activities during the breeding season or within 100 feet of project activities outside of the nesting season, Measure BIO-21 or BIO-22 will be implemented, as applicable.

BIO-20: If burrowing owls are found during pre-construction take avoidance surveys during the nesting season (BIO-20), the burrowing owls will be fully avoided by establishing an appropriate buffer in coordination with CDFW.

BIO-21: If burrowing owls are found during pre-construction take avoidance surveys outside of the nesting season (BIO-20), passive relocation by a qualified avian biologist will be conducted once it has been confirmed that pairing activities have not begun. Passive relocation efforts will be conducted in coordination with CDFW. If the burrowing owl is found to be paired and exhibiting potential nesting behavior, construction disturbance will not occur within a designated buffer determined in coordination with CDFW of the active burrow(s) until it is confirmed by the avian biologist that the pair is not nesting and that young are not present, or if present are independently foraging.

BIO-22: Prior to the start of project construction, a daytime assessment will be conducted by a qualified bat biologist to reexamine structures that are suitable for bat use. If bat sign is observed at that time, then nighttime bat surveys will be conducted to confirm whether the structures with suitable habitat identified during the preliminary assessment are utilized by bats for day roosting and/or night roosting, to ascertain the level of bat foraging and roosting activity at each of these locations, and to perform exit counts to visually determine the approximate number of bats utilizing the roosts. Acoustic monitoring will also be used during these surveys to identify the bat species present and to determine an index of relative bat activity for that site on that specific evening.

BIO-23: The Contractor Supplied Biologist will survey the BSA prior to construction to assess the potential for maternity roosts in the BSA. The surveys may include a combination of structure and structure inspection, sampling, exit counts, and acoustic surveys.

BIO-24: The removal of mature trees and snags will be minimized to the greatest extent practicable. Prior to tree removal or trimming, large trees and snags will be examined by a qualified bat biologist to ensure that no roosting bats are present.

BIO-25: If bat maternity sites are identified during the preconstruction bat habitat assessment, then no construction activities at that location will be allowed during the maternity season (i.e., April 1–August 31) unless a qualified bat biologist has determined the young have been weaned. If maternity sites are present, and it is anticipated that construction activities cannot be completed outside of the maternity season, then bat exclusion at maternity roost sites will be completed by the Contractor Supplied Biologist in consultation with CDFW either as soon as possible after the young have been weaned or outside of the maternity season or as otherwise approved by the qualified bat biologist in coordination with CDFW.

BIO-26: A Nesting Bird Management Plan will be drafted to provide a comprehensive approach to handling nesting birds prior to the commencement of construction. It will include the following items:

- If vegetation clearing is to occur during the avian nesting season (i.e., February 1-September 15), the designated biologist will conduct a preconstruction survey of construction areas and adjacent habitat in the near vicinity no more than 72 hours prior to construction to identify the locations of avian nests. Should nests be found, an appropriate buffer will be established around each nest site by a qualified biologist/biological monitor until nesting is completed.
- Nesting bird habitat within the BSA will be resurveyed during the breeding bird season if there is a lapse in construction activities longer than 7 days.

BIO-27: Preconstruction clearance surveys for sensitive wildlife species will be performed by a qualified biologist within 48 hours prior to construction to flush the species from the construction footprint. No nesting birds will be flushed during the nesting season. Bats will not be flushed but will be protected as specified in Section 4.3.3 of the Natural Environment Study. Amphibians, reptiles, and burrowing wildlife will be relocated from the site of temporary or permanent impacts as feasible during preconstruction clearance surveys. Relocation sites will be within the project vicinity and will consist of suitable habitat to support these species.

BIO-28: Equipment maintenance, lighting, and staging will occur only in designated areas, and will not block or impede movement through wildlife corridors.

BIO-29: The project limits of disturbance, including the upstream, downstream, and lateral extents on either side of any stream adjacent to the project footprint, will be clearly defined and marked in the field. The biological monitor will review the limits of disturbance prior to initiation of construction activities. The upstream and downstream limits of project disturbance,

plus the lateral limits of disturbance on either side of the stream, will be clearly defined and marked in the field to ensure avoidance of jurisdictional areas.

V. Cultural Resources

Would the project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant with Mitigation Incorporated
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant with Mitigation Incorporated
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

Response to Items a), b): Less Than Significant with Mitigation Incorporated. Information from this section was taken from the Historic Property Survey Report (Caltrans 2020b), Archaeological Survey Report (Caltrans 2020c), Finding of No Adverse Effect (Caltrans 2020d), Archaeological Evaluation Report (Caltrans 2020e), and ESA Action Plan (2020f). Caltrans uses a single process to fulfill both its National Historic Preservation Act Section 106 and CEQA responsibilities. The Area of Potential Effects (APE) was established as the limits of construction within the median of I-40, temporary construction easements, potential staging areas, a sufficient buffer to allow heavy equipment to maneuver, and the I-40 travel lanes. The vertical APE extends to a maximum height of 18 feet and a maximum depth of 3 feet from the current grade for slope reduction, culvert repair, riprap placement, and upgrading the existing guardrail, as needed.

The Native American Heritage Commission (NAHC) was contacted in November 2019 to request pertinent cultural resource information available in the Sacred Lands File. The NAHC stated that the Sacred Lands File search for the project was completed with negative results.

Two Native American tribes were contacted under Assembly Bill (AB) 52. Letters were sent on December 17, 2019, to the San Manuel Band of Mission Indians (Lee Clauss, Director of Cultural Resources) and the Twenty-Nine Palms Band of Mission Indians (Darrell Mike, Chairperson; and Anthony Madrigal, Tribal Historic Preservation Officer).

A follow-up email was sent on January 6, 2020, to Lee Clauss of the San Manuel Band of Mission Indians and a response was received the same day from Jessica Mauck. In the response, the San Manuel Band of Mission Indians requested to consult with Caltrans, as the area exists within a sensitive portion of the Serrano ancestral territory. Project reports and information were requested and provided in August 2020. In a response email dated August 28, 2020, the San Manuel Band of Mission Indians representatives indicated that the project is within a significant cultural landscape associated with the Lavic Lake/Pisgah area, which is considered a Tribal Cultural Resource (TCR). The San Manuel Band of Mission Indians expressed concerns about potential impacts to archaeological sites and the TCR, as well as potential impacts to unknown

subsurface sites. They requested archaeological and tribal monitoring. In a response letter sent on September 4, 2020, Caltrans indicated that clearing and grubbing would not occur within the area of known sites, and agreed to archaeological and Native American monitoring. A follow-up email was also sent to the Twenty-Nine Palms Band of Mission Indians on January 6, 2020, followed by a follow-up phone call on March 6, 2020. The contact person referred all coordination to Sarah Bliss of the Twenty-Nine Palms Band of Mission Indians. Email correspondence was sent to Ms. Bliss on March 6, 2020. A follow-up email was sent on June 23, 2020, and follow-up phone call made on June 29, 2020. Ms. Bliss indicated the Twenty-Nine Palms Band of Mission Indians would review the materials and provide a response. On August 3 2020, Caltrans sent cultural resources documentation to the Twenty-Nine Palms Band of Mission Indians and indicated that there would be archaeological and Native American monitoring for the project, and that the project would have a Finding of No Effect due to the conservation efforts proposed. No further response has been received.

Background records search conducted for the proposed project indicate a total of 327 previously recorded resources identified within a 0.5-mile radius of the APE. Of these, nine are within the APE, eight cross the APE but are outside the vertical extent of the APE, 154 are within a 0.25-mile radius of the APE, and 156 are within a 0.5-mile radius of the APE. A pedestrian field survey conducted in February 2020 recorded 11 new archaeological sites, including 10 prehistoric sites and one historic-era site, and five new prehistoric isolates, within the APE. Five of the prehistoric sites are an Archaeological Landscape related to Native American lithic procurement and reduction present in the APE.

A geoarchaeological review conducted of the APE indicates that the limits of construction appears to have a low potential to contain subsurface prehistoric archaeological resources. While portions of the APE and its vicinity appear to have been intensively used for lithic procurement and processing, the potential for subsurface prehistoric archaeological deposits in the APE is considered low due to the presence of desert pavement landforms and previous disturbances. Desert pavements are layers of pebbles or gravel covering a stabilized surface and take thousands of years to develop. An archaeological site present on the surface of desert pavement post-dates the creation of the desert pavement, precluding the potential for subsurface cultural deposits below their surfaces. The original ground surfaces in the median may once have contained well-developed desert pavements, as remnants of desert pavement were observed in some areas during the field survey, but some of the original surfaces appear to have been largely disturbed by construction of I-40 and subsequent maintenance of the roadway. The limits of construction is mapped as consisting of modified lands or artificial fill at the surface, which likely reflects disturbances associated with the construction of I-40. Previous disturbances associated with the construction and maintenance of I-40 are likely to have disturbed any intact portions of sites within the limits of construction.

Additionally, there does not appear to be much evidence for long term habitation within the APE's immediate vicinity, as recorded prehistoric sites largely reflect lithic assaying, quarrying, and processing. Given that many of the sites are clustered on and around desert pavement and reflect lithic procurement, it is unlikely they contain subsurface components due to the activities that took place and the stability of these landforms, which are not subject to depositional

processes. Given the types of archaeological sites located within the APE and its vicinity, which are related to activities that do not typically result in the accumulation of substantial cultural deposits, the presence of desert pavement at surface, which precludes below ground deposition, and the disturbed nature of the limits of construction, it is unlikely that intact prehistoric archaeological deposits are present subsurface within the limits of construction. Therefore, Project-related ground disturbance is unlikely to encounter intact subsurface prehistoric archaeological deposits.

A review of historic maps and aerial photographs indicates that the limits of construction does not overlap areas of long-term, intensive historic-period use (e.g. town sites, railroad sidings, homesteads, labor camps, etc.). Given the lack of evidence of town sites, railroad sidings, homesteads, or labor camps within the limits of construction, Project-related ground disturbance is unlikely to encounter intact subsurface historic-era archaeological deposits.

A total of 25 cultural resources were identified in the APE. Of the 25 cultural resources, 9 were previously recorded cultural resources consisting of 2 prehistoric archaeological sites (P-36-014564/CA-SBR-13041 and P-36-020873/CA-SBR-13450), 4 multicomponent archaeological sites with both prehistoric and historic elements (P-36-001908/CA-SBR-1908/H, P-36-002328/CA-SBR-2328/H, P-36-005598/CA-SBR-5598/H, and P-36-014561/CA-SBR-13038/H), and 3 historic built environment resources (P-36-002910/CA-SBR-2910H, P-36-026491, and P-36-032305). The remaining 16 cultural resources in the APE are newly recorded cultural resources identified during surveys and consists of 10 prehistoric archaeological sites (ESA-I40-Site-001P through -010P), 1 historic-period archaeological site (ESA-I-40-site-011H), and 5 isolated prehistoric artifacts (ESA-I40-ISO-001P through -005P).

Of the 3 mentioned previously recorded historic built environment resources (P-36-002910/CA-SBR-2910H, P-36-026491, and P-36-032305), one (P-36-002910) was not identified as present within the APE during the survey and no further work is required. The remaining 2 resources (P-36-026491 and P-36-032305) are exempt from evaluation according to Attachment 4 of the Section 106 PA and no further work is required.

Of the previously mentioned 16 newly recorded cultural resources, 11 were identified in the APE. Of these 11 sites, five (ESA-I40-Site-001P, -002P, -003P, -005P, and -011H) are exempt from evaluation according to Attachment 4 of the Section 106 PA and no further work is required. The remaining 6 sites (ESA-I40-Site-004P, -006P, -007P, -008P, -009P, and -010P) were evaluated for listing in the NRHP and all 6 sites appear to be ineligible for listing in the NRHP under Criteria A-D. As such, they do not qualify as historic properties pursuant to Section 106 and do not require further analysis or mitigation.

Caltrans Professionally Qualified Staff has determined that there are resources in the project area that are historical resources for the purposes of CEQA. The following properties within the APE are considered eligible for inclusion in the National Register of Historic Places for purposes of this project because evaluation was not possible, in accordance with Section 106 Programmatic Agreement Stipulation VIII.C.4.

- P-36-002328 (CA-SBR-2328/H): a multicomponent archaeological site with historic refuse and prehistoric lithic quarry, cleared circles, and possible hearths
- P-36-005598 (CA-SBR-5598/H): a multicomponent archaeological site with historic refuse, hunting blinds, and rock rings/hearth features, and prehistoric lithics and possible rock features
- P-36-014561 (CA-SBR-13038/H): a multicomponent archaeological site with historic mining features, and prehistoric lithics and possible trail
- P-36-014564 (CA-SBR-13041): a prehistoric archaeological site consisting of lithics and possible rock feature
- P-36-020873 (CA-SBR-13450): a prehistoric archaeological site consisting of a complex lithic scatter
- Archaeological Landscape (P-36-001908, P-36-005598, P-36-014561, P-36-14564, and P-36-020873)

Furthermore, Caltrans has determined that the following property is within the APE and was previously determined eligible for inclusion in the National Register of Historic Places, and those determinations remain valid.

- P-36-001908 (CA-SBR-1908/H): a multicomponent archaeological site with historic refuse and prehistoric lithics and rock feature. The site's rock features were identified as contributing elements, and the prehistoric lithic reduction loci were identified as non-contributing elements. The California State Historic Preservation Officer (SHPO) concurred with these finding in August 2010.

Caltrans has determined that a Finding of No Adverse Effect (without Standard Conditions) is appropriate for the undertaking and initiated consultation with SHPO on October 22, 2020, pursuant to 36 CFR 800(c) and Section 106 Programmatic Agreement Stipulation X.B.1. SHPO concurrence was received in a response letter dated November 10, 2020 (refer to Appendix G for SHPO concurrence documentation). Furthermore, an Environmentally Sensitive Area (ESA) Action Plan was prepared to ensure that there are no adverse effects to the historic properties identified within the APE and to all other non-exempt archaeological sites within the Project ADI regardless of NRHP eligibility status. The ESA Action Plan indicates that the historic properties will be protected in place with the establishment of ESAs and monitored soils capping within AMAs. In addition, and pursuant to consultation with the San Manuel Band of Mission Indians, all other non-exempt archaeological sites in the Project ADI will be protected in place through monitored soil capping within AMAs. Capping of the sites will allow for subsurface components to remain intact and undisturbed while keeping surface components in place and protected by local soil. No clearing or grubbing will occur within these areas. Once construction activities commence, a Native American monitor and an Archaeological Monitor will be on site to monitor capping of the sites. For the portions of the archaeological sites that extend outside of the Project ADI, ESAs will be delineated along the outside of the I-40 edge of pavement to protect them from potential effects. AMAs will be delineated discontiguously around each archaeological site within the project ADI (I-40 median).

BLM was contacted via email on April 14, 2020, regarding the effects on historic properties on lands managed by BLM. A brief project description and maps were sent to the Barstow Field Office Archaeologist with a description of the archaeological sites (P-36-001908, P-36-002328, P-36-00598, P-36-014561, P-36-014564, and P-36-020873). A follow-up email was sent on June 18, 2020, indicating that Caltrans would proceed with a Finding of No Adverse Effect for these six sites given the limited potential for effects because only a small portion in the I-40 median would be affected, and that consultation with SHPO would occur upon completion of Native American consultation. No response has been received to date.

Based on the analysis conducted which included review of historic maps and aerial photographs, the development within and adjacent to the APE was associated with the National Old Trails Route (NOTR)/Route 66, the BNSF Railroad, transmission lines, and underground gas pipelines. Many of the previously recorded archaeological sites containing historic-period components consist of surface refuse scatters associated with these linear features. Based on the fact that refuse scatters typically do not contain subsurface components along with the lack of evidence of town sites, railroad sidings, homesteads, or labor camps within the APE, it was concluded that the APE's area of direct effects has low potential for the presence of historic-period archaeological deposits. However, given the general cultural sensitivity of the area and the presence of numerous prehistoric archaeological sites in the project vicinity, and to ensure preservation in place of archaeological sites, the project will implement measures **CR-1** to **CR-5**.

Response to Item c): No Impact. No human remains were discovered during field surveys conducted for the proposed project, and no formal cemeteries are within the project site. If buried cultural materials, including human remains, are encountered during construction, it is Caltrans' policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find. If human remains are discovered, California Health and Safety code Section 7050.5 will be followed, which, in summary, states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the county coroner contacted. If the remains are thought to be Native American, the NAHC will be contacted, who, pursuant to California Public Resources Code Section 5097.98, will then notify the Most Likely Descendant, as further detailed in measure **CR-2**.

Avoidance, Minimization, and/or Mitigation Measures

The following measures will be included with implementation of the proposed project.

CR-1: Treatment of Previously Unidentified Cultural Resources. If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

CR-2: Treatment of Human Remains. In the event that human remains are found, the county coroner shall immediately be notified and all construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify NAHC, who will then notify the Most

Likely Descendant. The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909) 383-2647 and Gary Jones, DNAC: (909) 383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

CR-3: Treatment of Identified Cultural Resources. All archaeological sites within the Project Area of Direct Impacts (ADI), regardless of eligibility for the National Register of Historic Places, shall be preserved in place through capping (placement of fill). No grubbing or vegetation clearing shall be conducted within the documented boundaries of archaeological sites prior to the placement of fill.

CR-4: Environmentally Sensitive Areas (ESAs). Environmentally Sensitive Areas shall be established around the portions of archaeological sites P-36-001908, P-36-002328, P-36-005598, P-36-014561, P-36-014564, and P-36-020873 located outside of the Project ADI to prevent inadvertent adverse effects. Because there are no planned construction activities outside the I-40 median and travel lanes, the ESAs will not be fenced during construction. Rather, the ESAs will be delineated on construction plan layouts in the contractor's specifications. No project activities shall occur within the boundaries of ESAs.

CR-5: Archaeological Monitoring Areas (AMAs). Archaeological Monitoring Areas shall be established for archaeological sites within the Project ADI. The AMAs shall include a 50-foot buffer. The AMAs will be shown on Project plans and delineated appropriately in the field through discussion with the Archaeological Monitor. Native American and Archaeological Monitoring will be required within the AMAs to ensure archaeological sites are protected in place through soil capping. Monitoring of soil capping will ensure that subsurface components remain intact and undisturbed while keeping surface components in place and protected by local soil. No clearing or grubbing will occur within the AMAs.

VI. Energy

Would the project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

Response to Item a), b): No Impact. The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation, as the project involves regrading of existing median cross-slopes. The proposed project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency.

Caltrans promotes energy-efficient development by incorporating statewide goals from California's Energy Efficiency Strategic Plan, setting policies, codes, and actions. Implementing these actions would assist in energy conservation and would minimize the impact on climate change.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Energy.

VII. Geology and Soils

Would the project:

Question	CEQA Determination
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

Response to Item a.i), a.ii): No Impact. None of the project segments are near an Alquist-Priolo Special Studies Zone; therefore, no impacts are anticipated. The project site, like most of Southern California, is in a seismically active area. According to the California Department of Conservation Seismic Hazard Program map, the Pisgah fault and the Lavic Lake fault zone intersect I-40 in the project area. An unnamed fault is also adjacent to and north of I-40, near Lavic Road and I-40, along the project site. The Newberry Fracture Zone and Calico fault are also to the west of the project site.

Compliance with the most current Caltrans procedures regarding seismic design, which is standard practice on all Caltrans projects, is anticipated to avoid or minimize any significant impacts related to seismic ground shaking. Seismic design would also meet county requirements under the Uniform Building Code. Therefore, through the incorporation of standard seismic

design practices, the proposed project would result in no impact because project construction and operation would have no opportunity to rupture a known earthquake fault or cause seismic shaking, as the project would consist of regrading the median slopes.

Response to Item a.iii), a.iv), c): No Impact. The San Bernardino County Land Use Plan General Plan Geological Hazard Overlays Map does not identify any geologic hazards for the project. The project area is not in an area designated for landslide susceptibility or liquefaction susceptibility. Furthermore, the project is not in an area designated for rockfall or debris flow hazard areas. Compliance with the most current Caltrans procedures regarding seismic design, which is standard practice on all Caltrans projects, is anticipated to avoid or minimize any significant impacts related to liquefaction and seismic risk. Seismic design would also meet county requirements under the Uniform Building Code. Therefore, through the incorporation of standard seismic design practices, the proposed project would result in no impact because construction or operation would not cause any seismic-related ground failure, including liquefaction.

Response to Item b): Less Than Significant Impact. Grading and fill activities during the construction phase of the project would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. Erosion control measures would be used to address site soil stabilization during construction. Typical measures would include temporary soil stabilization, temporary sediment control, stabilizing construction entrances, wind erosion control, non-stormwater management, waste management, and materials pollution control.

State jurisdictions require that an approved Storm Water Pollution Prevention Plan (SWPPP) be prepared for projects that involve greater than 1 acre of disturbance. A SWPPP specifies BMPs that would minimize erosion and keep all products of erosion from moving off site into receiving waters. Earthwork in the project area would be performed in accordance with the most current edition of the Caltrans Standard Specifications, the project SWPPP, and the requirements of applicable government agencies; therefore, the proposed project would result in less-than-significant impacts.

Response to Item d): No Impact. The San Bernardino County Land Use Plan General Plan Geological Hazard Overlay Map does not identify any geologic hazards for the project. The proposed project would not create substantial direct or indirect risks to life or property. Any earthwork in the project area would be performed in accordance with the most current edition of the Caltrans Standard Specifications; therefore, the proposed project would result in no impact.

Response to Item e): No Impact. Due to the nature of the proposed project, which involves the regrading of the existing median slopes along the I-40 median, the proposed project would not affect existing or proposed septic tanks or alternate wastewater disposal systems, nor would the use of septic tanks be involved during construction. Therefore, no impacts would occur.

Response to Item f): No Impact. Background research and analysis of geologic mapping for the project indicates that modified lands or artificial fill is mapped at the surface within the project

area. This geologic unit likely reflects disturbances associated with the construction and maintenance activities associated with I-40. Four geologic units are mapped within the immediate vicinity of the project area and include Pleistocene- to Holocene-age alluvium (Q), Holocene-age volcanic flows (Qrv), Pleistocene-age alluvial fan deposits (Qoa), and Pliocene-age to Pleistocene-age volcanic flows (Tv). The geologic soils of the areas consist of loam and sandy soils, including sandy loam, gravelly sandy loam, coarse sandy loam, sand, loamy sand, and coarse sand, and are associated with alluvial fan geology that extends from the mountains to the north and south of the project site.

Paleontological resources are evidence of ancient life forms that have fossilized or mineralized. According to the County of San Bernardino, General Plan Final Program Environmental Impact Report (EIR), Paleontological resources consists of fossils and trace fossils preserved in sedimentary rock units, particularly fine-to-medium-grained marine, lake, and stream deposits such as limestone, siltstone, sandstone, or shale, and ancient soils. Fossils are more likely to be preserved in the subsurface, where they have not been damaged or destroyed by previous ground disturbance, or natural causes such as erosion. The potential for paleontological resources in the project area is considered low due to the presence of desert pavement landforms and previous disturbances including construction of I-40 and maintenance activities that have occurred. Desert pavements are layers of pebbles or gravel covering a stabilized surface and take thousands of years to develop. The original ground surfaces in the median may once have contained well-developed desert pavements, as remnants of desert pavement were observed in some areas during field surveys conducted for the project. However, some of the original surfaces appear to have been largely disturbed by the construction and maintenance activities of I-40. As the proposed project consists of regrading the median slopes of an existing roadway, and because the excavation involved with the median grading and drainage modifications are planned to extend no more than 2 feet for drainage structures and 3 feet for replacement and extension of the existing guardrail, it is expected that the project would have no effect on paleontological resources.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Geology and Soils.

VIII. Greenhouse Gas Emissions

Would the project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

Response to Items a), b): Less Than Significant Impact. See extensive climate change discussion below beginning on page 47.

IX. Hazards and Hazardous Materials

Would the project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less Than Significant Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

Response to Items a), b): Less Than Significant Impact. Implementation of the Build Alternative is not expected to result in the creation of any new health hazards or expose people to potential new health hazards, because the project involves regrading the median to flatter slopes. No storage of toxic materials or chemicals would occur, and the project is not anticipated to increase the potential for hazardous materials in the project area. The proposed staging areas would be within disturbed lands in the westbound and eastbound rest areas at PM R28.3 through R28.6, and construction personnel and equipment would access the project site using existing roadways.

As I-40 has been utilized as a major roadway since 1970, there is potential for aerially deposited lead (ADL) to be present in soil within the project footprint from historic leaded gasoline emissions, which includes areas of undisturbed soil within the median. As such, an ADL investigation would be required for the project area due to disturbance of earth materials during the construction phase, containing the potential for ADL. Furthermore, multiple bridges and culverts are present along I-40. As such, it is possible that asbestos-containing materials (ACM) were used in components of these structures and that lead-based paint (LBP) was applied during construction. Guardrails and signs exist at multiple locations within the project area, primarily at the locations of bridges and intersections. These guardrails and signs are assumed to contain treated wood. Treated wood is typically treated with hazardous preserving chemicals that protect the wood from insect predation and fungal decay.

A hazardous materials survey is required for demolition of any structures that are potentially affected by ACM or LBP. Project special provisions should be prepared that direct the contractor on the management of hazardous building materials such as ACM or LBP during demolition.

Furthermore, a Naturally Occurring Asbestos (NOA) detailed site investigation would also be required for the project area due to existing pipe culverts, which may potentially contain ACM.

Response to Item c): No Impact. The nearest school to the project site is Newberry Springs Elementary School (33713 Newberry Road, Newberry Springs), approximately 7 miles to the northwest of the project area in Newberry Springs. There are no schools within one-quarter mile of the project site; therefore, no impacts would occur.

Response to Item d): Less Than Significant Impact. The California Department of Toxic Substances Control tracks and identifies sites with known or potential contamination through its EnviroStor database, and SWRCB tracks and identifies sites that may affect groundwater through its GeoTracker database. The EnviroStor database did not list any sites within or in the immediate project area.

The GeoTracker database listed the following sites:

- Whiting Brothers (T0607100769) (30863 Fort Cady Road, Newberry Springs): Leaking underground storage tank (LUST) Cleanup Site. Cleanup status: Completed, Case Closed as of 9/3/1997. This site is approximately 1.25 miles west of the proposed project.
- Desert Oasis Safety Roadside RES (WDR 100029984) (I-40 EAST of Newberry, Newberry Springs): Waste Discharge Requirements (WDR) site. Status: Active WDR as of 10/8/1997. WDR sites include sites that operate under the WDR issued by SWRCB or RWQCB.
- Ludlow 76 Station (T100000010936) (25635 Crucero Road, Ludlow): LUST Cleanup Site. Cleanup Status: Completed, Case Closed as of 3/12/2019.
- Ludlow Truckstop (T0607100953) (Highway 66 Main Street, Ludlow): LUST Cleanup site. Cleanup Status: Completed, Case Closed as of 2/10/2004.

As included below, implementation of measure **HAZ-1** to **HAZ-4** would be required to minimize impacts related to hazardous materials.

Response to Items e), f): No Impact. The nearest public airport is approximately 12 miles northwest of the project site. The Barstow-Daggett Airport is a general aviation airport near Daggett and also supports military training conducted at the Fort Irwin National Training Center. No other public airports are near the project site and the proposed project would not result in a safety hazard or excessive noise for people residing or working in the area. The project site is within an area designated as an Airport Safety Review Area 4 based on the San Bernardino County Land Use Plan General Plan Hazard Overlays map. Based on the County of San Bernardino General Plan Safety Element, Table S-5, a variety of land uses—including residences, schools, sports arenas, parks, office buildings, commercial centers, agriculture, and recreation—in Airport Safety Review Area 4 are considered Normally Acceptable or Clearly Acceptable. The project consists of regrading the median cross-slopes of an existing roadway. As such, the project would not be incompatible with an Airport Safety Review area. Additionally, the project would not contain any skyward features that would interfere with any air traffic flight paths or other airport activities. As the proposed project would result in the regrading of the

existing median cross-slopes of an existing roadway, the proposed project is not anticipated to impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Applicable traffic controls, such as signage and flag persons, as identified in the Transportation Management Plan (TMP), would be implemented to minimize potential interference with any adopted emergency response plan or evacuation plan. No impacts would occur.

Response to Item g): No Impact. The project site consists of rural desert flora and fauna, with limited sources or potential to result in fires. Based on the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones Map for the County of San Bernardino (CAL FIRE 2020), the project is in an area designated as Other Moderate and Local Responsibility Area (LRA) Moderate. The proposed project is not in or near any areas designated as LRA Very High or LRA High areas of the fire hazard severity zones. Furthermore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would be implemented for Hazards and Hazardous Materials:

HAZ-1: SSP 14-11.14 For the Removal and Disposal of Treated Wood Waste Such as Sign Posts and Guardrails

HAZ-2: SSP 36-4 Residue Containing Lead from Paint and Thermoplastic

HAZ-3: SSP 7-1.02K(6)(J)(iii) for Lead Compliance Plan

HAZ-4: NSSP 14-11.17 for Asbestos Containing Pipe for potential of possible asbestos containing pipes in existing culverts. A hazardous materials survey is required for demolition of any structures that are potentially affected by ACM or LBP. If required, a survey should be conducted under the oversight of a California Division of Occupational Safety and Health Certified Asbestos Consultant and California Department of Public Health lead Inspector/Assessor and will serve to confirm the presence or absence of ACM and LBP through collection of bulk samples and laboratory analysis. Project special provisions should be prepared that direct the contractor on the management of hazardous building materials during construction.

X. Hydrology and Water Quality

Would the project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;	Less Than Significant Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less Than Significant Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Less Than Significant Impact
(iv) impede or redirect flood flows?	Less Than Significant Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

Response to Item a): Less Than Significant Impact. The potential temporary effects of the proposed project on the quality of the water in the area would come from runoff during construction, including erosion. The National Pollutant Discharge Elimination System (NPDES) permits issued by RWQCB set limits on discharges, schedules for compliance, special conditions, and monitoring programs. These permits also limit discharges, set water quality standards, and establish a monitoring program of the waste discharge. Grading during construction of the project would require the removal of vegetation and moving of soils. The median regrading would keep the high points and low points at the same existing locations so the tributary drainage area would not change. The paved and unpaved areas would be the same as under the existing condition and the runoff coefficient would be the same as under the existing condition. The temporary increase in the exposure of soils to wind and water erosion could increase the amount of sediments entering downstream drainages and waterways. Sediments can adversely affect water quality and negatively affect fish, aquatic plants, and other organisms. Staging areas would be located within the westbound and eastbound I-40 rest areas at PM R28.3 to R28.6; however, no ground disturbance would occur in the staging areas. Furthermore, construction personnel would access the project site using existing roadways.

As the project would be constructed within existing Caltrans right of way, the California Statewide NPDES Permit No. CAS000003 as amended in Order No. 2014-0077-DWQ would apply to this project. Coverage under the Construction General Permit for stormwater discharges associated with construction activities and land disturbance activities NPDES No. CAS 000002 would also be required during the construction phase of the project.

A SWPPP will be prepared for the project to control pollutants, and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction. Temporary construction site BMPs would be implemented to reduce or eliminate pollutants in stormwater discharges. Temporary construction site BMPs may include, but not be limited to, temporary soil binder, temporary erosion control blanket, temporary cover, hydraulic mulch, temporary high-visibility fence, temporary fiber rolls, temporary bag berm, street sweeping, stabilized construction entrance, temporary drainage inlet protection, wind erosion control, vehicle and equipment maintenance, waste management, and materials pollution control. A site-specific Construction Site Monitoring Program will be developed as part of the SWPPP prior to the start of construction and revised as necessary to reflect project revisions.

The project would use stormwater controls, as required, to minimize the amount of roadway pollution from the project area during construction. Compliance with the NPDES requirements would further reduce such polluting impacts. Projects within Caltrans' right of way are obligated to comply with the latest Caltrans and RWQCB water quality standards relative to the treatment of post-construction stormwater runoff. Determination and implementation of BMPs within the right of way are defined based on the evaluation of existing site constraints, constituents of concern at the receiving waters, soil conditions, and hydraulic conditions. Prior to approval of the final design of the project, applicable post-construction BMPs would be identified to ensure that applicable Caltrans selection and siting criteria have been achieved. Deployment of BMPs would reduce long-term water quality impacts due to implementation of the proposed project. Therefore, less-than-significant water quality impacts are anticipated.

Response to Item b): No Impact. According to the Basin Plans of the Lahontan and Colorado River RWQCBs, the project area is within the Troy Valley, Broadwell Valley, and Lavic Valley of the San Bernardino County Groundwater Basin. Groundwater levels obtained from the California Department of Water Resources Water Data Library, observation well (Station Number 347966N1165191W001) at PM 29.5 and approximately 1,000 feet away from I-40, indicate that the groundwater table was 1,755 feet to 1,765 feet between years 2000 and 2020. The water depth ranges from 45 feet to 55 feet. The project would be within an area of rural desert without infrastructure or utilities. It is not expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge. The project is not expected to affect the amount of water consumed regionally through increased withdrawals from groundwater sources.

Response to Items c (i), (ii), (iii), (iv): Less Than Significant Impact. The natural topography of the project site is relatively flat with some hilly and mountainous terrain toward the middle of the project site. The natural topography of the western half of the project area generally flows from east to west along I-40, while the eastern half of the project generally flows from west to east. Within the project limits, there are 70 cross-culverts and nine bridges that convey runoff from one side of I-40 to the other. There are also 80 onsite tributary drainage areas (TDAs). From PM R25.0 to R38.7, there are 48 TDAs that drain through the cross-culverts or bridges to the north side of I-40 to Troy Lake. From PM R38.7 to PM R41.9, there are 15 TDAs that drain

through the cross-culverts to the south side of I-40 to Lavic Lake. From PM R41.9 to PM R50.0, there are 17 TDAs that drain through cross-culverts to the north side of I-40 to Broadwell Lake. The project would improve the existing median slope within the median of I-40. Current median slope standards require a median slope gradient of 10:1 or flatter from edge of pavement to median in both directions. Additional improvements would include extending existing culverts within the I-40 median that are not protected by a guard rail, and improving existing CHP crossing areas in the median. Based on the hydrologic and hydraulic analysis conducted for the Preliminary Drainage Report for the project, implementation of the project would not change the hydrologic conditions. As the proposed project would not change the drainage patterns, the proposed condition flow rates would be the same as under existing conditions and, as such, the total flow rates going through the cross-culverts would be the same as under existing conditions. It was also determined by the Preliminary Drainage Report that although the swales along the median would reduce the drainage capacity, due to the relatively small onsite tributary drainage area and wide median, the swales would still have enough capacity to convey the 25-year runoff. Furthermore, BMPs would be designed and implemented to reduce the discharge of pollutants from the Caltrans storm drain system to the maximum extent practicable. Permanent treatment controls would be implemented to address the stormwater impacts caused by the project. Erosion control measures also would be used to address site soil stabilization and reduce deposition of sediments into adjacent surface waters. Typical measures would include the application of soil stabilizers, such as soil binders, temporary check dam, and temporary fiber rolls. Temporary water pollution control and permanent erosion control plans will be provided during the PS&E design phase of the project.

Permits that may be required include a Section 401 Water Quality Certification and a CDFW 1602 Streambed Alteration Agreement.

The project is not expected to have any significant impacts on water quality with implementation of measures **WQ-1** through **WQ-4**. A less-than-significant impact would occur as a result of increased runoff, altered drainage patterns, or water quality degradation.

Response to Item d): No Impact. Based on the Federal Emergency Management Agency Flood Insurance Rate Map, the proposed project is within an unmapped area designated as Zone D. Flood risk is indicated on Flood Insurance Rate Maps with letters. Areas designated with letters B, C, or X represent moderate- and low-risk areas. Flood zones identified by letters A or V represent high-risk areas. The Zone D designation is used for areas where there are possible but undetermined flood hazards, as no analysis of flood hazards has been conducted. These are common in rural areas where no mapping has been prepared. Based on the nature of the project, which involves regrading of an existing median, the project would not risk the release of pollutants due to project inundation under these conditions.

Response to Item e): No Impact. As the project proposes to regrade the existing median slopes within the clear recovery zone from existing 6:1 or steeper gradient conditions to a proposed 10:1 gradient or flatter on I-40, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impervious

surface is being added, and the project would not require modification or removal of any existing impervious surface area. Furthermore, all project improvements would occur within Caltrans right of way and no additional right of way would be required for the project.

Avoidance, Minimization, and/or Mitigation Measures

The following standard measures will be included for Hydrology and Water Quality:

WQ-1: Prior to the start of construction, a SWPPP for reducing impacts on water quality shall be developed by the contractor and approved by Caltrans.

WQ-2: The SWPPP control measures shall address the following categories: soil stabilization practices, sediment control practices, sediment tracking control practices, wind erosion control practices, and non-stormwater management and waste management and disposal control practices.

WQ-3: The contractor shall be required to comply with water pollution control provisions and the SWPPP and conform to the requirements of Caltrans' Standard Specification Section 7-1.01G "Water Pollution," of the Standard Specifications.

WQ-4: If necessary, soil disturbed areas of the project site will be fully protected using soil stabilization and sediment control BMPs at the end of each day, unless fair weather is predicted.

XI. Land Use and Planning

Would the project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

Response to Item a): No Impact. The proposed project would not physically divide an established community, as none exists in the project area. The proposed project consists of regrading the existing median slopes within the clear recovery zone. No additional right of way would be required. No impacts on existing established communities are anticipated.

Response to Item b): No Impact. As the proposed project involves the regrading of existing median slopes, the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The project improvements would occur within Caltrans right of way and no additional right of way or detours would be required for the project.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Land Use and Planning.

XII. Mineral Resources

Would the project:

Question	CEQA Determination
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

Response to Items a), b): No Impact. Based on the Department of Conservation, Division of Mines and Geology, 1997 Mineral Land Classification Report of Southwestern San Bernardino, Barstow-Newberry Springs Area, California, the Barstow-Newberry Springs area includes lands classified as Mineral Resource Zone (MRZ) 2a and MRZ-2b due to the commodities mined in the area at active quarries, mines, and rock milling operations. The California State Mining and Geology Board has designated MRZ-2a and MRZ-2b as areas of identified mineral resources both demonstrated and inferred. There are no classified or designated mineral deposits of statewide or regional significance that are known to occur within the project area. Also, the project site is not within any active quarries, mines, or rock milling operations.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Mineral Resources.

XIII. Noise

Would the project result in:

Question	CEQA Determination
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

Response to Item a): No Impact. The Desert Oasis Rest Area at Newberry Springs is off the eastbound and westbound I-40 at approximately PM 28. The rest area provides bathrooms, shaded areas, and parking for cars and large trucks. Several structures are off the I-40 and Crucero Road interchange near PM 50 on the eastern end of the project site, including a Chevron

Gas Station, 76 Gas Station with DQ Food Store, Ludlow Motel, Ludlow Café, and a few residential structures likely associated with the nearby businesses. Railroad tracks are also located to the north of the project site on the western end of the alignment, then cross the center of the project, and occur to the south of the project on the eastern portion of the alignment. No construction noise impacts are anticipated to occur on visitors of the rest areas, businesses near the I-40/Crucero Road interchange area, and adjacent structures off Crucero Road because construction related to the project would occur in the median area of I-40 and away from areas where businesses and residences are located. No other construction-related noise impacts would occur because there are no other residences or businesses along the remaining project site. Construction personnel would access the project site using existing roadways. Additionally, construction noise would be short term and intermittent—only lasting during the construction period—and construction would be conducted in accordance with Caltrans Standard Specifications Section 14.8-02 (measure **NOI-1**).

The project would not expose people to or generate noise levels in excess of standards established in a general plan or noise ordinance, or applicable standards of other agencies.

Response to Item b): No Impact. Any groundborne noise or vibration would be limited to the construction period and would be short in duration. Construction would involve regrading of the existing median slopes within I-40 in an area that experiences noise levels consistent with an active interstate highway. The proposed project would comply with Caltrans' Standard Specifications as outlined in **NOI-1** and, as such, no impacts would occur.

Response to Item c): No Impact. The nearest public airport is the Barstow-Daggett Airport, approximately 12 miles northwest of the project site. The Ludlow airstrip (5CA4) is a private airstrip approximately 1,700 feet east of the I-40/Crucero Road interchange. The project would not expose people residing or working in the project area to excessive noise levels, and no receptor locations would experience a substantial increase over their corresponding existing noise levels; therefore, no impacts are anticipated to occur.

Avoidance, Minimization, and/or Mitigation Measures

The following Noise measures located in Caltrans' provisions in Section 14-8, "Noise Control," of the 2018 Standard Specifications and Special Provisions would be implemented to minimize potential impacts:

NOI-1: The contractor shall comply with all local sound control and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the contract.

NOI-2: Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.

XIV. Population and Housing

Would the project:

Question	CEQA Determination
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

Response to Item a): No Impact. The project consists of regrading the median cross-slopes and would not induce population growth in the area, either directly or indirectly. The project would not result in any construction of new homes businesses, nor would the project result in the need for roads or other infrastructure that would facilitate an increase in population. No impacts are anticipated in this regard.

Response to Item b): No Impact. The project would not require any additional right of way because the project would occur in the median of I-40. Furthermore, no residents or businesses would need to be relocated as a result of implementing the project. The proposed project would not necessitate the relocation of any existing developments and/or people. No impacts are anticipated in this regard.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Population and Housing.

XV. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Question	CEQA Determination
a) Fire protection?	No Impact
b) Police protection?	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

Fire Protection

Response to a) Fire Protection: No Impact. The County of San Bernardino Fire Department, Divisions 4 and 6, provides fire protection in the project vicinity. The nearest County of San Bernardino Fire Station is the Harvard Fire Station Number 52 at 39059 Kathy Lane in

Newberry Springs. The proposed project involves regrading the existing median slopes within the clear recovery zone to reduce the severity and the number of run-off-road accidents in the median on I-40. Flattening the existing median slopes would improve the safety of the traveling public. The proposed project would not result in an increase in population and therefore would not increase the demand for community services. In addition, the proposed project would not induce growth or increase population in the study area or the greater community beyond that previously planned for and would not result in the need for additional fire protection. No fire stations would be acquired or displaced.

Police Protection

Response to a) Police Protection: No Impact. The San Bernardino County Sheriff's Department and CHP, as appropriate, provide police protection in the project vicinity. The nearest sheriff's station is the Barstow Sheriff's Station at 225 East Mountain View in Barstow. The Barstow Sheriff's Station's jurisdiction encompasses over 9,200 square miles and includes the communities of Daggett, Ludlow, and Newberry Springs. Due to the large coverage area, the Barstow Station is regularly assisted by CHP, Barstow Police Department, and BLM Rangers, when needed. The project would regrade the median slopes within the clear recovery zone and result in a safer traversable and recoverable transition back onto I-40 for the traveling public. The project would also include improvements to the existing CHP crossings within the median. The proposed project would not induce population growth in the area beyond that previously planned for and would not result in the need for additional police protection. No impacts on police protection from operation of the proposed project would occur.

Implementation of a construction-period TMP (**TRF-1**; refer to Section XVII for measure), which is prepared for all Caltrans highway projects, would ensure that access is maintained to and from the project area and that the police service providers are notified prior to the start of construction activities; therefore, there are no anticipated impacts.

Schools

Response to a) Schools: No Impact. The nearest school site is the Newberry Springs Elementary School at 33713 Newberry Road in Newberry Springs, approximately 6 miles northwest of the project site. The proposed project would not result in accessibility problems to existing schools in the vicinity of the project and is not expected to result in any other impacts on school services.

Parks

Response to a) Parks: No Impact. The Rodman Mountains Wilderness Area is managed by BLM and located approximately 4 miles south of the I-40 alignment but would not be affected by either construction or operation of the project. The majority of the surrounding land to the north and south of the alignment is owned by BLM. However, no right of way is expected for this project and there would be no impacts on parks.

Other Public Facilities

Response to a) Other Public Facilities: No Impact. There are no other public facilities in the immediate project area and, as such, there would be no impacts on public facilities as a result of construction or operation of the project.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Public Services.

XVI. Recreation

Question	CEQA Determination
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

Response to Items a), b): No Impact. The project consists of regrading the existing median slopes along I-40 within the clear recovery zone. As such, project implementation does not have the capacity to generate a substantial increase of use to any existing neighborhood or regional parks, or other recreational facilities such that substantial physical deterioration would occur, nor would it require the construction or expansion of existing recreational facilities.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Recreation.

XVII. Transportation

Would the project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	Less Than Significant Impact

Response to Items a), b): No Impact. The purpose of the project is to reduce the severity and the number of run-off-road accidents in the I-40 median, minimize overturning of vehicles, and enhance the safety of motorists by flattening the existing median slope within the clear recovery zone. No improvements are proposed at the on- and off-ramps or rest areas. No additional right

of way or detour routes are required for this project. During the construction phase, construction personnel traveling to and from the construction site would access the project site using existing roadways; however, this slight increase in traffic is considered to be minor and similar to existing roadway conditions currently experienced along I-40. The project would not increase traffic because no new land uses are proposed. The project would accommodate existing traffic demand, but it would not create new demand, directly or indirectly. The project would also not reduce congestion and/or improve the level of service of traffic. The proposed project would not conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. No impacts are anticipated in this regard.

Response to Item c): No Impact. The project would consist of regrading the existing median slopes on I-40 and would not increase hazards due to a geometric design feature or incompatible uses, as none are proposed for this project. The project would improve the safety of the traveling public by regrading the median slopes within the clear recovery zone from its existing 6:1 or steeper gradient to 10:1 or flatter in the median on I-40 from PM R25 to PM R50. No impacts are anticipated in this regard.

Response to Item d): Less Than Significant Impact. Construction activities may have the potential to result in temporary, localized, site-specific disruptions during the construction period. This could lead to an increase in delay times for emergency response vehicles during construction; however, the proposed project would include the preparation and implementation of a TMP (measure **TRF-1**), which would avoid or minimize any potential impacts. No detour routes would be required during project construction. Impacts would be less than significant during the construction period. Upon completion of the project, the flattening of the existing median slopes would improve the safety of the traveling public, improve access for emergency vehicles traveling through the area, improve the existing CHP crossings within the median, and result in a beneficial project impact.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and/or minimization measure would be implemented to minimize potential Transportation impacts.

TRF-1: Prior to construction, a TMP will be developed by Caltrans to minimize potential impacts on emergency services and commuters during construction.

XVIII. Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Question	CEQA Determination
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	Less Than Significant with Mitigation Incorporated
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant with Mitigation Incorporated

Response to Item a), b): Less Than Significant with Mitigation Incorporated. The NAHC was contacted in November 2019 to obtain cultural resource information available in the Sacred Lands File. In a reply dated November 19, 2019, NAHC indicated that the Sacred Lands File search for the project was completed with negative results. Furthermore, the San Manuel Band of Mission Indians and the Twenty-Nine Palms Band of Mission Indians were contacted to obtain further information regarding any cultural resources within the project area. Initial letters were sent to the two tribes on December 17, 2019, and follow-up emails were sent on January 6, 2020. The San Manuel Band of Mission Indians responded and requested to consult with Caltrans, as the proposed project area exists within a sensitive portion of the Serrano ancestral territory. The San Manuel Band of Mission Indians also requested project information and plans, which was provided in August 2020. In a response email dated August 28, 2020, the San Manuel Band of Mission Indians representatives indicated that the project is within a significant cultural landscape associated with the Lavic Lake/Pisgah area, which is considered a Tribal Cultural Resource (TCR). The San Manuel Band of Mission Indians expressed concerns about potential impacts to archaeological sites and the TCR, as well as potential impacts to unknown subsurface sites. They requested archaeological and tribal monitoring. In a response letter sent on September 4, 2020, Caltrans indicated that clearing and grubbing would not occur within the area of known sites, and agreed to archaeological and Native American monitoring. A follow-up phone call was made on March 6, 2020, a follow-up email sent on June 23, 2020, and another follow-up phone call made on June 29, 2020, to the Twenty-Nine Palms Band of Mission Indians representative. The representative indicated the project materials would be reviewed. On August 3 2020, Caltrans sent cultural resources documentation to the Twenty-Nine Palms Band of Mission Indians and indicated that there would be archaeological and Native American monitoring for the project, and that the project would have a Finding of No Effect due to the conservation efforts proposed. No further response has been received. Clearing and grubbing would not occur within the area of known sites and with implementation of CR-1 through CR-5, including archaeological and Native American monitoring, impacts on Tribal Cultural Resources are anticipated to be less than significant.

Avoidance, Minimization, and/or Mitigation Measures

Refer to measures CR-1 through CR-5 in Section V, Cultural Resources.

XIX. Utility and Service Systems

Would the project:

Question	CEQA Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

Response to Item a): No Impact. The project consists of regrading the existing median slopes within the clear recovery zone on I-40 from PM R25 to R50. As part of the project, existing culverts that are not protected by guard rails would be extended within the I-40 median and improvements made to the existing CHP crossings within the median. However, the project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage; electric power; natural gas; or telecommunications facilities. No impacts would occur in this regard.

Response to Item b): No Impact. Due to the nature and scope of the proposed improvements, which consist of regrading the existing median slopes, no impacts are anticipated on water supplies.

Response to Item c): No Impact. The project is not expected to increase the demand for wastewater treatment providers or result in inadequate capacity for wastewater treatment providers beyond their current existing commitments because the project would not require wastewater treatment. As the project consists of regrading the existing median slopes along I-40, construction activities would not be expected to increase capacity of existing wastewater treatment facilities. As such, no impacts are anticipated in this regard.

Response to Item d): No Impact. The proposed project consists of regrading the existing median slopes and would require fill material and modification to the existing drainage facilities. Due to the nature of the project improvements, the project would generate a minimal amount of solid waste. Furthermore, it is Caltrans' policy to recycle construction materials whenever possible. As such, the project would not impair the attainment of the state's solid waste reductions goals.

Response to Item e): No Impact. The proposed project would require the use of a local landfill, if applicable, to dispose of construction materials. The use of local landfills would be temporary

during construction. It is Caltrans' policy to recycle materials whenever possible, and the project is expected to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Utility and Service Systems.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact

Response to Item a), b), c), d): No Impact. The project would not impair an adopted emergency response plan or emergency evacuation plan. The project consists of regrading the existing median slopes within the clear recovery zone. Flattening of the existing median cross-slopes would improve the safety of the traveling public. The project would not exacerbate wildfire risks and, as there are no structures proposed with the project, would not expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Based on the CAL FIRE Fire Hazard Severity Zones Map for the County of San Bernardino, the project is in an area designated as Other Moderate and LRA Moderate. The proposed project is not in or near any areas designated as LRA Very High or LRA High areas of the fire hazard severity zones. In addition, the project is not in an area designated as High or Very High on the Fire Hazard Severity Zones in State Responsibility Areas map adopted by CAL FIRE. Therefore, the proposed project is not anticipated to exacerbate wildfire risks. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk and would not result in temporary or ongoing impacts on the environment. Furthermore, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes.

Avoidance, Minimization, and/or Mitigation Measures

No measures are required for Wildfire.

XXI. Mandatory Findings of Significance

Question	CEQA Determination
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant with Mitigation Incorporated
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

Response to Item a): Less-than-Significant Impact with Mitigation. The project area contains suitable habitat for desert tortoise, a species listed as threatened by USFWS and CDFW. No desert tortoises or their signs of burrow, scat, carcasses, tracks, eggshells, courtship rings, or drinking depressions were found within the BSA during surveys. All project-related work, including staging areas, would occur within the median and outside of the USFWS-designated desert tortoise critical habitat areas. Substantial impacts on desert tortoise or its suitable habitat are not anticipated with implementation of measures **BIO-1**, **BIO-2**, and **BIO-4** through **BIO-19**. Caltrans is seeking a *may affect, likely to adversely affect* determination for desert tortoise. No bats or their sign were observed within the BSA during surveys; however, bat species could move into the area prior to construction. Although no construction would occur on existing bridges, overpasses, or culverts, implementation of measures **BIO-1**, **BIO-2**, **BIO-8**, and **BIO-23** to **BIO-26** would ensure the project would not affect bats or their roosting habitat. Furthermore, implementation of measures **BIO-8**, **BIO-16**, **BIO-27**, and **BIO-28** would ensure there is no direct mortality of special-status wildlife species. Measures **BIO-20** to **BIO-22** and **BIO-27** would ensure there is no direct mortality of nesting birds and or abandonment of nests with eggs. The project would occur within portions of the Mojave Desert Ecoregion that has been identified as an Essential Connectivity Area and Natural Landscape Block mapped by the Essential Habitat Connectivity Project. However, no bridge work would occur as part of the proposed project and no work is proposed within the channel washes that flow under the bridges. No new barriers to wildlife movement would be created and no wildlife movement corridors would be permanently reduced or eliminated with implementation of the project.

Response to Item b): No Impact. The cumulative projects in the area include the I-40 Regrade Existing Median Project, which consists of regrading the existing I-40 median cross-slope along 29.6 miles between PM 125.0 and PM 154.6 on I-40, and the I-40 Median Regrade Project between PM 100.0 and PM 125.0, which would also regrade the existing median along I-40. The public review period for the I-40 Regrade Existing Median Project between PM 125.0 and PM 154.6 ended in October 2018. The public review period for the I-40 Median Regrade project between PM 100.0 and PM 125.0 has not yet begun, as the project is still in its environmental

document preparation stage. The proposed project is in a rural area of San Bernardino County; in conjunction with the relatively minor construction activities involving flattening of the median cross-slopes, cumulatively considerable impacts as a result of the other cumulative projects in the area are not anticipated to occur. A TMP would be implemented for each project during construction. No other cumulative projects are anticipated to occur in the vicinity.

Response to Item c): No Impact. The project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. The project would improve the safety for the traveling public by flattening the existing median slopes. The project would improve the safety of motorists by providing a clear recovery zone area.

Avoidance, Minimization, and/or Mitigation Measures

No measures that have not already been identified for other topics are required for Mandatory Findings of Significance.

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom

line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB readopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$).[1] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies,

[1] GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent" (CO_2e). The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.

regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

Environmental Setting

The proposed project is in a rural area, along I-40 from PM R25.0 to PM R50.0 within the County of San Bernardino. I-40 is the main transportation route to and through the area for both passenger and commercial vehicles. It traverses portions of California, Arizona, New Mexico, Texas, Oklahoma, Arkansas, Tennessee, and North Carolina, providing a major transcontinental transportation corridor linking Southern California with the East Coast while carrying high volumes of truck traffic transporting goods across the nation. Within the project limits, I-40 consists of a four-lane divided freeway with a dirt median, which varies in width, separating the roadbeds. The surrounding areas consists of undeveloped, desert land.

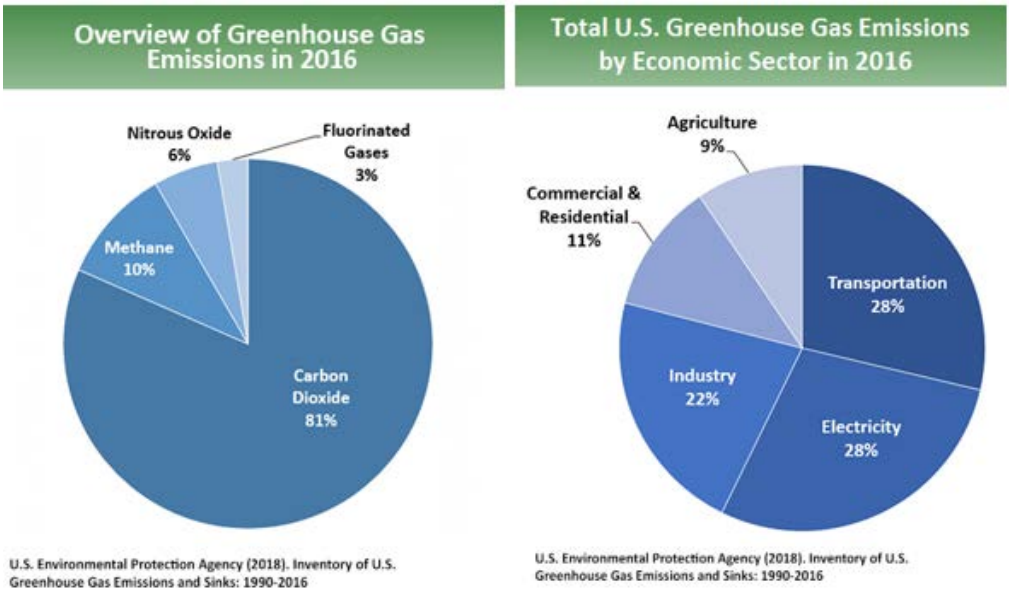
A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for

documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO_2, CH_4, N_2O, HFCs, perfluorocarbons, SF_6, and nitrogen trifluoride. It also accounts for emissions of CO_2 that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO_2 (carbon sequestration). The 1990–2016 inventory found that of 6,511 $MMTCO_2e$ GHG emissions in 2016, 81% consist of CO_2, 10% are CH_4, and 6% are N_2O; the balance consists of fluorinated gases (U.S. EPA 2018). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.

Figure 4. U.S. 2016 Greenhouse Gas Emissions



State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 $MMTCO_2e$ for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (ARB 2019a).

Figure 5. California 2017 Greenhouse Gas Emissions

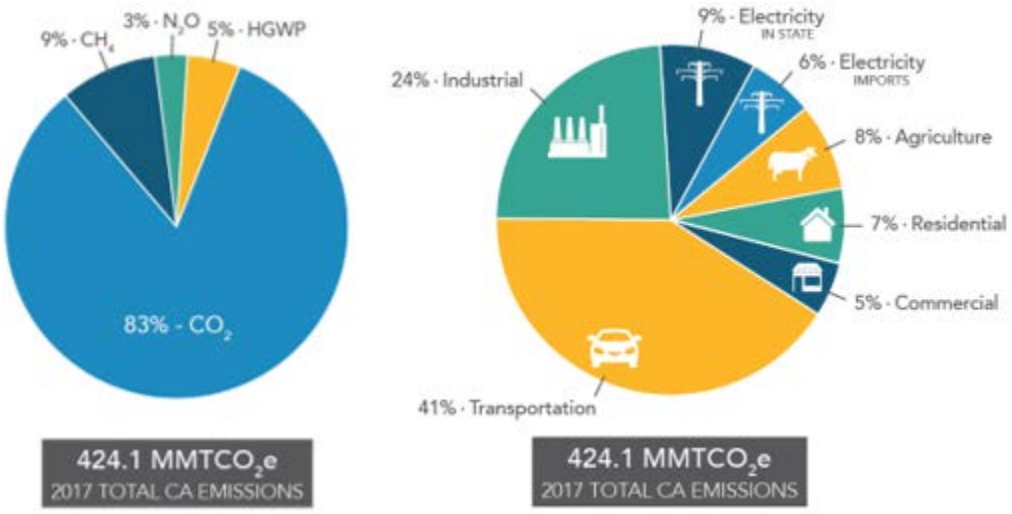
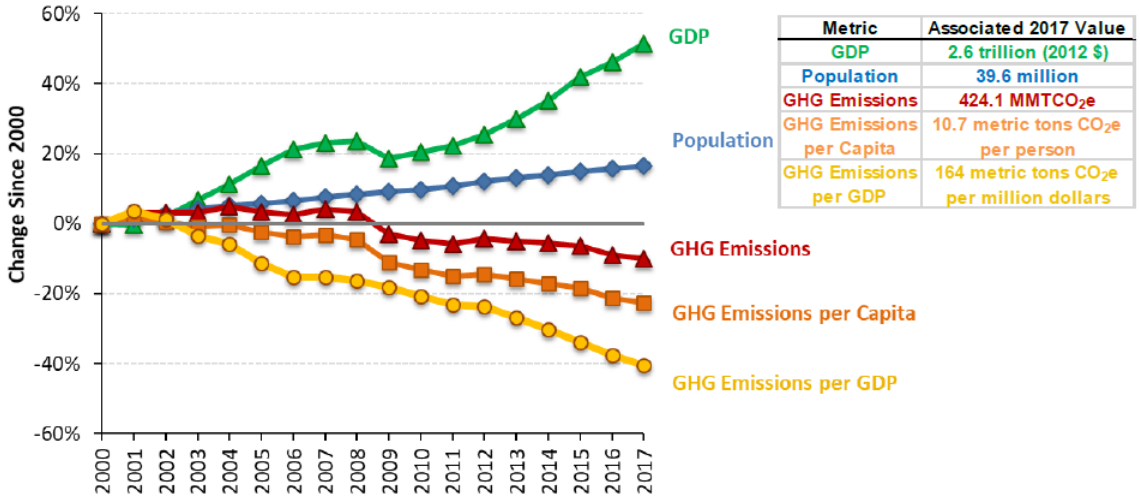


Figure 6. Change in California GDP, Population, and GHG Emissions since 2000 (Source: ARB 2019b)



AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every five years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG

emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for Southern California Association of Governments (SCAG). The regional reduction target for SCAG is 8 percent and 19 percent for the years 2020 and 2035, respectively (ARB 2019c). SCAG and San Bernardino County policies directed at reducing GHG emissions include the following, among other measures.

Title	GHG Reduction Policies or Strategies
Southern California Association of Governments *2016–2040 Regional Transportation Plan/Sustainable Communities Strategy* (adopted April 2016)	• Encourage bicycle and pedestrian improvements and efficient transportation infrastructure. • Invest in adding capacity and improving critical road conditions. • Invest in long-term emission-reduction investments for trucks and rail. • Implement technology and mobility innovations. • Expand regional express lanes.
San Bernardino County Regional Greenhouse Gas Reduction Plan (adopted March 2014)	• Roadway improvements, including signal synchronization and transportation flow management. • Provide a comprehensive system of facilities for non-motorized transportation. • Expand renewable fuel/low-emission vehicle use. • Anti-idling enforcement. • Electric-powered construction equipment.

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the project and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the proposed project is to regrade an existing median and the project would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on I-40, it would not likely lead to a substantial or measurable increase in vehicle miles traveled. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as improved TMPs and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction-period GHG emissions were modeled using the Sacramento Metropolitan Air Quality Management District Road Construction Emissions Model, version 9.0.0. Short-term construction activities would result in GHG emissions from fuel combustion associated with off-road construction equipment, haul-truck trips, and construction worker commute trips, which would result in total project emissions of approximately 7,700 CO_2e[2] metric tons per phase during the project construction duration, which was estimated at 396 working days.

The project would comply with all MDAQMD emissions control requirements during construction. In addition, all construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions. In addition, a TMP would be implemented to minimize traffic delays during construction.

CEQA Conclusion

While the proposed project would result in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. The proposed

[2] Because GHGs differ in how much heat each traps in the atmosphere, and CO_2 is the most important GHG, amounts of other gases are expressed relative to CO_2. Measurements are then summed to yield a total in metric tons of CO_2-equivalent over a given time period. The Road Construction Emissions model calculates only CO_2, methane, and nitrous oxide.

project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. With implementation of construction GHG-reduction measures, the impact would be less than significant.

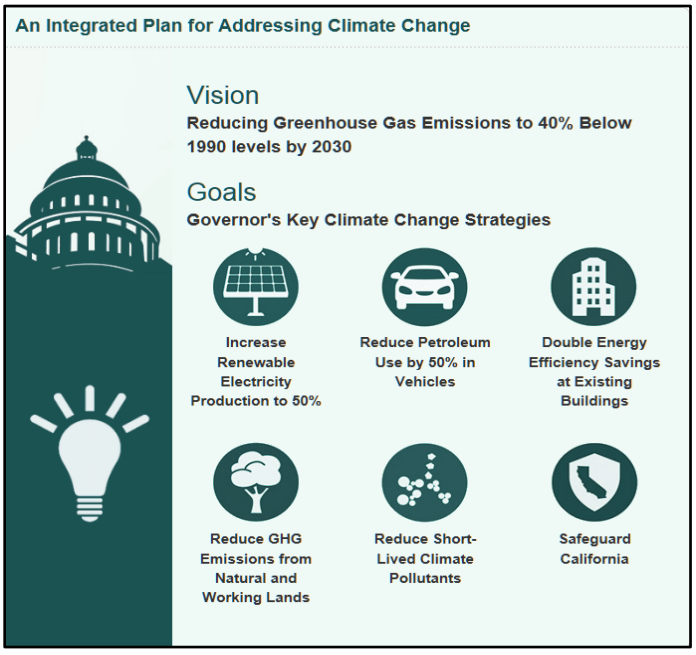
Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

Figure 7. California Climate Strategy



The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of VMT. A key state

goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO_2 reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project. Standard project measures incorporated into the proposed project, such as the use and maintenance of construction equipment in accordance with Caltrans' Standard Specifications Section 14-9.02, ARB commercial vehicle idle regulations, and manufacturers' specifications would reduce GHG emissions from diesel-powered construction vehicles. In addition, the TMP would reduce emissions resulting from idling traffic.

Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15

U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience." Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.

- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning,

design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Analysis

Climate-change risk analysis involves uncertainties as to the timing and intensity of potential risks.

Sea-Level Rise

The proposed project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts on transportation facilities due to projected sea-level rise are not expected.

Floodplains

The proposed project is not in or near a floodplain. The Caltrans Climate Change Vulnerability Assessment for District 8 maps projected changes in 100-year storm precipitation depths under climate change scenario. In the project area, storm depth is projected to change by less than 5 percent through 2085. Drainage facilities and culverts will be modified to accommodate the new gradient and will retain capacity to capture design flows. Effects of climate change on precipitation are not likely to adversely affect the project.

Wildfire

The area surrounding the proposed project is undeveloped desert with sparse vegetation. The project is not in an area designated as High or Very High on the Fire Hazard Severity Zones in State Responsibility Areas map adopted by CAL FIRE. Based on the CAL FIRE Fire Hazard Severity Zones Map for the County of San Bernardino, the project is in an area designated as Other Moderate and Local Responsibility Area (LRA) Moderate. The proposed project is not in or near any areas designated as LRA Very High or LRA High fire hazard severity zones. The project would not introduce new structures or uses that would exacerbate fire risk or be vulnerable to fire damage. Caltrans 2018 revised Standard Specification 7-1.02M(2) mandates fire prevention procedures during construction, including a fire prevention plan. The project will not impair emergency response vehicles or emergency evacuation. Accordingly, the project is not anticipated to exacerbate the impacts of wildfires intensified by climate change.

Chapter 3 Public Involvement, Draft IS Circulation, and Response to Comments

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process. It helps planners determine the scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings and Project Development Team meetings. This section summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

U.S. Fish and Wildlife Service

A list of threatened and endangered species was obtained from USFWS on November 5, 2020.

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

On April 14, 2020, the BLM Barstow Field Office Archaeologist was contacted by email regarding historic properties located on lands managed by BLM. A brief project description and maps were provided in the correspondence. A follow-up email was sent on June 18, 2020, regarding the project.

Native American Tribes

On December 17, 2019, the following Native American Tribes were contacted: San Manuel Band of Mission Indians and Twenty-Nine Palms Band of Mission Indians. Follow-up phone calls and emails were conducted on January 6, 2020 to both tribes. Project materials were provided to San Manuel Band of Mission Indians in August 2020 and a response received on August 28, 2020 with concerns about potential impacts to archaeological sites and Tribal Cultural Resources. Caltrans provided a response letter on September 4, 2020 and agreed to archaeological and Native American monitoring. A follow-up phone call was made to Twenty-Nine Palms Band of Mission Indians on March 6, 2020, a follow-up email sent on June 23, 2020, and another follow-up phone call made on June 29, 2020 s. On August 3, 2020, Caltrans sent cultural resources documentation to the Twenty-Nine Palms Band of Mission Indians and indicated that there would be archaeological and Native American monitoring for the project, and that the project would have a Finding of No Effect due to the conservation efforts proposed for the project.

State of California, Office of Historic Preservation

Caltrans initiated consultation with SHPO on October 22, 2020 and submitted copies of the Historic Property Survey Report, Historic Resources Evaluation Report, Archaeological Survey Report, and Findings of Effect for the project. Caltrans determined that a Finding of No Adverse Effect is appropriate for the undertaking and sought concurrence from SHPO in the finding, pursuant to 36 CFR 800 (c) and Section 106 Programmatic Agreement Stipulation X.B.1. Concurrence from SHPO was received in a response letter dated November 10, 2020 and included in Appendix G.

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Appendix A Maps

- Figure 1. Project Vicinity Map
- Figure 2. Aerial Project Location Map
- Figure 3. Project Location Map

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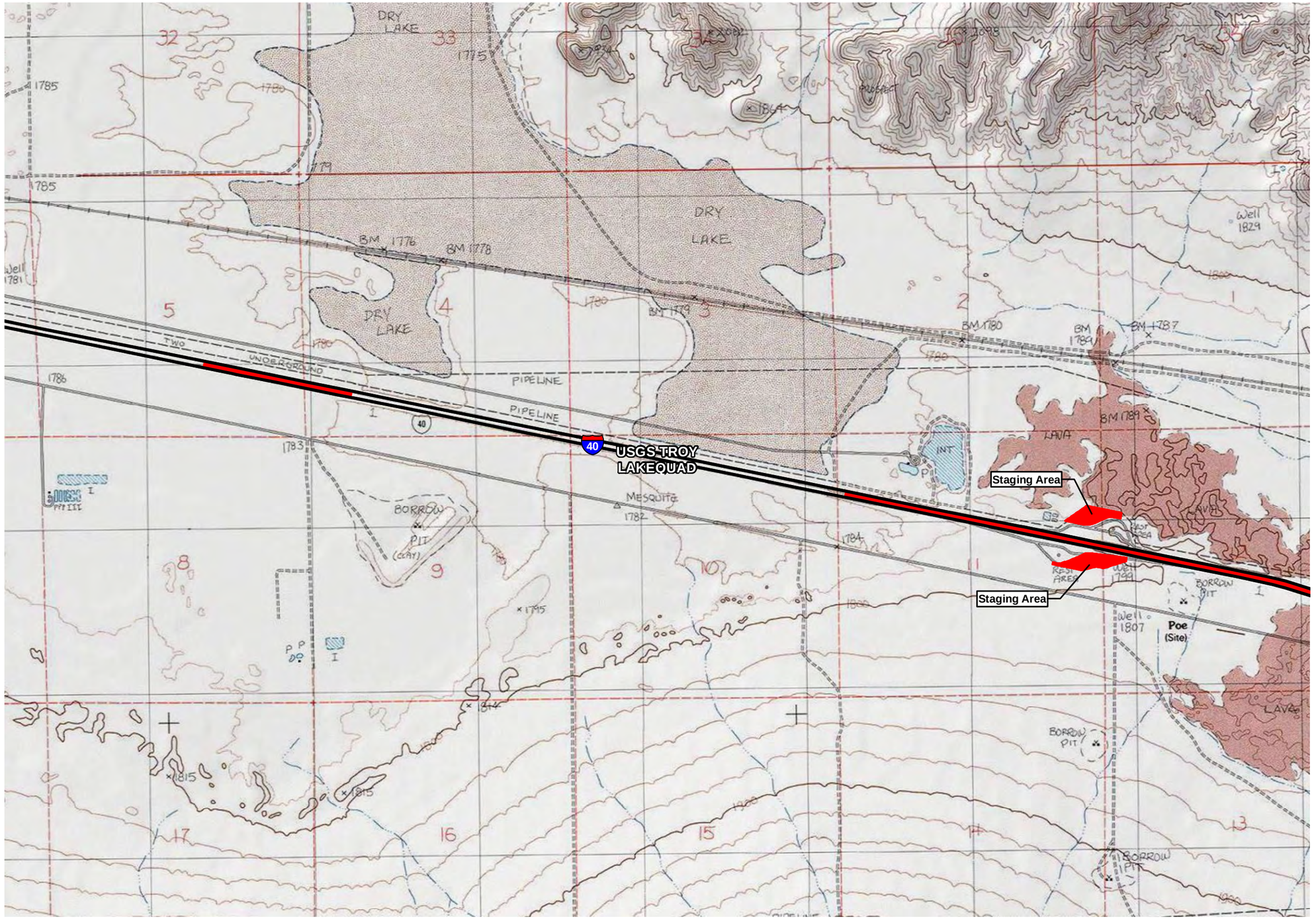
Figure 1
Regional Vicinity Map
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



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🟥 Project Location

▭ Quad Boundary

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Source: USA Topo Maps

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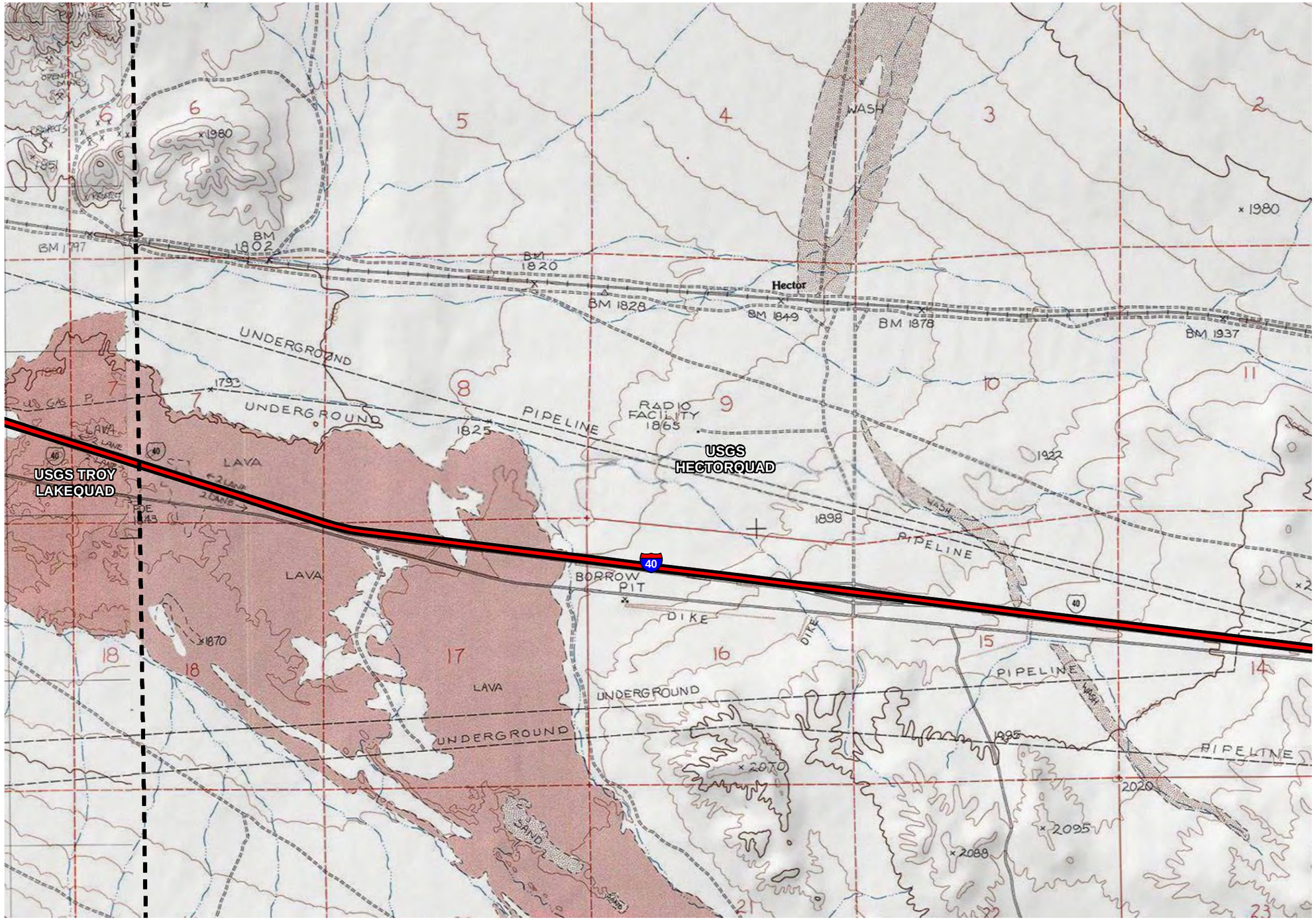
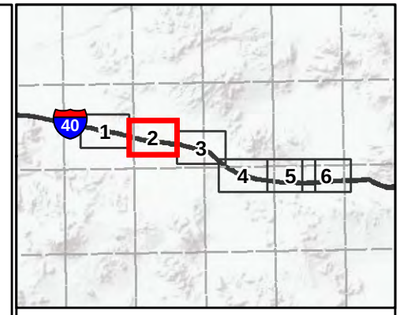
Figure 2, Sheet 1 of 6
Project Location
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





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Source: USA Topo Maps

Figure 2, Sheet 2 of 6
Project Location
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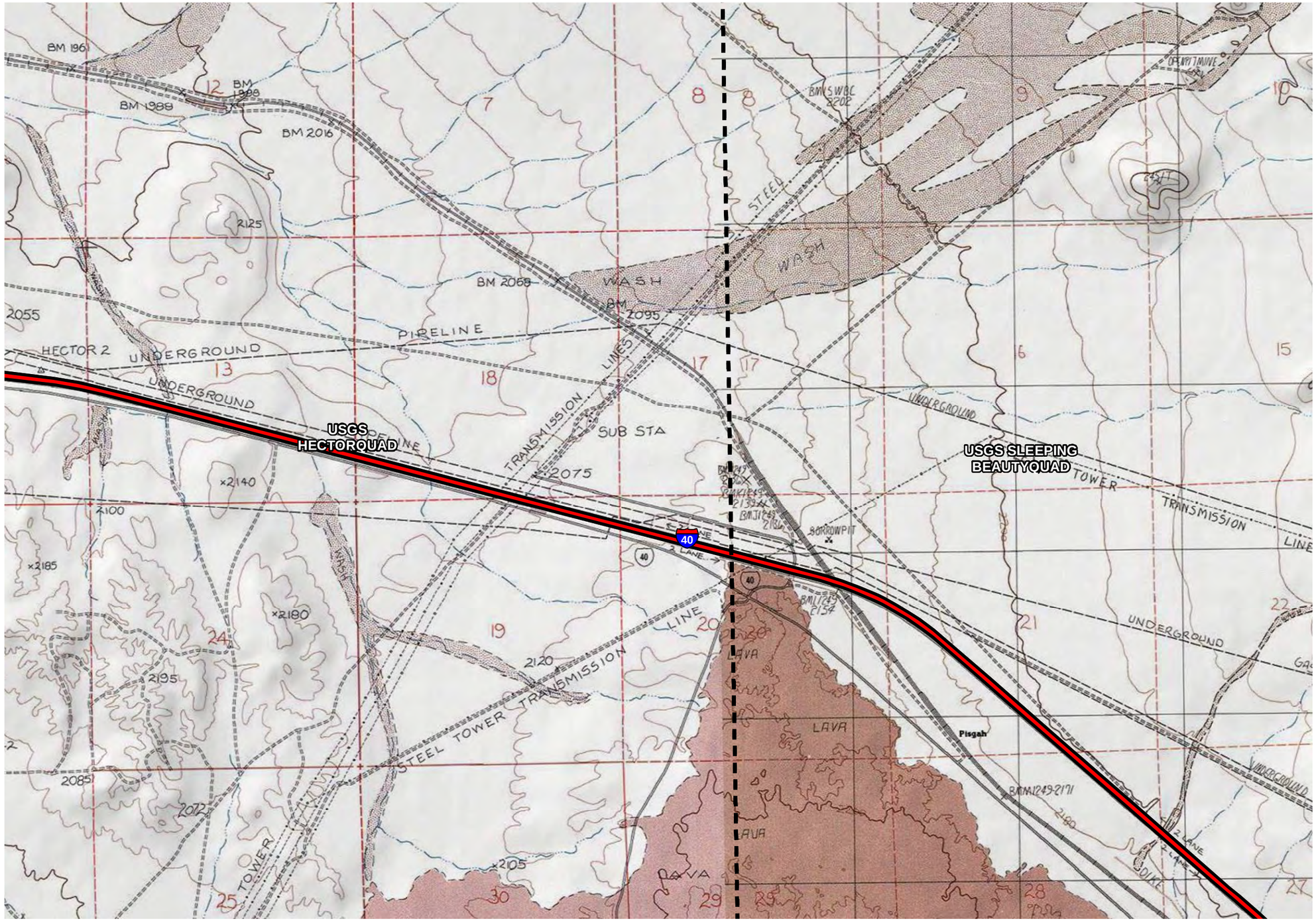

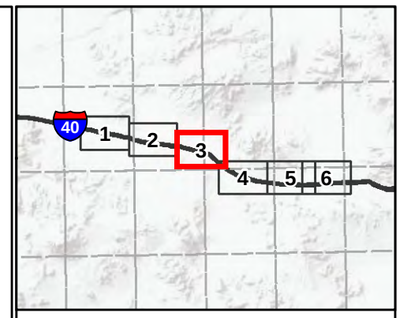

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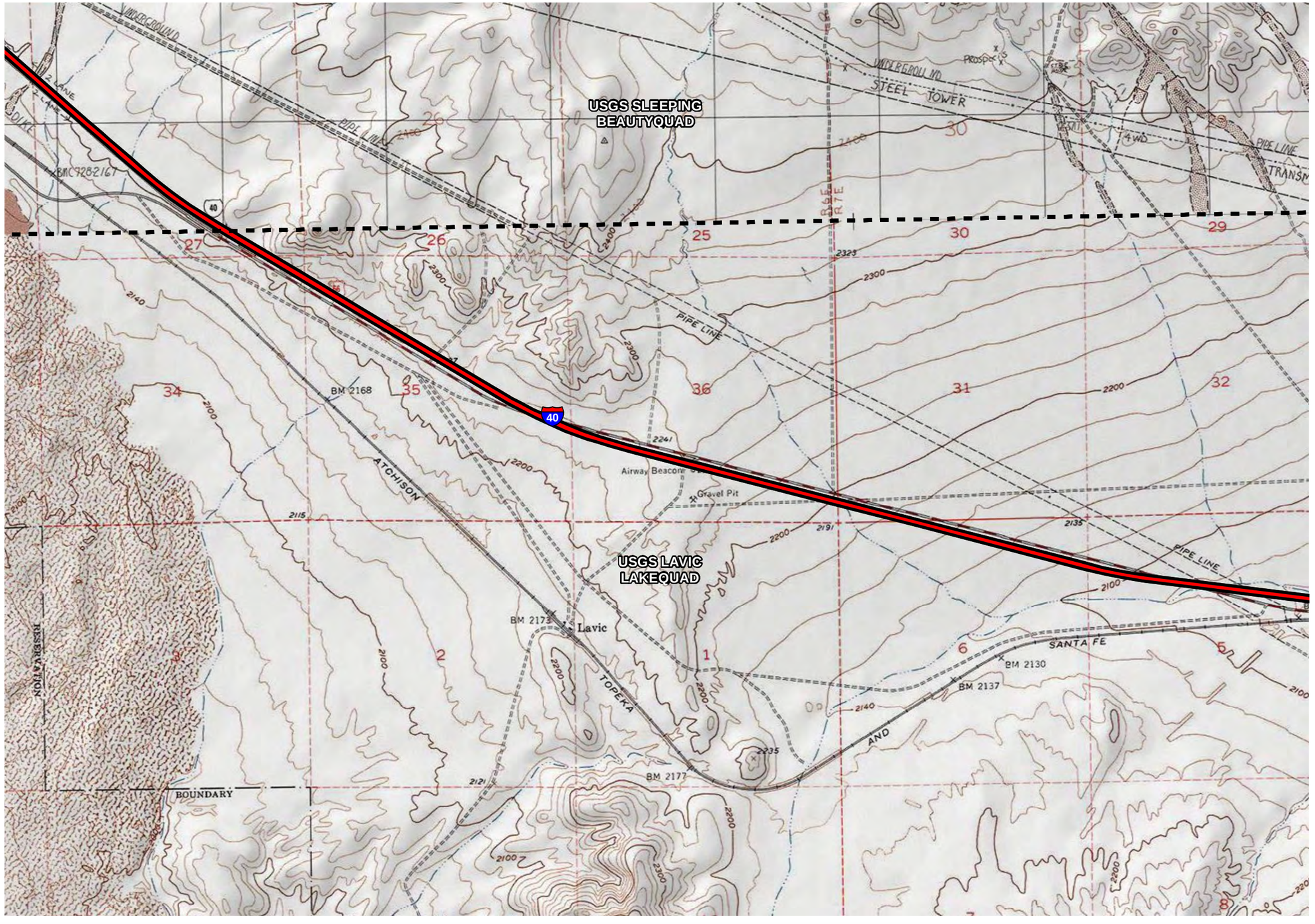
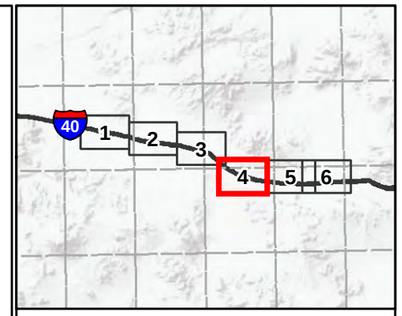
Source: USA Topo Maps

Figure 2, Sheet 3 of 6
Project Location
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





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Project Location

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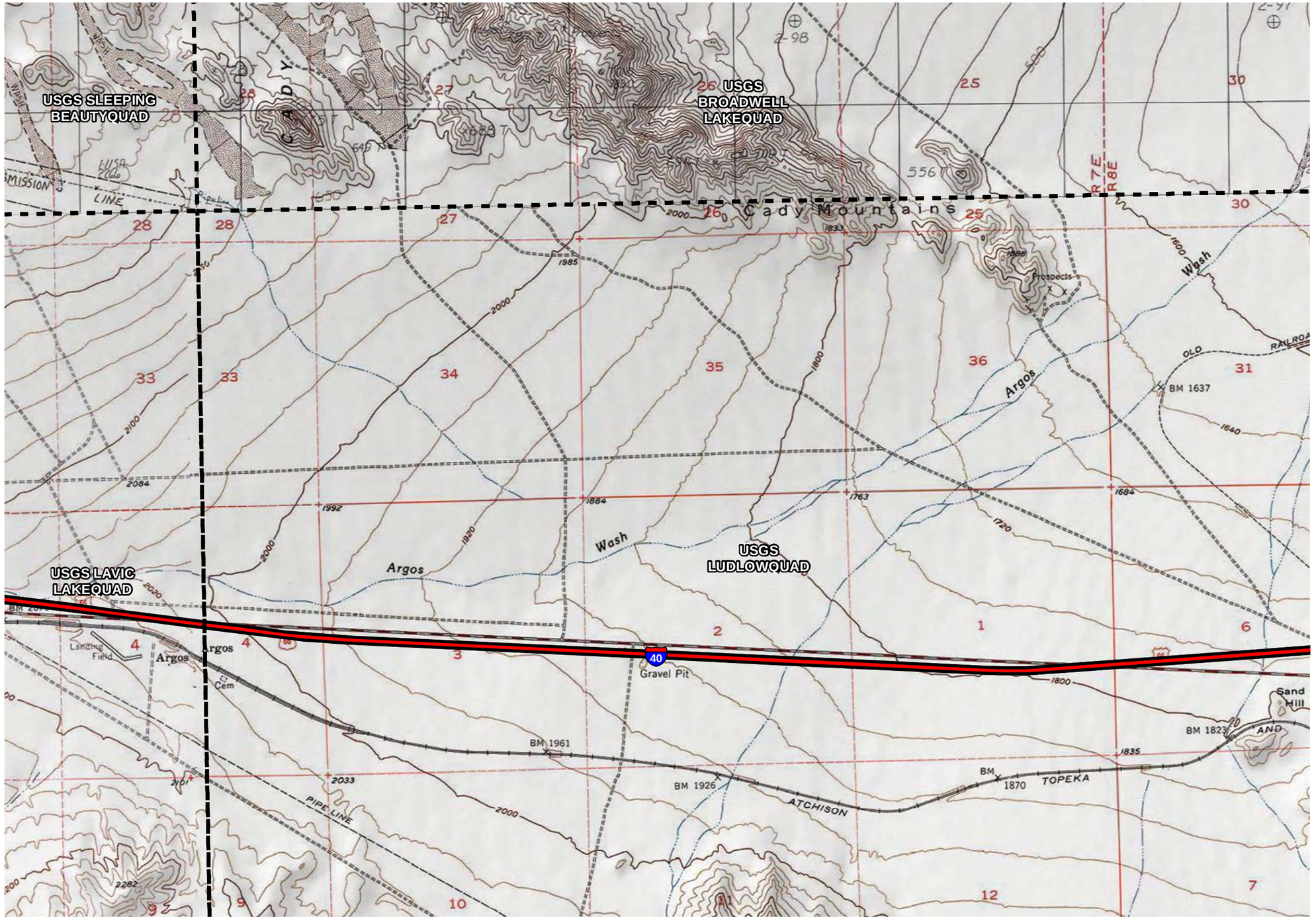
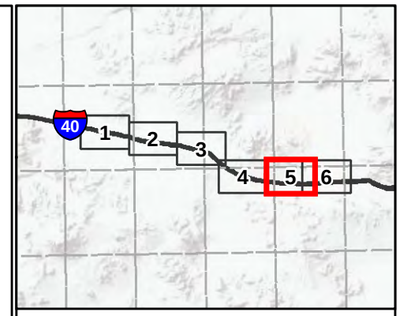
Source: USA Topo Maps

Figure 2, Sheet 4 of 6
Project Location
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





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Project Location

Quad Boundary

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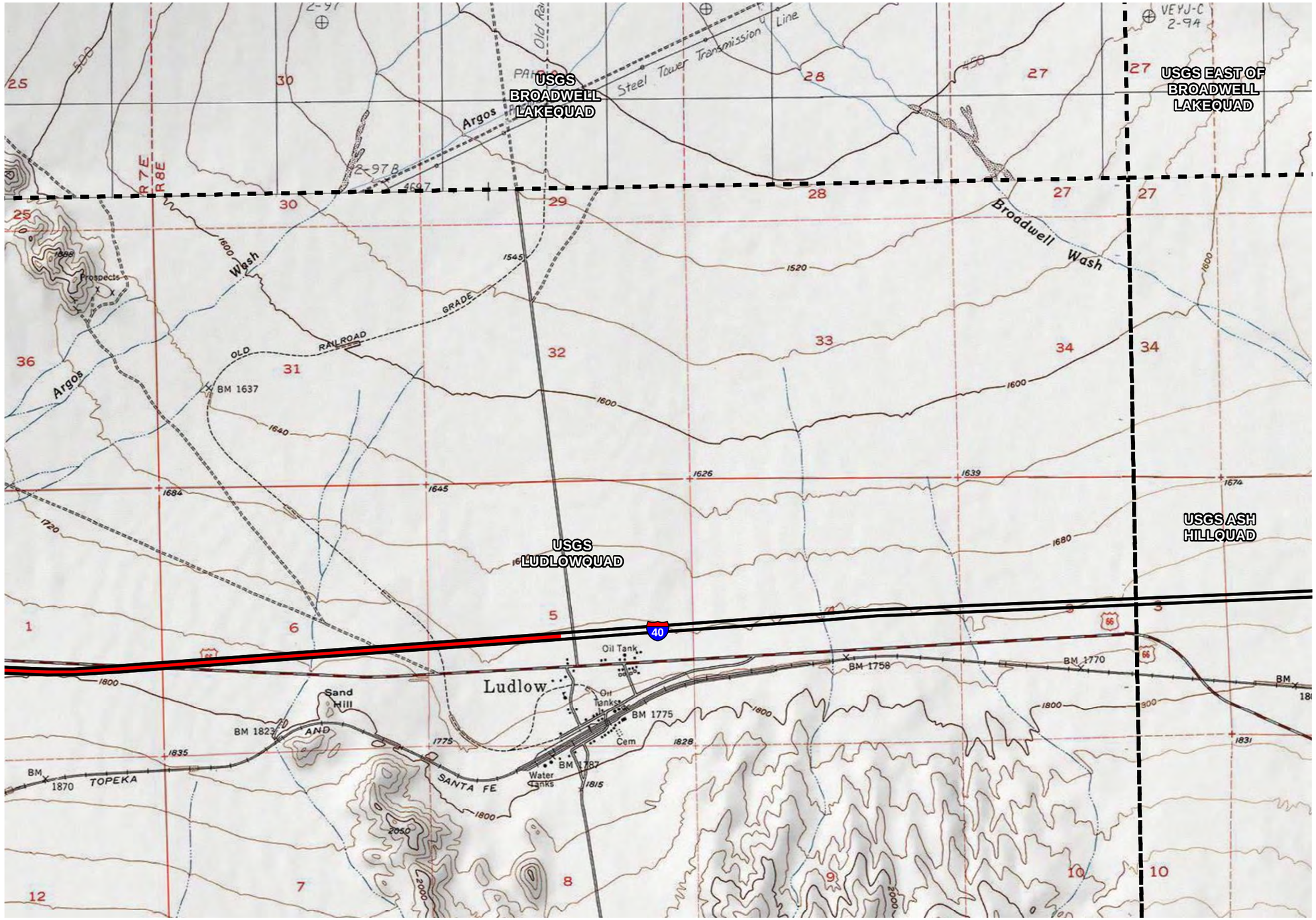
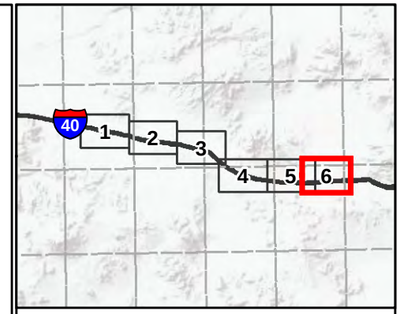
Source: USA Topo Maps

Figure 2, Sheet 5 of 6
Project Location
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

Project Location

Quad Boundary

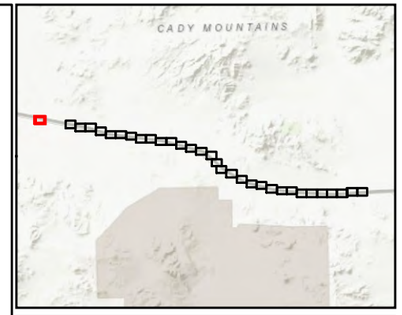
0 1,000 2,000 Feet

1:24,000

N

Source: USA Topo Maps

Figure 2, Sheet 6 of 6
Project Location
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

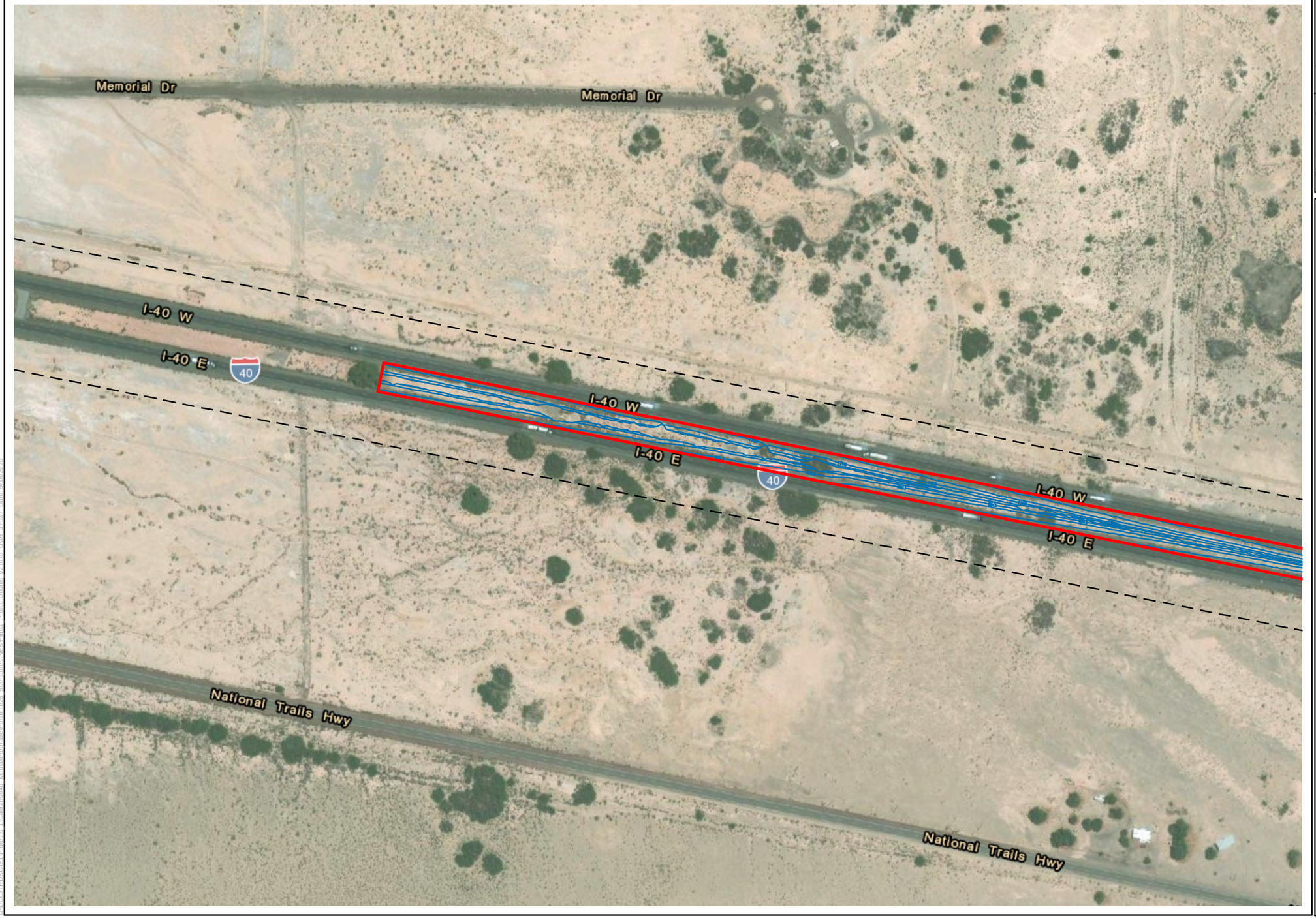
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

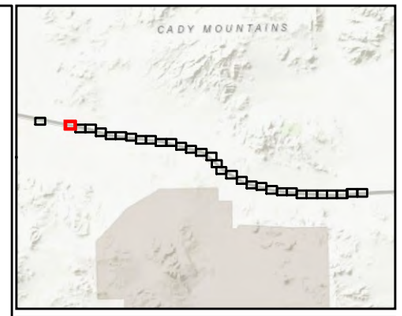
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 1 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

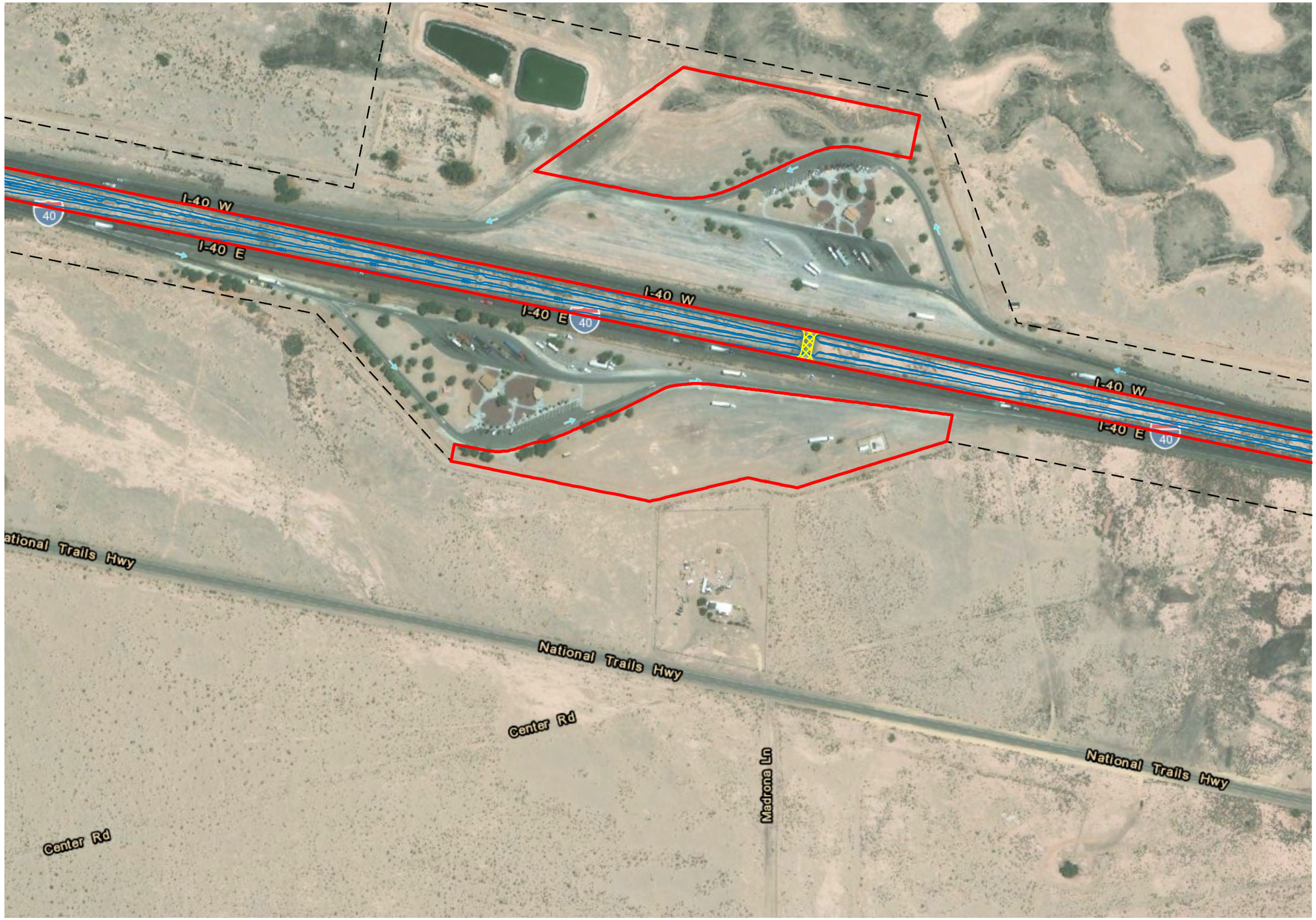
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

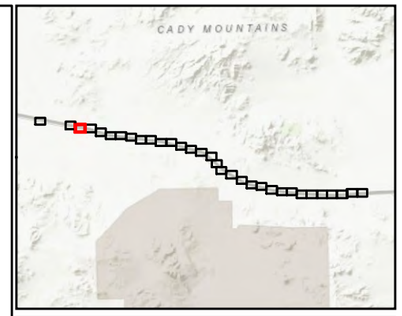
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 2 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





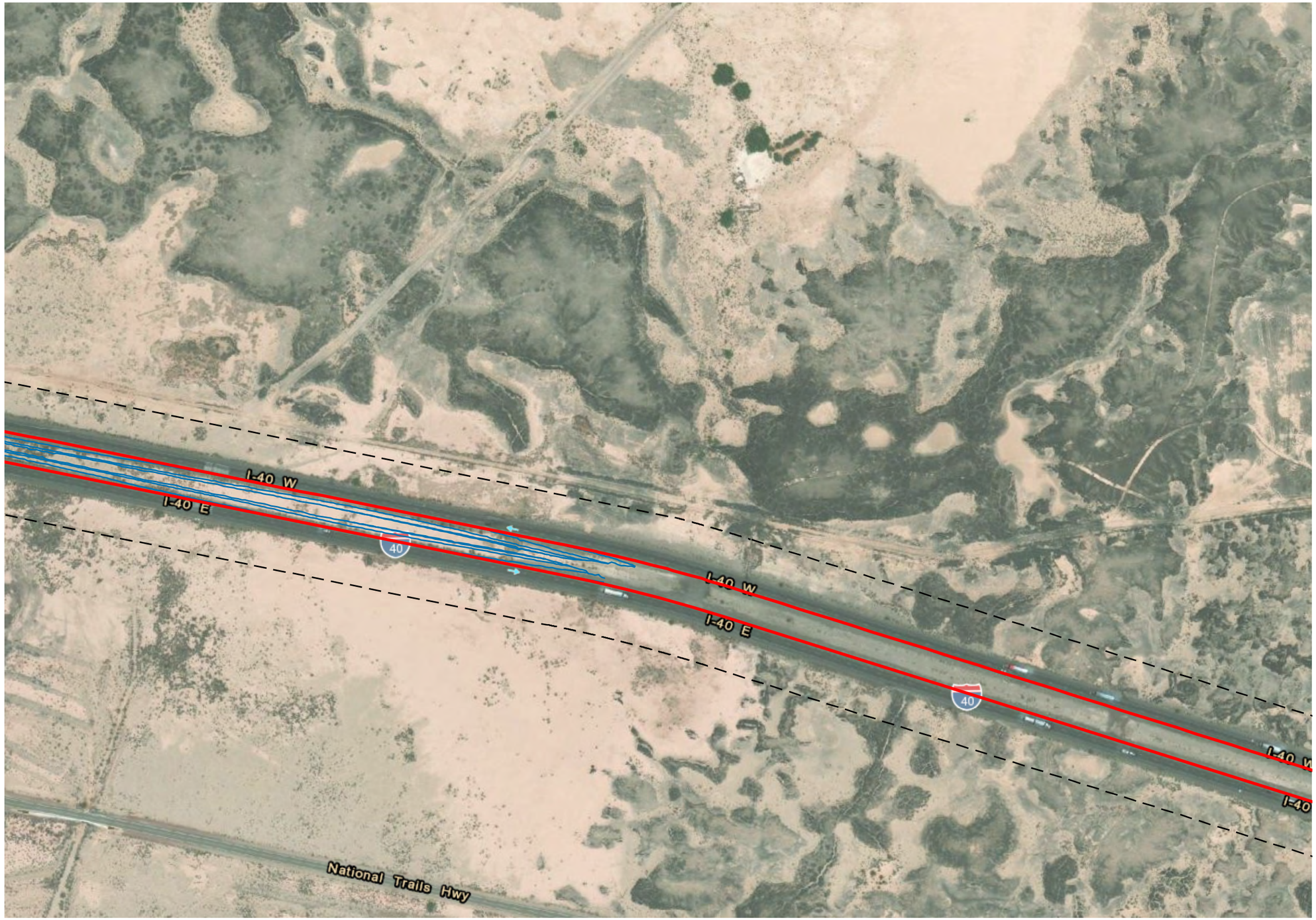
Legend

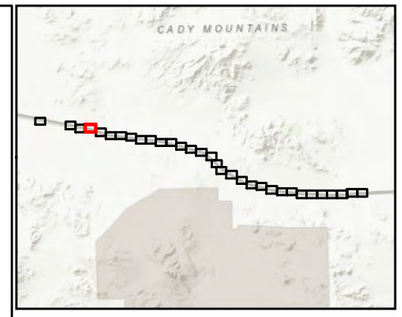
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

0 150 300 Feet
1:3,600

N

Figure 3, Sheet 3 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

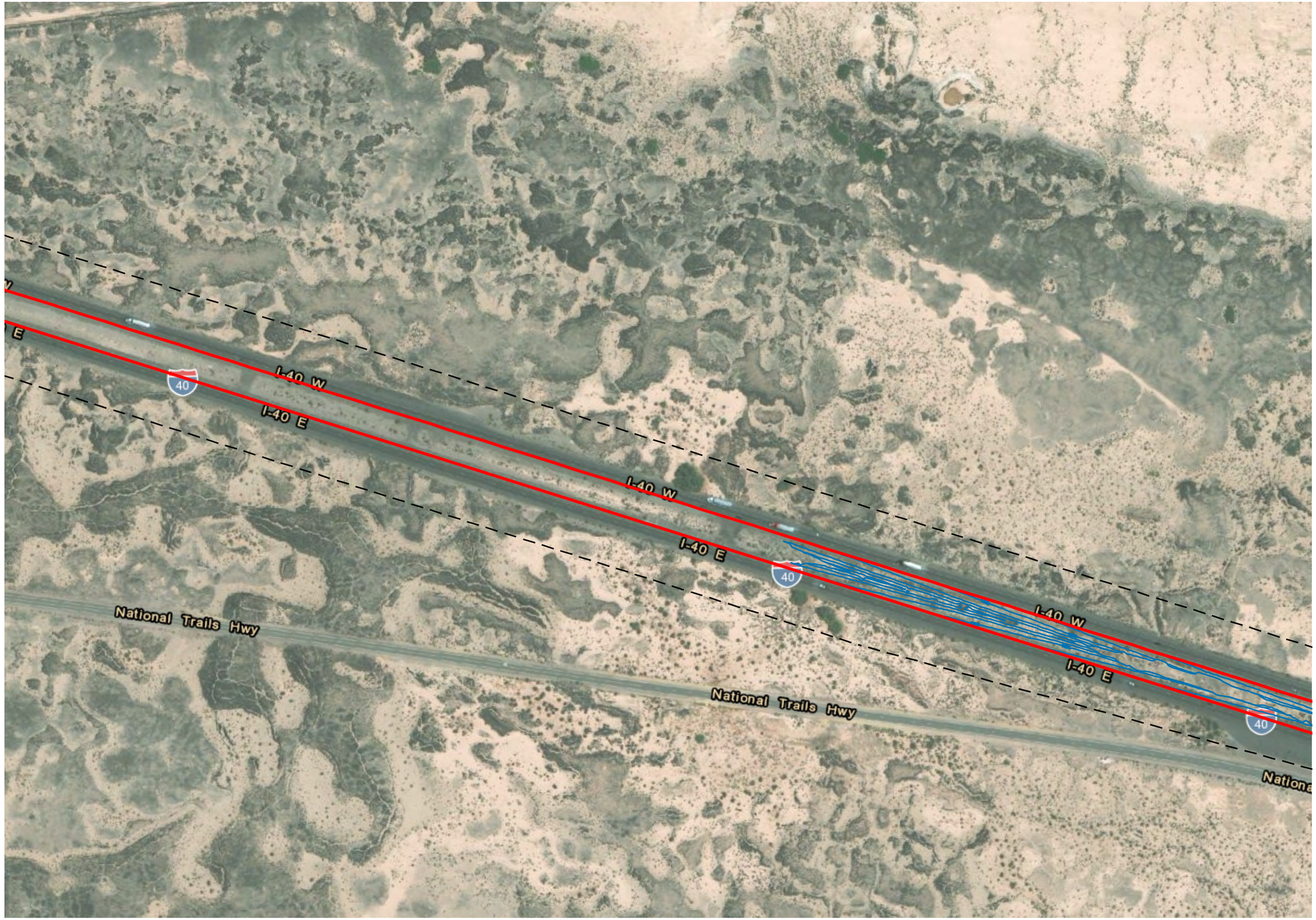
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

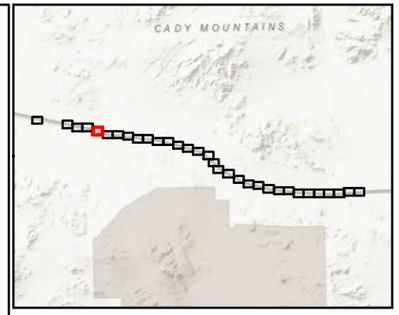
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 4 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

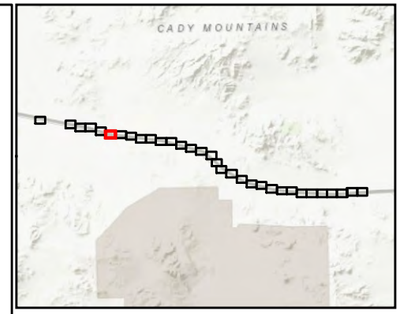
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 5 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

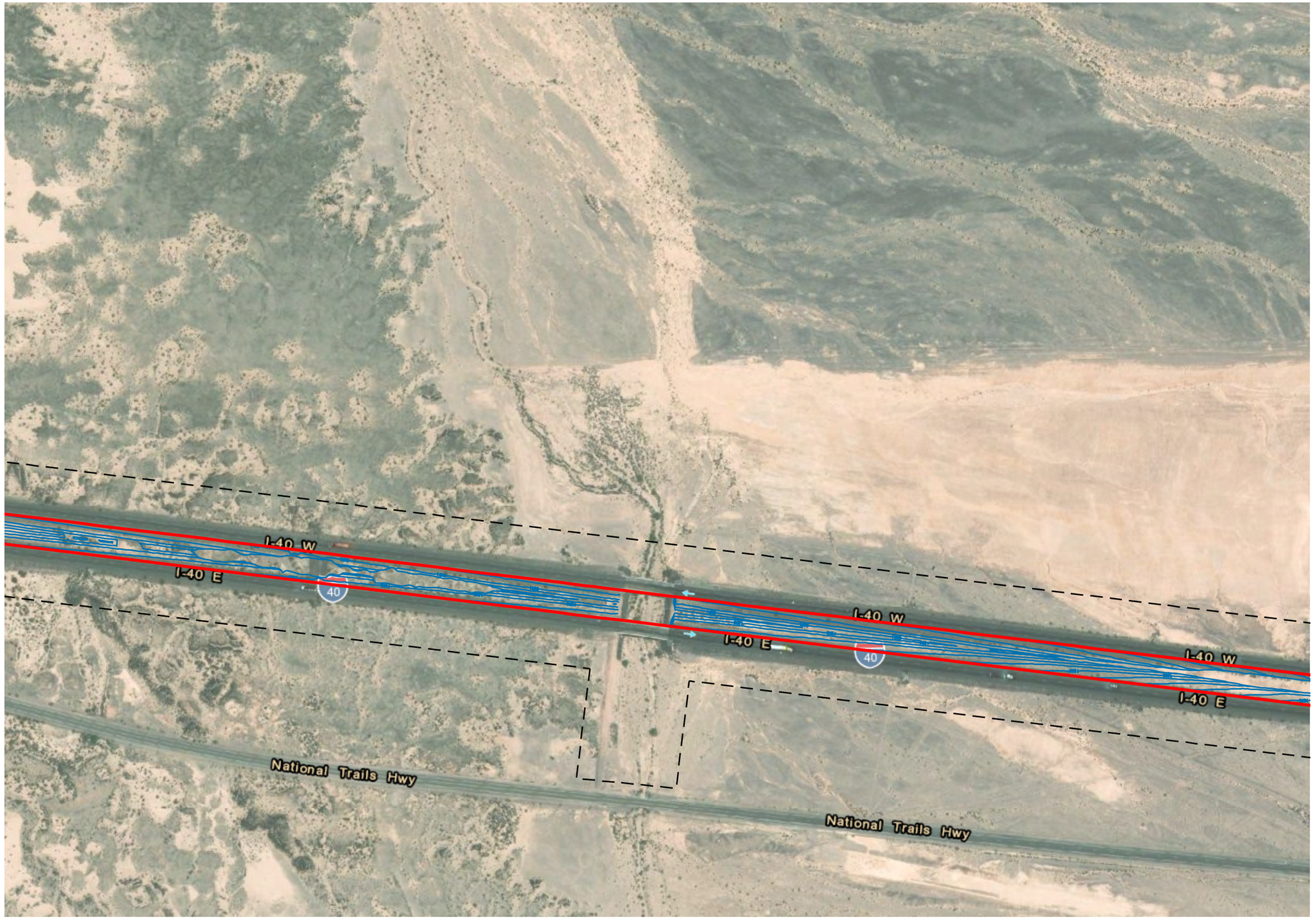
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

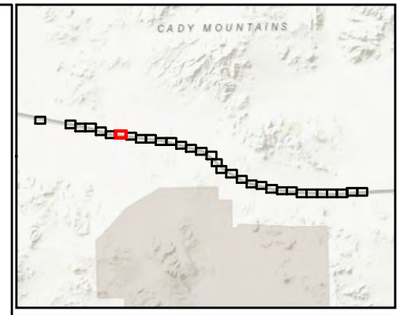
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 6 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

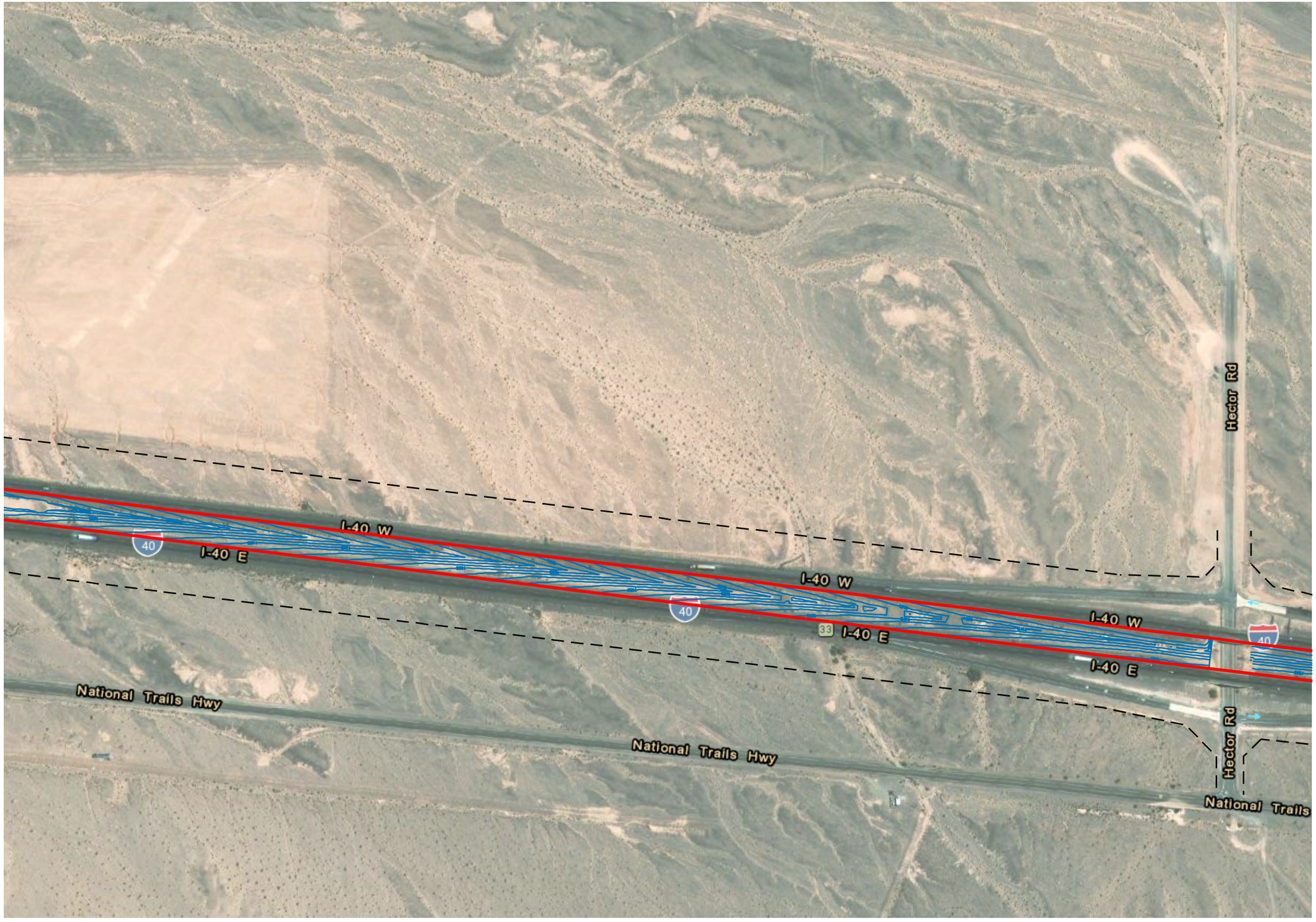
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

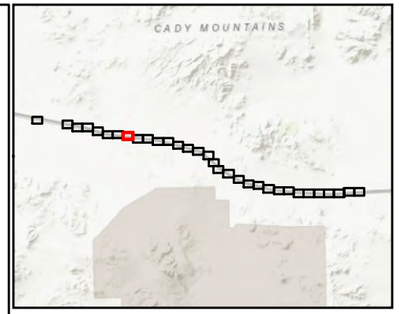
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 7 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

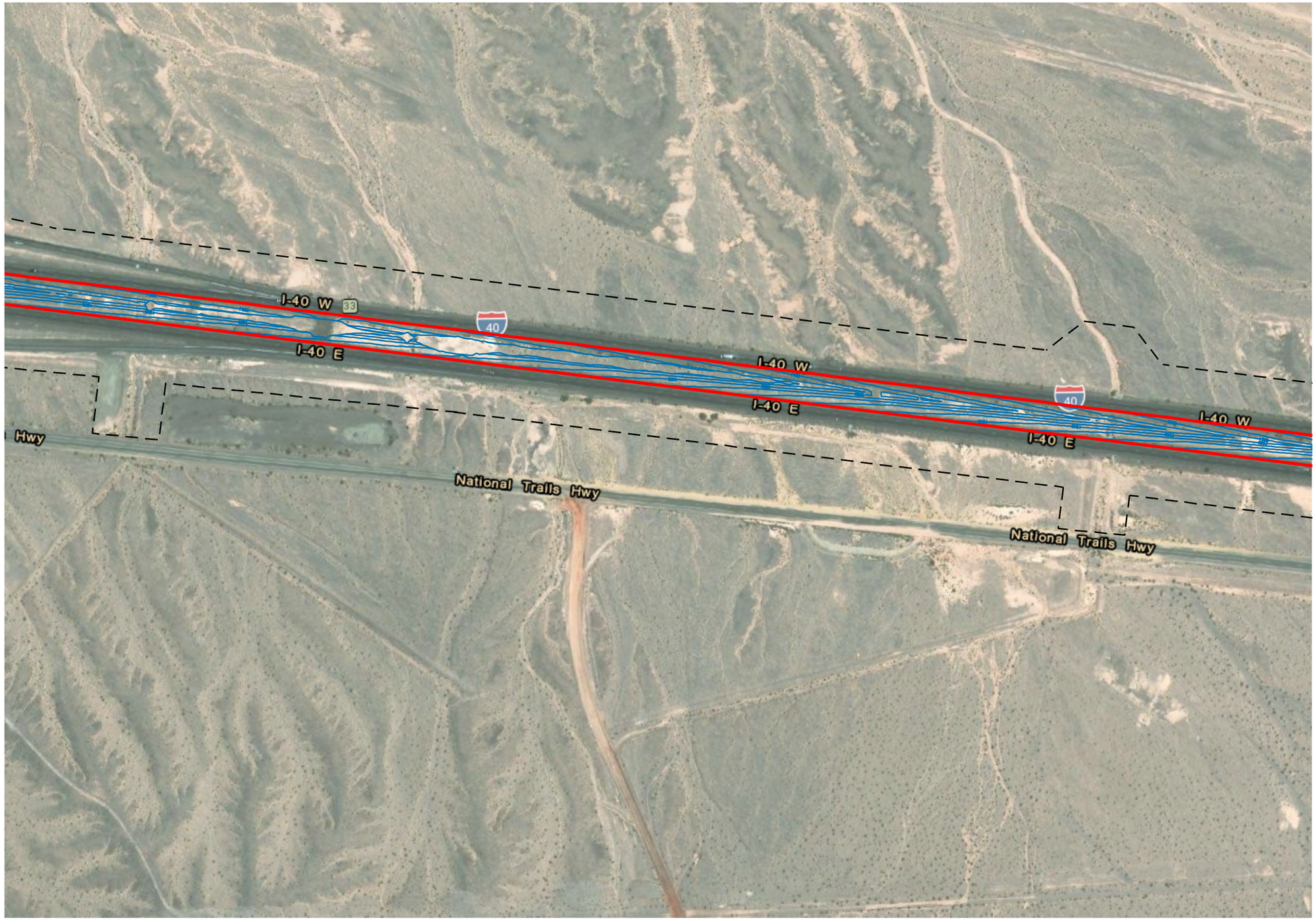
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

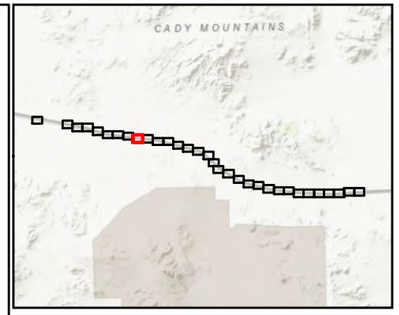
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 8 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





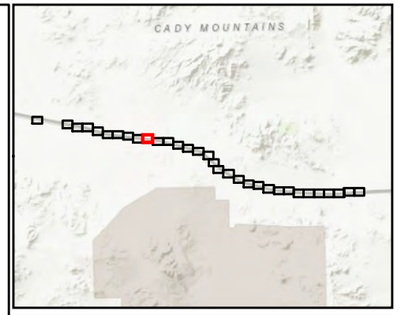
Legend

- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

0 150 300 Feet
1:3,600

N

Figure 3, Sheet 9 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

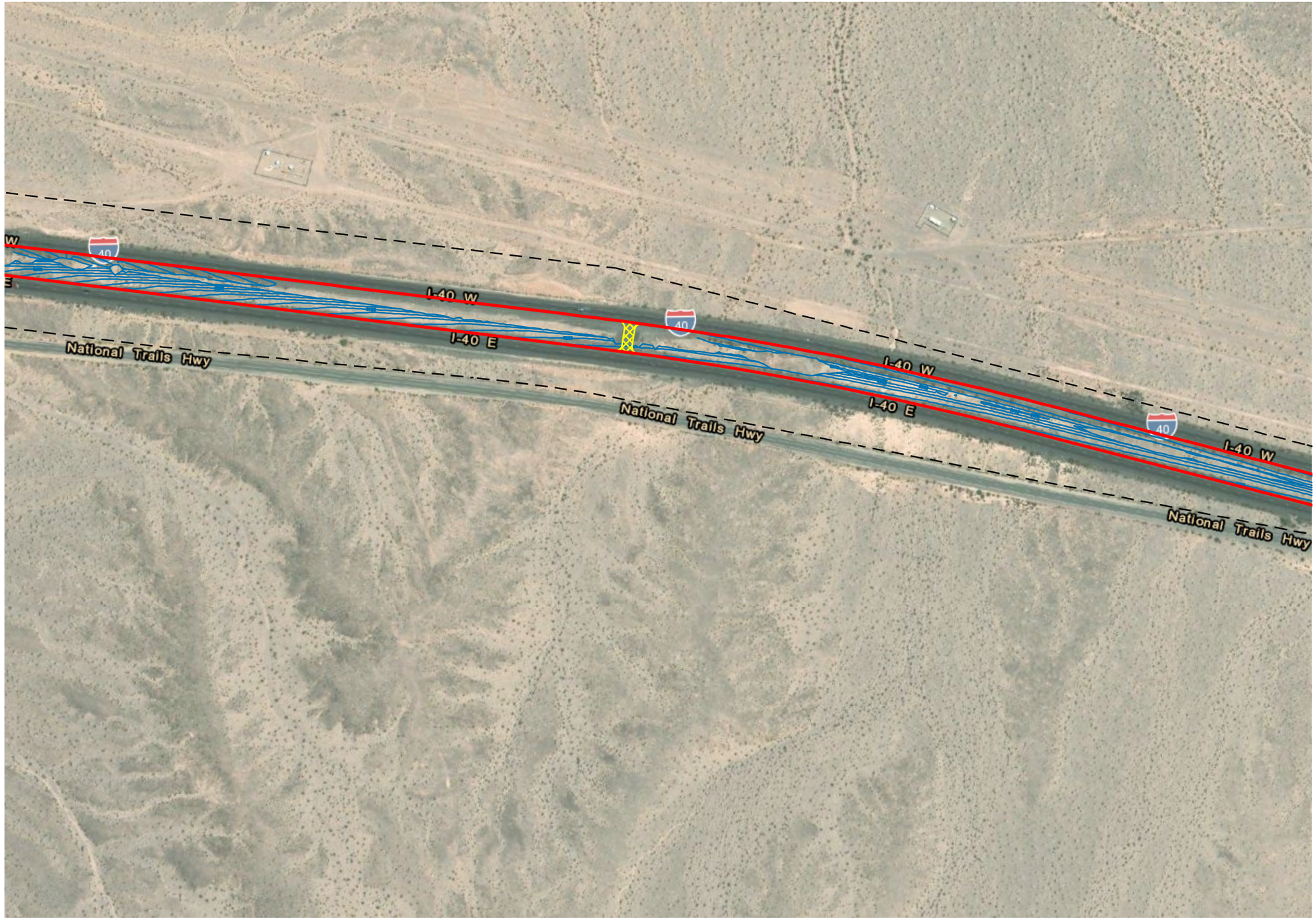
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

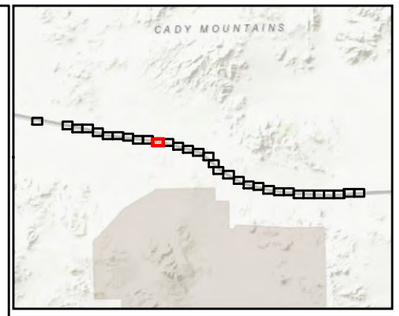
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 10 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

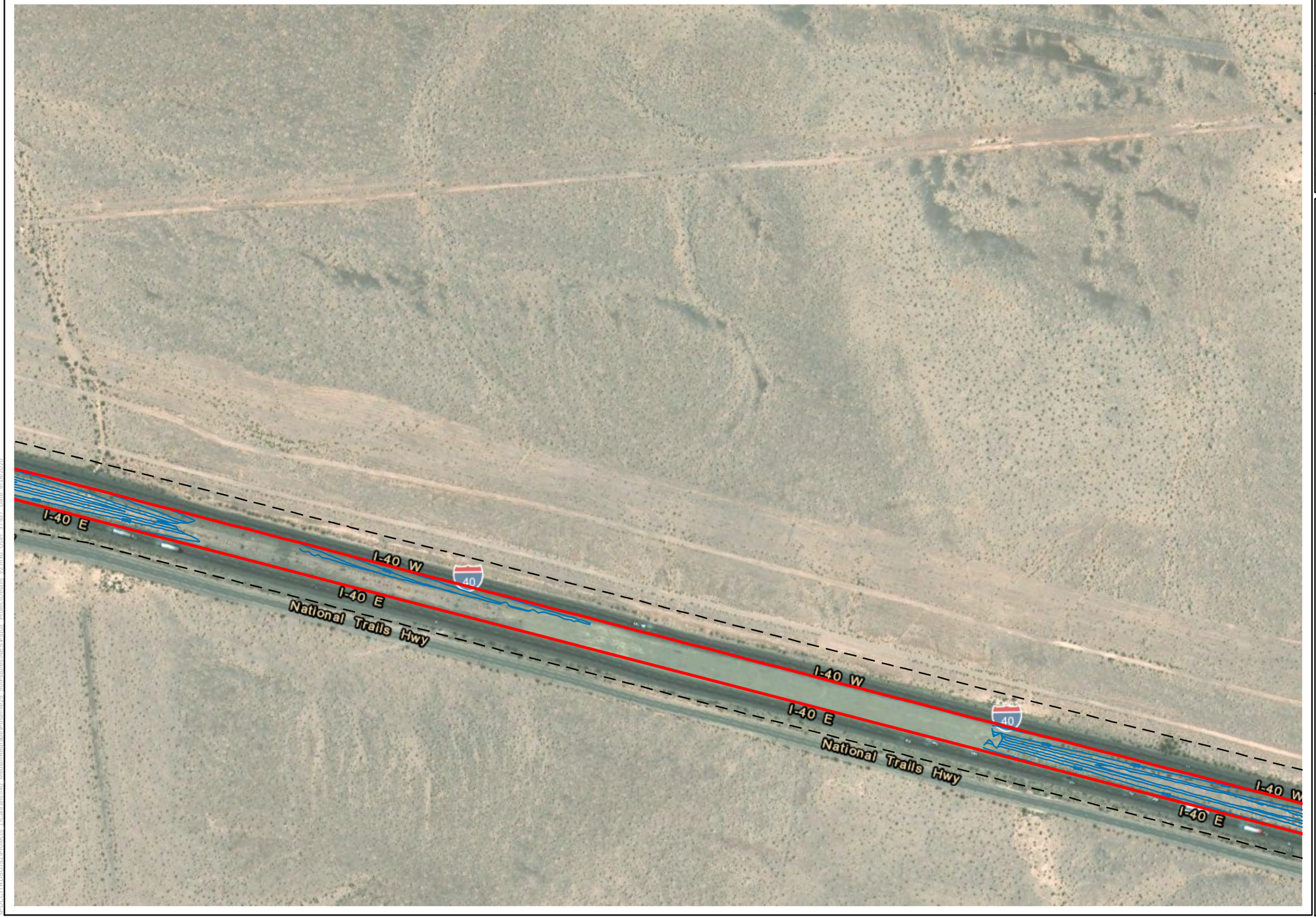
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

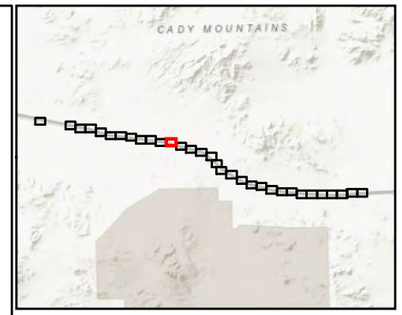
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 11 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

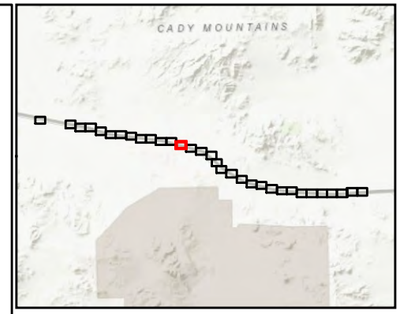
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 12 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

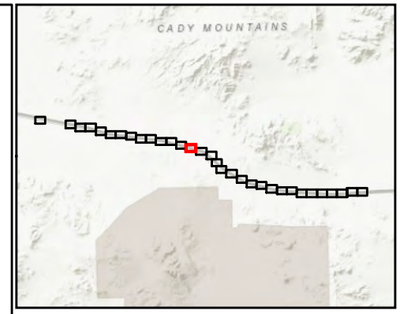
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 13 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

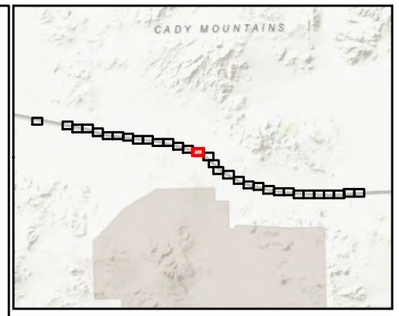
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 14 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

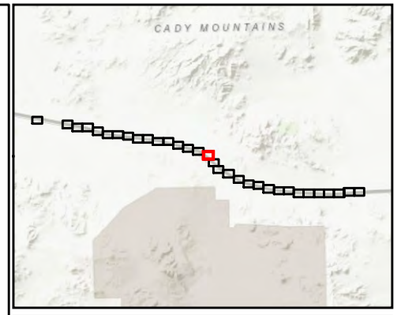
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 15 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

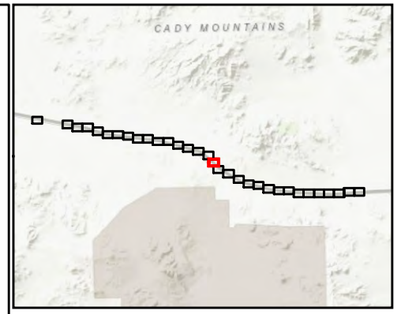
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 16 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

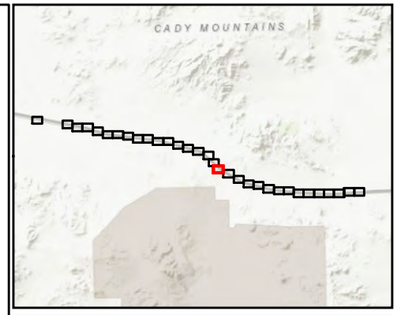
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 17 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

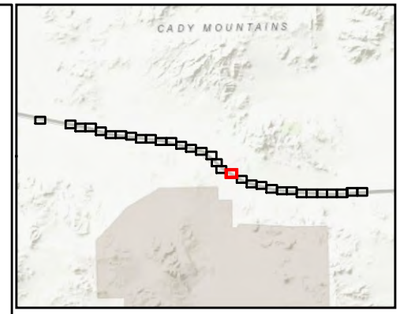
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 18 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

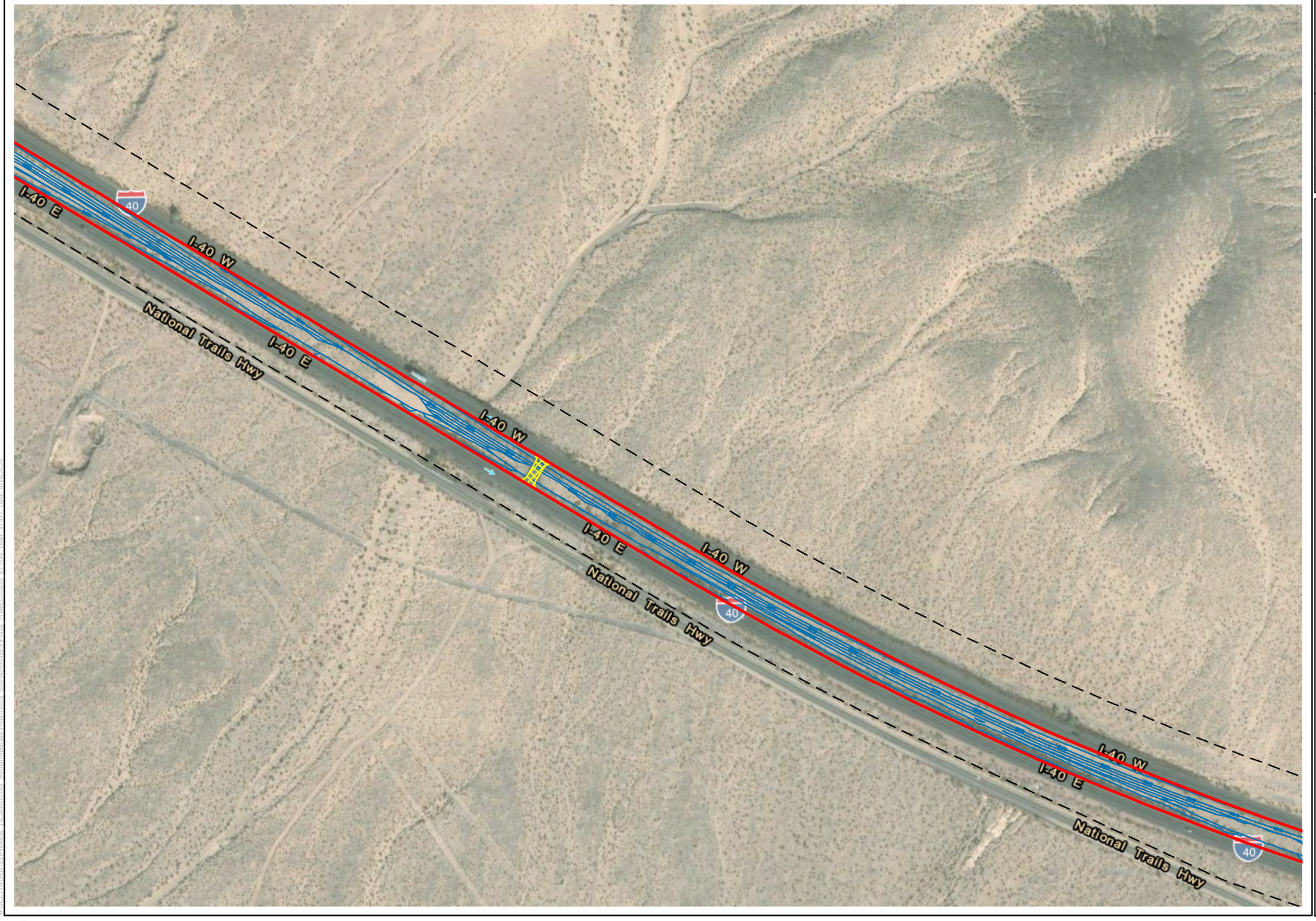
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

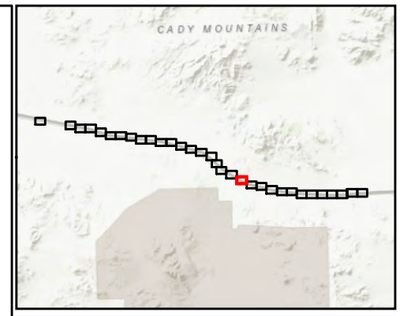
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 19 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

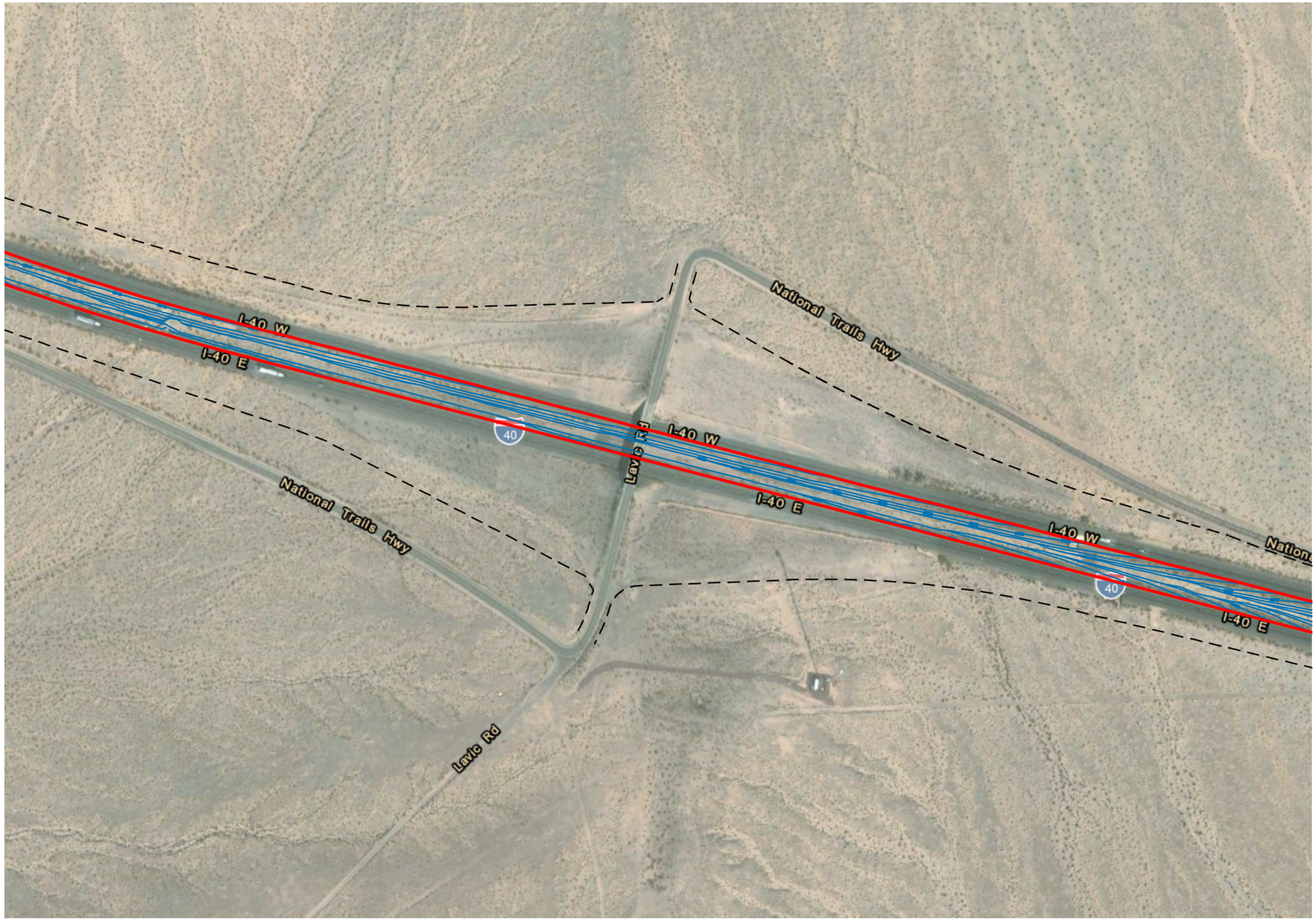
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

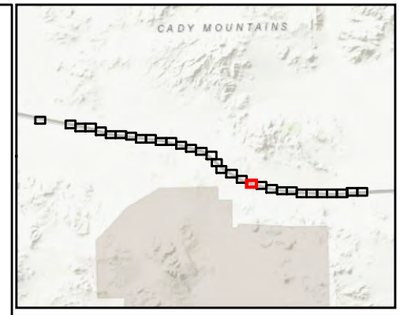
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 20 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

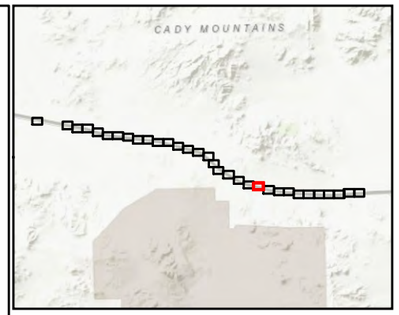
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 21 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

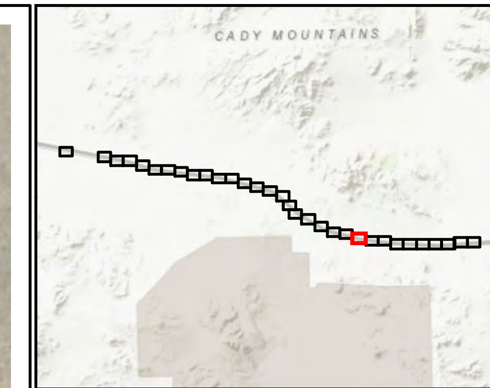
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 22 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

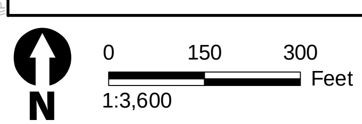
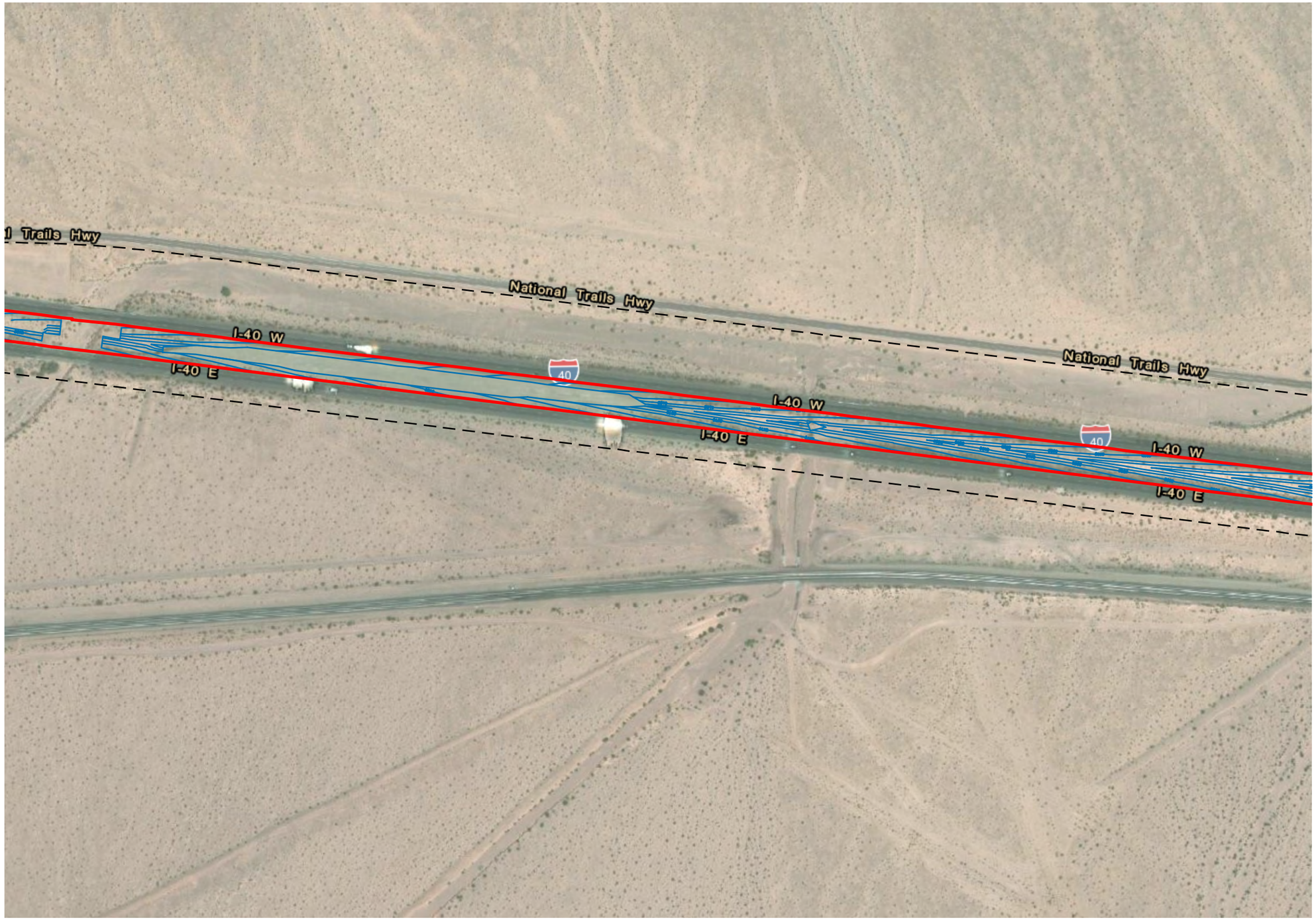
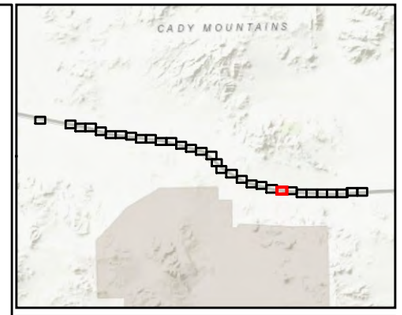


Figure 3, Sheet 23 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

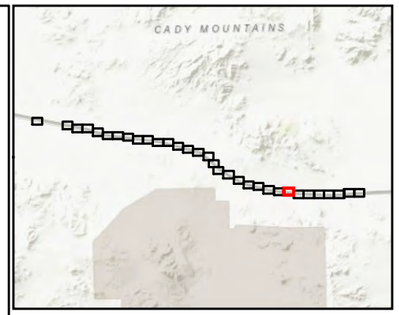
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 24 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

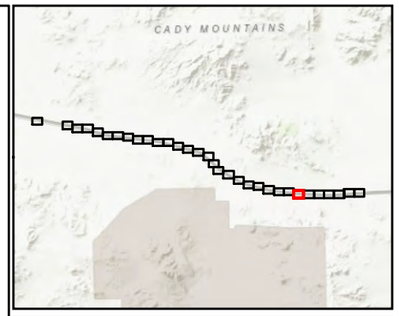
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 25 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

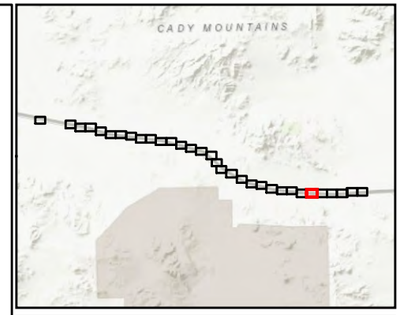
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 26 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

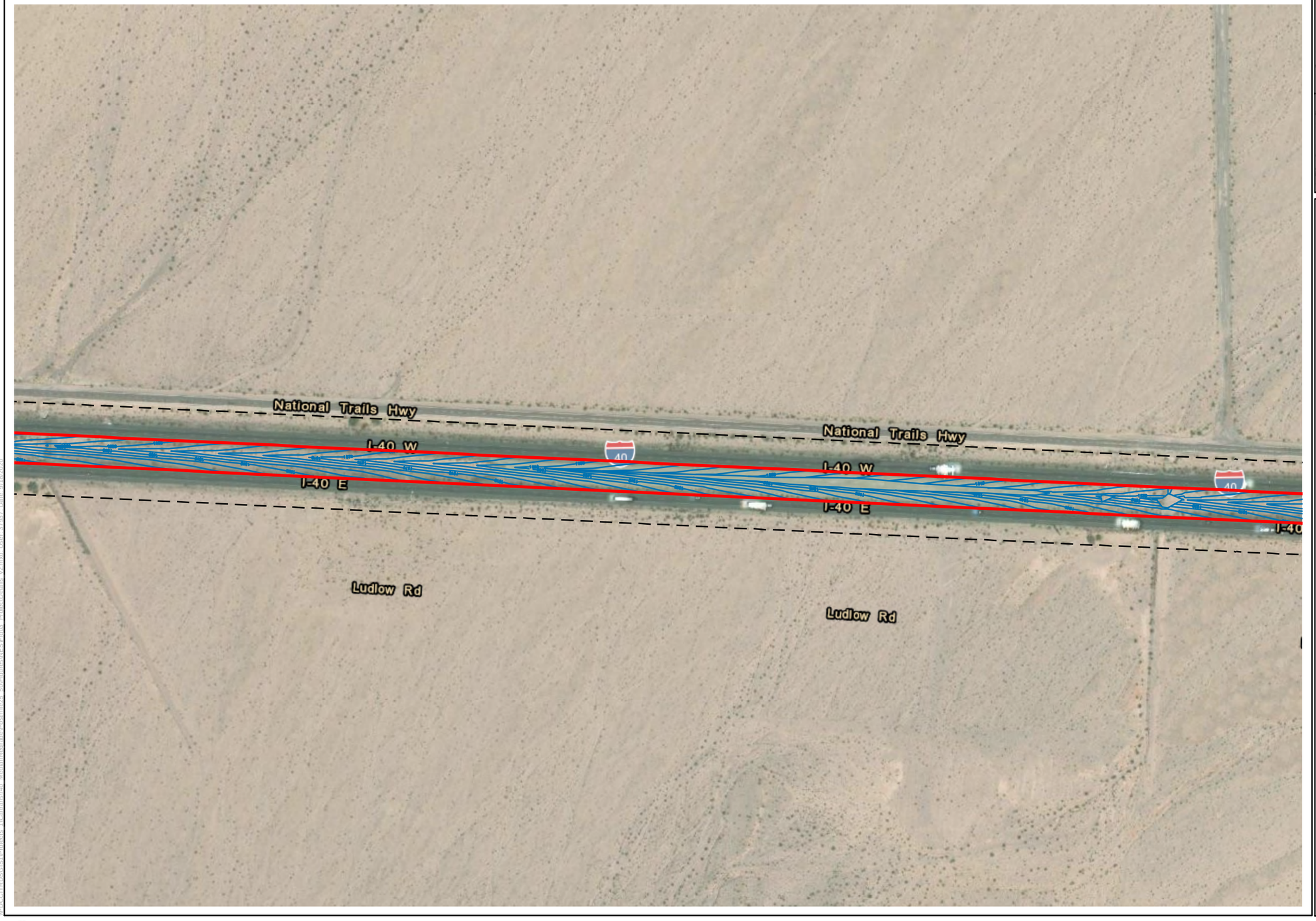
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

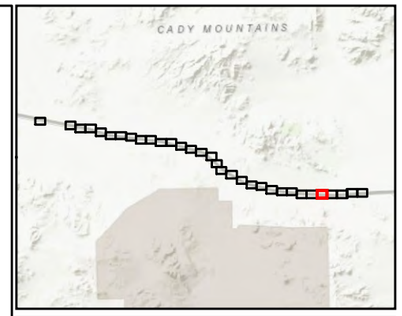
N

0 150 300 Feet

1:3,600

Figure 3, Sheet 27 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California





Legend

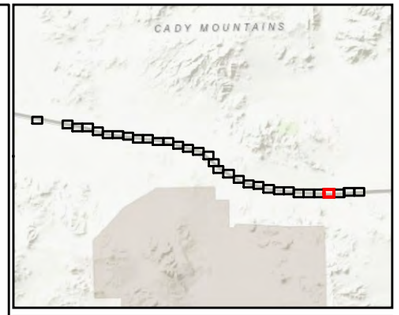
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 28 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

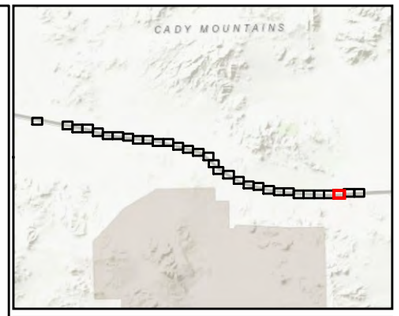
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 29 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

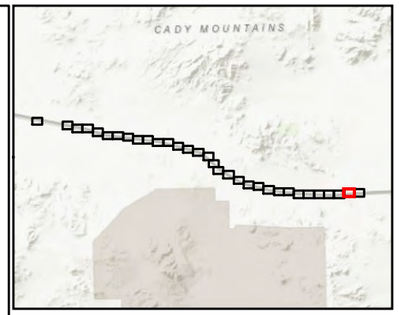
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 30 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

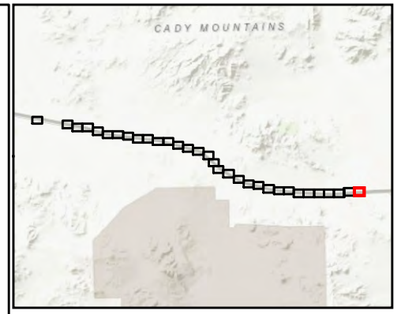
- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 31 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California



Legend

- Limits of Disturbance
- Grading Limits
- Existing Right-of-Way
- Permanent Crossover

N

0 150 300 Feet

1:3,600

Figure 3, Sheet 32 of 32
Project Details
Median Regrading on I-40 from Post Mile R25 to Post Mile R50 East of Barstow, California

Appendix B Distribution List

A public notice of this IS and/or a Notice of Intent to Adopt a Mitigated Negative Declaration was distributed to federal, state, regional, and local agencies, elected officials, and utilities and service providers. In addition, all property owners and occupants within a 500-foot radius of the project limits were provided the Notice of Intent.

Public Agencies, Elected Officials, and Service Providers

Mr. Gary McBride
Chief Executive Officer
County of San Bernardino
385 North Arrowhead Avenue, 5th Floor
San Bernardino, CA 92415-0120

BLM Barstow Field Office
2601 Barstow Road
Barstow, CA 92311

Dr. Raymond Wolfe
Executive Director
San Bernardino County Transportation Authority
1170 W. 3rd St., 2nd Floor
San Bernardino, CA 92410

Assembly Member Eduardo Garcia
48220 Jackson Street, Suite A3
Coachella, CA 92236

Hon. Curt Hagman
Supervisor, District 4
San Bernardino County Board of Supervisors
385 N. Arrowhead Ave., 5th Floor
San Bernardino, CA 92415

Hon. Raul Ruiz Congress Member
House of Representatives, California District 36
445 East Florida Ave - 2nd Floor
Hemet, CA 92543

Hon. James Ramos Supervisor, District 3
San Bernardino County Board of Supervisors
385 N. Arrowhead Ave., 5th Floor
San Bernardino, CA 92415

Silver Valley Unified School District
Superintendent
35320 Daggett-Yermo Road
Yermo, CA 92398

Mr. Ross Sevy District Director
Office of Assembly Member Jay P. Obernolte
15901 Smoke Tree St., Ste. 125
Hesperia, CA 92346

Hon. Jean Fuller Senator
California Senate, District 16
7248 Joshua Lane, Ste. B
Yucca Valley, CA 92284

Hon. Josie Gonzales Supervisor, District 5
San Bernardino County Board of Supervisors
385 N. Arrowhead Ave., 5th Floor
San Bernardino, CA 92401

Hon. Robert A. Lovingood Supervisor, District 1
San Bernardino County Board of Supervisors
385 N. Arrowhead Ave., 5th Floor
San Bernardino, CA 92415

Hon. Janice Rutherford Supervisor, District 2
San Bernardino County Board of Supervisors
385 N. Arrowhead Ave., 5th Floor
San Bernardino, CA 92415

Hon. Jay P. Obernolte Assembly Member
California State Assembly, District 33
15900 Smoke Tree St., Ste. 125
Hesperia, CA 92345

California Highway Patrol
300 East Mountain View Street
Barstow, CA 92311

San Bernardino County Fire - Division 6
Harvard Station No. 52
39059 Kathy Lane
Newberry Springs, CA 92365

Hon. Jeff Stone Senator
California Senate, District 28
45-125 Smurr St., Suite B
Indio, CA 92201

San Bernardino County Sheriff's Dept
225 East Mountain View
Barstow, CA 92311

Hon. Chad Mayes Assembly Member
California State Assembly, District 42
41608 Indian Trail, Suite 1
Rancho Mirage, CA 92270

City of Barstow, Planning Dept.
220 E. Mountain View Street, Suite A
Barstow, CA 92311

Mr. Steven Hernandez Chief of Staff
Office of Supervisor V. Manuel Perez
73-710 Fred Waring Dr. Suite 222
Palm Desert, CA 92260

Richard Meyers
Refuge Manager
Havasu NWR
U.S. Fish & Wildlife Service
Lake Havasu NWR Complex
317 Mesquite Avenue
Needles, CA 92363

Mr. Dakota Higgins District Director
Office of Congress Member Paul Cook
14955 Dale Evans Pkwy.
Apple Valley Town Hall
Apple Valley, CA 92307

PG&E
77 Beale Street
San Francisco, CA 94105

Regents of the University of California
2200 University Ave
Berkeley, CA 94720

State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

California Department of Fish and Wildlife, Region 6
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764

California Institute of Technology
1201 E. California Blvd
Pasadena, CA 91125

BNSF Railway Company
P.O. Box 961089
Fort Worth, TX 76131

Interested Parties, Property Owners, and Members of the Public

Ghassan F. Nassar
568 N. Mountain View Ave
San Bernardino, CA 92401

Francis R. Eatwell
519 Keyser Rondo
Camarillo, CA 93010

Mary Feringa 2011 Trust
930 7th Street
Norco, CA 92860

Penelope L. Cook
1463 Bibiana Way
Upland, CA 91786

Ho Youn & Ki Bin Sh Rev Trust
1900 Camino Loma Ave, Apt B-204
Fullerton, CA 92833

Frank & G Blaszcak Liv TR 2009
131 W. Wells Street
San Gabriel, CA 91766

DL & JM Mensa Inter Vivos TR
181 Hillway Circle
Ventura, CA 93003

Fred Baker
P.O. Box 41225
Reno, NV 89501

L&J Duncan Family Partners
2700 Kadema Drive
Sacramento, CA 95864

William E. Hill
52080 National Trails
Newberry Springs, CA 92365

Hibiscus Nurseries LLC
2916 Carta Taza
San Clemente, CA 92673

Jordan Desert Property LLC
4825 S. Highway 95, #2-501
Fort Mohave, AZ 86426

Henrietta Ordorica
2036 Delores Street
West Covina, CA 91792

John Anthony Cortez Rev TR
4536 Fruit Street
La Verne, CA 91750

Educating the World LLC
P.O. Box 101
Interlachen, FL 32148

Bernice Anderson
P.O. Box 3066
Wrightwood, CA 92397

Nhiem Tong
P.O. Box 2411
La Habra, CA 90631

Jerry L. Thomas
2305 Almeza Avenue
Rowland Heights, CA 91748

Joe Diaz
3308 Arden Way
Chino Hills, CA 91709

Daryl & Linda Childers LIV TR
6191 Greenbrier Drive
Huntington Beach, CA 92648

Joseph W. Kozmata TR
10533 Serengeti Drive
Littleton, CO 80124

Angelito S. Genuino TR
11746 Buford Street
Cerritos, CA 90703

Kumar Family Revocable TR
571 Monticello Ter.
Fremont, CA 94539

Mi Casa Property LLC
1330 Oakview Avenue
San Marino, CA 91108

Buren B and Wilma Lemere Day
916 Bayless
Azusa, CA 91702

Liza Torkan
6931 Stanford Avenue
Los Angeles, CA 90001

Margariet J. De Voy TR
15413 Orlanda Drive
Bonita Springs, FL 34135

Terry W. Kuchta
P.O. Box 188
Pearblossom, CA 93553

El Cierto LLC
2563 ½ East Carson Street
Carson, CA 90810

Simeon D. Peroff
P.O. Box 9063
Calabasas, CA 91302

SF Pacific Properties Inc.
2235 Faraday Avenue, Suite O
Carlsbad, CA 92011

George P. Harrington
8440 Otto Street
Downey, CA 90240

Nick Liadis
2561 East Carson Street
Carson, CA 90810

Sae Sil Kwon
14818 Stonehedge Lane
Westminster, CA 92683

AMLH Trust 4-1-08
19421 Sierra Linda
Irvine, CA 92603

Jones living Trust
485 Madrid Street
Hemet, CA 92545

Annelen Juliani
1333 Clear Creek
Prescott, AZ 86305

Richard Sulpizio
2404 Wilma Avenue
Commerce, CA 90040

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20438 View Point Road
Castro Valley, CA 94552

Donnie J. Hanson
8904 2nd Avenue
Inglewood, CA 90305

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11951 Sierra Lane
Northridge, CA 91326

Anthony J. Rivera SEP Pro TR
1220 Hearthside Court
Fullerton, CA 92831

Sarkis Basteghian
14949 Sylvan Street
Van Nuys, CA 91411

Family Business Investments Inc.
P.O. Box 13403
El Cajon, CA 92021

Theodore J. Ticktini
1463 Pueo Street
Honolulu, HI 96816

Sarkis Avanian
5432 Lemon Grove Avenue
Los Angeles, CA 90038

Kiran Bohlat
4222 Broadway, #A
Hawthorne, CA 90250

Thomas M. Bedner
8610 187th Place
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6043 Tampa Avenue, #210
Tarzana, CA 91356

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Norco, CA 92860

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Appendix C List of Preparers

The following personnel contributed to the preparation of this IS:

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- Andrew Kuria, Environmental Planner, Environmental Studies "B"
- Ashley Bowman, Associate Environmental Planner, Cultural Studies
- Luz Quinnell, Associate Environmental Planner, Biological Studies
- Andrew Walters, Senior Environmental Planner, Cultural Studies
- Craig Wentworth, Senior Environmental Planner, Biological Studies
- Paul Phan, Civil Engineer/Environmental Engineering, Branch Chief: Environmental Engineering "A"
- Chandan Meenu, Civil Engineer/Environmental Engineering, Environmental Engineering "A"
- Phong Hoang, Civil Engineer/Environmental Engineering, Environmental Engineering "A"
- Edison Jaffery, Civil Engineer/Environmental Engineering, Environmental Engineering "A"
- Karen Riesz, Associate Environmental Planner, Regulatory Permits

TranSystems

- Joseph W. Sawtelle, P.E., Vice President

ICF

- Elizabeth Irvin, Technical Editor
- Court Morgan, Environmental QA/QC
- Youji Yasui, Environmental Document Preparation

ESA

- Ryan Todaro, Environmental QA/QC

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Appendix D Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

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Appendix E List of Technical Studies

Archaeological Survey Report, Median Regrading on I-40 from PM R25 to PM R50, San Bernardino County, California, 08-SBd-40-R25.0/R50.0, EA Number 0R170, Project Number 081200002.

ESA Action Plan, Median Regrading on I-40 from PM R25 to PM R50 Project, East of Barstow, San Bernardino County, California, 08-SBd-40-R25.0/R50.0, EA Number 0R170, Project Number 081200002.

Finding of No Adverse Effect, Median Regrading on I-40 from PM R25 to PM R50, San Bernardino County, California, 08-SBd-40-R25.0/R50.0, EA Number 0R170, Project Number 081200002.

Historic Property Survey Report, I-40 Median Regrade Project, San Bernardino County, California, 08-SBd-40-R25.0/R50.0, EA Number 0R170, Project Number 081200002. September 2020. ESA.

Natural Environment Study, Median Regrading on I-40 from PM R25 to PM R50, San Bernardino County, California, 08-SBd-40-R25.0/R50.0, EA Number 0R170, Project Number 0812000028. October 2020. ICF.

Preliminary Drainage Report, Median Regrading Project on I-40 from PM R25.0 to PM R50.0, San Bernardino County, California, Caltrans Project No. 0812000028, EA OR170. May 2020. Advanced Civil Technologies.

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Appendix F Environmental Commitments Record

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

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Permit Type	Agency	Date Received	Expiration	Notes
1602	California Department of Fish and Wildlife			
401	Regional Water Quality Control Board			

Date of ECR: November 2020
Date:

Project Phase:
☒ PA/ED (*DED/FED*)
☐ PS&E Submittal_____ %
☐ Construction

ENVIRONMENTAL COMMITMENTS RECORD (Median Regrading on I-40 from Post Mile R25 to Post Mile R50)

08-SBd-40
PM R25.0/R50.0

EA 08-0R170
PN 0812000028
Generalist: Andrew Kuria
ECL: TBD
Resident Engineer: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page Number	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP:	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
CULTURAL RESOURCES										
CR-1: Treatment of Previously Unidentified Cultural Resources. If buried cultural resources are encountered during project activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.	P.23	HPSR, HRER, ASR	Environmental Cultural Studies/ Maintenance/ Design/ Resident Engineer/ Contractor		Standard					
CR-2: Treatment of Human Remains. In the event that human remains are found, the county coroner shall immediately be notified and all	p.23	HPSR, HRER, ASR	Environmental Cultural Studies/ Maintenance/ Design/ Resident		Standard					

construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify NAHC, who will then notify the Most Likely Descendant. The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909) 383-2647 and Gary Jones, DNAC: (909) 383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.			Engineer/ Contractor							
CR-3: Treatment of Identified Cultural Resources. All archaeological sites within the Project Area of Direct Impacts (ADI), regardless of eligibility for the National Register of Historic Places, shall be preserved in place through capping (placement of fill). No grubbing or vegetation clearing shall be conducted within the documented boundaries of archaeological sites prior to the placement of fill.	p.40	FOE	Environmental Cultural Studies/ Maintenance/ Design/ Resident Engineer/ Contractor		Standard					
CR-4: CR-4: Environmentally Sensitive Areas (ESAs). Environmentally Sensitive Areas shall be established around the portions of archaeological sites P-36-001908, P-36-002328, P-36-	p.40	FOE	Environmental Cultural Studies/ Maintenance/ Design/ Resident Engineer/ Contractor							

005598, P-36-014561, P-36-014564, and P-36-020873 located outside of the Project ADI to prevent inadvertent adverse effects. Because there are no planned construction activities outside the I-40 median and travel lanes, the ESAs will not be fenced during construction. Rather, the ESAs will be delineated on construction plan layouts in the contractor's specifications. No project activities shall occur within the boundaries of ESAs.										
CR-5: CR-5: Archaeological Monitoring Areas (AMAs). Archaeological Monitoring Areas shall be established for archaeological sites within the Project ADI. The AMAs shall include a 50-foot buffer. The AMAs will be shown on Project plans and delineated appropriately in the field through discussion with the Archaeological Monitor. Native American and Archaeological Monitoring will be required within the AMAs to ensure archaeological sites are protected in place through soil capping. Monitoring of soil capping will ensure that subsurface components remain intact and undisturbed while keeping surface components in place and protected by local	p.40	FOE	Environmental Cultural Studies/ Maintenance/ Design/ Resident Engineer/ Contractor							

soil. No clearing or grubbing will occur within the AMAs.										
TRAFFIC AND TRANSPORTATION/BICYCLE AND PEDESTRIAN FACILITIES										
TRF-1: Prior to construction, a TMP will be developed by Caltrans to minimize potential impacts on emergency services and commuters during construction.	p.41	ISMND	Resident Engineer		Standard					
WATER QUALITY AND STORM RUNOFF										
WQ-1: Prior to the start of construction, a SWPPP for reducing impacts on water quality shall be developed by the contractor and approved by Caltrans.	p.35	ISMND	Resident Engineer							
WQ-2: The SWPPP control measures shall address the following categories: soil stabilization practices, sediment control practices, sediment tracking control practices, wind erosion control practices, and non-stormwater management and waste management and disposal control practices.	p.35	ISMND	Resident Engineer							
WQ-3 The contractor shall be required to comply with water pollution control provisions and the SWPPP and conform to the requirements of Caltrans' Standard Specification Section	p.35	ISMND	Resident Engineer/ Contractor		Standard					

7 1.01G "Water Pollution," of the Standard Specifications.										
WQ-4 If necessary, soil disturbed areas of the project site will be fully protected using soil stabilization and sediment control BMPs at the end of each day, unless fair weather is predicted.	p.35	ISMND	Resident Engineer/ Contractor							
NOISE AND VIBRATION										
NOI-1 The contractor shall comply with all local sound control and noise level rules, regulations, and ordinances that apply to any work performed pursuant to the contract.	p.37	ISMND	Resident Engineer/ Contractor							
NOI-2: Each internal combustion engine, used for any purpose on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without the muffler.	p.37	ISMND	Resident Engineer/ Contractor							
HAZARDOUS WASTE / MATERIALS										
HAZ-1: SSP 14-11.14 For the Removal and Disposal of	p.31	ISMND	Design/Resident Engineer/ Contractor		Standard					

Treated Wood Waste Such as Sign Posts and Guardrails.										
HAZ-2: SSP 36-4 Residue Containing Lead from Paint and Thermoplastic.	p.31	ISMND	Design Resident Engineer/ Contractor		Standard					
HAZ-3: SSP 7-1.02K(6)(J)(iii) for Lead Compliance Plan	p.31	ISMND	Design Resident Engineer/ Contractor		Standard					
HAZ-4: NSSP 14-11.17 for Asbestos Containing Pipe for potential of possible asbestos containing pipes in existing culverts. A hazardous materials survey is required for demolition of any structures that are potentially affected by ACM or LBP. If required, a survey should be conducted under the oversight of a California Division of Occupational Safety and Health Certified Asbestos Consultant and California Department of Public Health lead Inspector/Assessor and will serve to confirm the presence or absence of ACM and LBP through collection of bulk samples and laboratory analysis. Project special provisions should be prepared that direct the contractor on the management of hazardous building materials during construction.	p.31	ISMND	Design Resident Engineer/ Contractor		Non-Standard					

AIR QUALITY										
AQ-1: Fugitive Dust: Contractor must abide.	p.8	ISMND	Resident Engineer/ Contractor		Standard	Section 14-9				
AQ-2: Implement and follow Erosion Control and Air Quality Best Management Practices (BMPs).	p.8	ISMND	Resident Engineer/ Contractor		Standard	Implement Erosion Control and Air Quality BMPs				
AQ-3: Comply with MDAQMD Rule 403.2 for Fugitive Dust and Caltrans Standard Specification Section 14-9.	p.8	ISMND	Resident Engineer/ Contractor		Standard	Comply with rule 403 for Fugitive Dust.				
AQ-4: Comply with the Caltrans Standard Specification Section 10.4	p.8	ISMND	Resident Engineer/ Contractor		Standard					
BIOLOGICAL RESOURCES										
BIO-1: Prior to clearing or construction, the outer perimeter of the project work area will be demarcated to prevent damage to adjacent habitat and to provide visual orientation to the project limits. No construction activities (including grading or fill activity), materials, or equipment storage of any type will be permitted outside of the designated construction work area and staging areas. All construction equipment will be operated in a manner to	p.15	Natural Environment Study (NES)	Resident Engineer/ Contractor							

prevent accidental damage to nearby preserved areas. Areas where native vegetation is immediately adjacent to planned grading activities will be protected from accidental deposition of fill material.										
BIO-2: A biologist will monitor construction in the vicinity of native vegetation communities prior to and during vegetation removal to ensure that vegetation removal, BMPs, and all avoidance and minimization measures are properly implemented.	p.15	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							
BIO-3: A pre-construction presence/absence plant survey will be performed within the project limits prior to ground-disturbing activities. If special-status plant species are found on site, coordination with CDFW will be conducted to determine the appropriate avoidance, minimization, and mitigation measures required for the project.	p.15	NES	Resident Engineer/ Contractor Supplied Biologist							
BIO-4: Caltrans will submit the names and qualifications of biologists that it believes meet the minimum requirements to serve as a Contractor Supplied Biologists to USFWS for review	p.15	NES	Resident Engineer/ Contractor Supplied Biologist							

and authorization under the Biological Opinion prior to beginning onsite activities (forms at http://www.fws.gov/ventura/speciesinfo/protocols_guidelines/). Caltrans will determine whether the presence of a Contractor Supplied Biologists and approved desert tortoise monitors will be required during project activities as outlined in the "criteria for use in reaching appropriate determination" section of the Programmatic Biological Opinion and the submitted Appendix I notification form to USFWS. In general, where the risk to desert tortoises is low, the Contractor Supplied Biologist or an approved biological monitor will be present at the onset of the project to ensure protective measures are in place and will, if necessary (for example, for projects that will require a substantial length of time to complete), conduct periodic field checks to ensure compliance.										
BIO-5: Caltrans will designate a Contractor Supplied Biologist to be responsible for overseeing compliance with all protective measures. The Contractor	p.16	NES	Resident Engineer/ Contractor Supplied							

Supplied Biologist will immediately notify the Caltrans Resident Engineer of project activities that may be in violation of the PLACs (Permits, Licenses, Agreements, Contracts). In such an event, the Resident Engineer can halt all construction activities until all protective measures are being fully implemented, as determined by the Contractor Supplied Biologist.			Biologist/ Contractor							
BIO-6: The Contractor Supplied Biologist will have the authority to halt any activity, through the coordination with the Resident Engineer, that may pose a threat to desert tortoises and to direct movements of equipment and personnel to avoid injury or mortality to desert tortoise.	p.16	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							
BIO-7: Immediately prior to the start of any ground-disturbing activities and prior to the installation of any material demarcating the work area (e.g., staking, lath, fencing), clearance surveys for the desert tortoise will be conducted by the Contractor Supplied Biologist, as appropriate. The entire project area will be surveyed for desert tortoise and their burrows by a	p.16	NES	Resident Engineer/ Contractor Supplied Biologist							

Contractor Supplied Biologist or approved desert tortoise monitor before the start of any ground-disturbing activities following the 2010 field survey protocol (USFWS 2010) or more current approved protocol. If burrows are found, they will be examined by a Contractor Supplied Biologist to determine if desert tortoises are present. If a tortoise is present and the burrow cannot be avoided, USFWS and CDFW will be contacted. If desert tortoises are found at a project site where Caltrans (or the Contractor Supplied Biologist) had previously concluded they were unlikely to occur, Caltrans will contact USFWS and CDFW to determine if the implementation of additional protective measures would be appropriate.										
BIO-8: A Worker Environmental Awareness Program will be developed and presented by the Contractor Supplied Biologist prior to the start of construction activities. All onsite personnel, including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors,	p.16	NES	Resident Engineer/ Contractor Supplied Biologist							

inspectors, subcontractors, and delivery personnel, employed for the project will be required to participate in the program prior to performing any onsite work. The program will consist of a class presented by a Contractor Supplied Biologist or a video, provided the Contractor Supplied Biologist is present to answer questions. At a minimum, the program will include the following topics: (1) biology, conservation, identifying characteristics, legal status, and regulations protecting special-status species occurring or potentially occurring within the project site, including nesting birds; (2) responsibilities of the biological monitor; (3) delineation and flagging of adjacent habitat; (4) limitations on all movement of those employed on site, including ingress and egress of equipment and personnel, to designated construction zones (personnel will not be allowed access to adjacent native habitats); (5) onsite pet prohibitions; (6) use of trash containers for disposal and removal of trash; (7) project features and avoidance and minimization measures										

designed to reduce the impacts on special-status species and habitat and promote continued successful occupation of adjacent habitat areas; (8) the process required for construction personnel to report special-status species detections, including a chain of command and criteria for stopping work/minimizing impacts; and (9) the penalties for violations of state and federal laws. Supporting materials (e.g., wallet-sized cards or a one-page handout) with important information regarding special-status species will be provided to all construction personnel during the training program as a future reference and a reminder of the program's content.										
BIO-9: Workers will check under the vehicle each time prior to moving the equipment or vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the Contractor Supplied Biologist or an approved desert tortoise monitor, who will notify the Resident Engineer. The Resident Engineer must notify the Caltrans Environmental Stewardship and Biological	p.16	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							

Monitoring Branch. Workers will not be allowed to capture, handle, or relocate tortoises. Any such handling must be reported as described in the Reporting Requirements section of the Programmatic Biological Opinion (8-8-10-F-59; USFWS 2018).										
BIO-10 The area of disturbance will be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. This measure includes temporary haul roads, staging/storage areas, or access roads. Work area boundaries will be clearly and distinctly demarcated to minimize surface disturbance associated with vehicle movement. To the extent possible, a previously disturbed areas within the Caltrans right of way will be used for equipment storage, office trailer locations, and vehicle parking. The development of all temporary access and work roads associated with construction will be minimized and constructed without blading where feasible. Project-related vehicle traffic will be restricted	p.17	NES	Resident Engineer/ Contractor Supplied Biologist/ Approved Desert Tortoise Monitor/ Contractor							

to established roads, construction areas, staging/storage areas, and parking areas. The Resident Engineer, Contractor Supplied Biologist, or approved desert tortoise monitor will ensure that blading is conducted only where necessary.										
BIO-11 The Resident Engineer is responsible for ensuring that all protective measures are being fully implemented. If the Resident Engineer determines, or is notified by the Contractor Supplied Biologist, that one or more protective measures are not being fully implemented, he or she will halt all activities that are out of compliance until all problems have been remedied. All workers, Contractor Supplied Biologists, and biological monitors will be required to notify the Resident Engineer of any such problem they notice. The Resident Engineer must always contact the Caltrans Environmental Stewardship and Biological Monitoring Branch to resolve any unforeseen issues.	p.17	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							
BIO-12 Permanent or temporary exclusion fencing may be used to prevent entry	p.17	NES	Resident Engineer/ Contractor							

by desert tortoises into a work site, if Caltrans and the Contractor Supplied Biologist determine this measure is appropriate. Exclusion fencing, should it be deemed necessary, will be installed following USFWS guidelines (2005) or more current protocol. The Contractor Supplied Biologist will ensure that desert tortoises cannot pass under, over, or around the fence. If such a fence is used, Contractor Supplied Biologists or desert tortoise monitors will not be required to be present at the site at all times. However, the Contractor Supplied Biologist must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction surveys for tortoise and tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground-disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction surveys will be performed.			Supplied Biologist/ Contractor							
BIO-13 Upon locating a dead or injured tortoise within a	p.18	NES	Resident Engineer/							

project site, the Resident Engineer will immediately notify the Contractor Supplied Biologist who will then contact the Caltrans Environmental Stewardship and Biological Monitoring Branch. The Contractor Supplied Biologist will also notify USFWS within 24 hours of the observation via telephone. Written notification must be made to the appropriate USFWS field office within 5 days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).			Contractor Supplied Biologist/ Contractor							
BIO-14 If working outside of a desert tortoise-proof fenced area, auger holes or other excavations will be covered following inspection at the end of each workday to prevent desert tortoises from becoming trapped.	p.18	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							
BIO-15 When feasible or practicable, construction vehicles will be cleaned of all	p.18	NES	Resident Engineer/ Contractor							

mud, dirt, and debris from other sites prior to entering the project area. The purpose of this measure is to minimize the spread of weedy plant species that may degrade desert tortoise habitat.			Supplied Biologist/ Contractor							
BIO-16 Desert tortoise exclusion fence construction, should it be deemed necessary, would follow the guidelines in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2010), which is available at the Ventura Fish and Wildlife Office website (www.fws.gov/ventura). If needed, fencing that is tortoise-proof would be installed along any fence gate bottoms beginning at least 2 feet above the fence bottom and extending toward the ground, leaving less than a 1-inch gap (USFWS 2010). All desert tortoise exclusion fences and gates would be regularly maintained at a frequency sufficient to ensure that they would continually provide an effective barrier to passage of desert tortoises. Any installed desert tortoise exclusion fences would not cross washes. If washes and culverts are encountered, the desert tortoise exclusion fence would follow the wash to	p.18	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							

the roadway and either tie into the existing bridge or cross over the top of a culvert.										
BIO-17 During inspections and repairs of the demarcated work area, if any desert tortoises are observed, workers are to notify the Contractor Supplied Biologist and Resident Engineer. Any such incident will be reported to the Caltrans Environmental Stewardship and Biological Monitoring Branch and in the annual report.	p.18	NES	Resident Engineer/ Contractor Supplied Biologist							
BIO-18 After each shift, surveyor flagging tape will be attached to a conspicuous place on each piece of equipment in order to remind the operator and/or the Contractor Supplied Biologist to check under the equipment for desert tortoises prior to operating equipment during the next shift.	p.18	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							
BIO-19 To determine if burrowing owls are occupying the project limits or adjacent areas prior to construction, the first take avoidance survey following CDFW protocol (2012) will be conducted no more than 14 days prior to initiating ground disturbance activities,	p.18	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							

and a second survey will be conducted within 24 hours prior to ground disturbance. The survey will be conducted from civil twilight to 10 a.m. or 2 hours before sunset until evening civil twilight within areas providing suitable habitat for burrowing owl. The survey will include the proposed project limits and a 300-foot buffer if performed between February 1 and August 31 (nesting season) and a 100-foot buffer if conducted outside of the nesting season. If burrowing owls are present within 300 feet of project activities during the breeding season or within 100 feet of project activities outside of the nesting season, Measure BIO-21 or BIO-22 will be implemented, as applicable.										
BIO-20: If burrowing owls are found during pre-construction take avoidance surveys during the nesting season (BIO-20), the burrowing owls will be fully avoided by establishing an appropriate buffer in coordination with CDFW.	p.19	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							
BIO-21: If burrowing owls are found during pre-construction take avoidance surveys outside of the nesting season (BIO-20),	p.19	NES	Resident Engineer/ Contractor/ Authorized							

passive relocation by a qualified avian biologist will be conducted once it has been confirmed that pairing activities have not begun. Passive relocation efforts will be conducted in coordination with CDFW. If the burrowing owl is found to be paired and exhibiting potential nesting behavior, construction disturbance will not occur within a designated buffer determined in coordination with CDFW of the active burrow(s) until it is confirmed by the avian biologist that the pair is not nesting and that young are not present, or if present are independently foraging.			Biologist/ Qualified Avian Biologist							
BIO-22: Prior to the start of project construction, a daytime assessment will be conducted by a qualified bat biologist to reexamine structures that are suitable for bat use. If bat sign is observed at that time, then nighttime bat surveys will be conducted to confirm whether the structures with suitable habitat identified during the preliminary assessment are utilized by bats for day roosting and/or night roosting, to ascertain the level of bat foraging and roosting activity at	p.19	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							

each of these locations, and to perform exit counts to visually determine the approximate number of bats utilizing the roosts. Acoustic monitoring will also be used during these surveys to identify the bat species present and to determine an index of relative bat activity for that site on that specific evening.										
BIO-23: The Contractor Supplied Biologist will survey the BSA prior to construction to assess the potential for maternity roosts in the BSA. The surveys may include a combination of structure and structure inspection, sampling, exit counts, and acoustic surveys.	p.19	NES	Resident Engineer/Contractor Supplied Biologist							
BIO-24: The removal of mature trees and snags will be minimized to the greatest extent practicable. Prior to tree removal or trimming, large trees and snags will be examined by a qualified bat biologist to ensure that no roosting bats are present.	p.19	NES	Resident Engineer/Contractor Supplied Biologist/ Qualified Bat Biologist							
BIO-25: If bat maternity sites are identified during the preconstruction bat habitat assessment, then no	p.20	NES	Resident Engineer/ Contractor Supplied							

construction activities at that location will be allowed during the maternity season (i.e., April 1–August 31) unless a qualified bat biologist has determined the young have been weaned. If maternity sites are present, and it is anticipated that construction activities cannot be completed outside of the maternity season, then bat exclusion at maternity roost sites will be completed by the Contractor Supplied Biologist in consultation with CDFW either as soon as possible after the young have been weaned or outside of the maternity season or as otherwise approved by the qualified bat biologist in coordination with CDFW.			Biologist/ Qualified Bat Biologist/ Contractor							
BIO-26 A Nesting Bird Management Plan will be drafted to provide a comprehensive approach to handling nesting birds prior to the commencement of construction. It will include the following items: • If vegetation clearing is to occur during the avian nesting season (i.e., February 1–September 15), the designated biologist will conduct a preconstruction survey of	p.20	NES	Resident Engineer/ Contractor Supplied Biologist							

construction areas and adjacent habitat in the near vicinity no more than 72 hours prior to construction to identify the locations of avian nests. Should nests be found, an appropriate buffer will be established around each nest site by a qualified biologist/biological monitor until nesting is completed. • Nesting bird habitat within the BSA will be resurveyed during the breeding bird season if there is a lapse in construction activities longer than 7 days										
BIO-27 Preconstruction clearance surveys for sensitive wildlife species will be performed by a qualified biologist within 48 hours prior to construction to flush the species from the construction footprint. No nesting birds will be flushed during the nesting season. Bats will not be flushed but will be protected as specified in Section 4.3.3 of the Natural Environment Study. Amphibians, reptiles, and burrowing wildlife will be relocated from the site of temporary or permanent impacts as feasible during preconstruction clearance	p.20	NES	Resident Engineer/ Contractor Supplied Biologist							

surveys. Relocation sites will be within the project vicinity and will consist of suitable habitat to support these species.										
BIO-28 Equipment maintenance, lighting, and staging will occur only in designated areas, and will not block or impede movement through wildlife corridors.	p.20	NES	Resident Engineer/ Contractor Supplied Biologist/ Contractor							
BIO-29 The project limits of disturbance, including the upstream, downstream, and lateral extents on either side of any stream adjacent to the project footprint, will be clearly defined and marked in the field. The biological monitor will review the limits of disturbance prior to initiation of construction activities. The upstream and downstream limits of project disturbance, plus the lateral limits of disturbance on either side of the stream, will be clearly defined and marked in the field to ensure avoidance of jurisdictional areas.	p.20	NES	Resident Engineer/Contractor Supplied Biologist/ Contractor							

Appendix G SHPO Concurrence Documentation

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State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
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November 10, 2020

VIA EMAIL

In reply refer to: CATRA_2020_1022_001

Mr. David Price
Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, MS-27
Sacramento, CA 95814

Subject: Determination of Eligibility and Finding of No Adverse Effect for the Proposed Interstate 40 Median Regrade Project, San Bernardino County, California.

Dear Mr. Price:

On October 22, 2020, the Office of Historic Preservation (OHP) received a letter from the California Department of Transportation (Caltrans) for the above referenced undertaking. Caltrans is initiating consultation with the State Historic Preservation Officer (SHPO) in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA), as well as the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92* (5024 MOU). Pursuant to Stipulation VIII.C.6 of the Section 106 PA and 5024 MOU, and Stipulation X.B.2.b of the Section 106 PA, Caltrans is seeking SHPO comment on determinations of National Register eligibility and on a finding of no adverse effect without standard conditions. Enclosed with Caltrans' letter is a Historic Property Survey Report (HPSR) and attachments.

As currently proposed, the undertaking involves the grading and regrading of the center median (including cut and fill) and culvert work on I-40 from Post Mile (PM) 25 – 50. All work will occur within the center median and gore areas. All work will be within the Caltrans Right-of-Way (ROW). A more detailed description of the undertaking and area of potential effects (APE) is located on pages one and two of the HPSR.

Caltrans' efforts to identify historic properties that may be affected by the undertaking identified 16 cultural resources within the APE requiring evaluation according to the National Register of

Historic Places (NRHP) criteria. ESA-I40-Site-001P, 002P, 003P, 004P, 005P, -006P, -007P, -008P, -009P, and -010P are all prehistoric lithic scatters located on disturbed alluvial and/or desert pavement landforms. Six archaeological sites, including four multicomponent archaeological sites (P-36-001908, -002328, -005598, -014561) and two prehistoric archaeological sites (P-36-014564 and -020873) were also identified in the APE. In addition, sites P-36- 001908, -005598, -014561, -014564, and -020873 were identified as collectively comprising of an Archaeological Landscape related to Native American lithic procurement and reduction. One property, P-19-001908 was previously determined eligible for listing in the NRHP under Criterion D in 2010.

Caltrans has evaluated and determined that ESA-I40-Site-001P, 002P, 003P, 004P, 005P, -006P, -007P, -008P, -009P, and -010P are ineligible for listing on the NRHP, and is seeking SHPO concurrence on these determinations pursuant to Stipulation VIII.C.6 of the Section 106 PA and 5024 MOU. **I concur** with these determinations of ineligibility. Pursuant to Stipulation VIII.C.4, Caltrans is assuming the remaining six properties (P36-002328, -005598, -014561, -014564, and -020873, and the Archaeological Landscape) as eligible for listing on the NRHP under Criterion D, for the purposes of this undertaking only, due to large property size. Undertaking activities will occur within the boundaries of P36-002328, -001908, -005598, -014561, -014564, and -020873, and the Archaeological Landscape.

Caltrans has applied the Criteria of Adverse Effect, pursuant to Stipulation X.A. of the Section 106 PA and has determined that the undertaking will not adversely affect any of the historic properties within the APE for the following reasons:

1. Less than 0.5 percent of the historic properties' boundary will be affected;
2. The portions of the properties located within the I-40 median, and where project activities will occur contain either limited or no data potential;
3. Portions of the properties located in the I-40 median have also undergone previous disturbances that have compromised this portion of the properties' integrity; and
4. Construction activities within the properties located in the I-40 median are limited to the placement of fill which would cover (or cap), and thereby preserve in place the portions of the properties located within the area of direct impact (ADI).
5. Caltrans will avoid adverse effects to the portions of the properties located outside of the I-40 median/ADI through the establishment of Environmentally Sensitive Areas (ESAs) and Archaeological Monitoring Areas (AMAs).

Pursuant to Stipulation X.B.2.a of the Section 106 PA, Caltrans has found that the proposed undertaking will have no adverse effect to historic properties given the above reasons. Based on a review of Caltrans' submitted documentation and proposed conditions to implement ESAs and AMAs to avoid adverse effects to historic properties within the APE, **I do not object**.

If you have any questions, please contact State Historian Natalie Lindquist at natalie.lindquist@parks.ca.gov or Associate State Archaeologist Alicia Perez at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
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Caltrans has evaluated and determined that ESA-I40-Site-001P, 002P, 003P, 004P, 005P, -006P, -007P, -008P, -009P, and -010P are ineligible for listing on the NRHP, and is seeking SHPO concurrence on these determinations pursuant to Stipulation VIII.C.6 of the Section 106 PA. **I concur** with these determinations of ineligibility. Pursuant to Stipulation VIII.C.4, Caltrans is assuming the remaining six properties (P36-002328, -005598, -014561, -014564, and -020873, and the Archaeological Landscape) as eligible for listing on the NRHP under Criterion D, for the purposes of this undertaking only, due to large property size. Undertaking activities will occur within the boundaries of P36-002328, -001908, -005598, -014561, -014564, and -020873, and the Archaeological Landscape.

Caltrans has applied the Criteria of Adverse Effect, pursuant to Stipulation X.A. of the Section 106 PA and has determined that the undertaking will not adversely affect any of the historic properties within the APE for the following reasons:

1. Less than 0.5 percent of the historic properties' boundary will be affected;
2. The portions of the properties located within the I-40 median, and where project activities will occur contain either limited or no data potential;
3. Portions of the properties located in the I-40 median have also undergone previous disturbances that have compromised this portion of the properties' integrity; and
4. Construction activities within the properties located in the I-40 median are limited to the placement of fill which would cover (or cap), and thereby preserve in place the portions of the properties located within the area of direct impact (ADI).
5. Caltrans will avoid adverse effects to the portions of the properties located outside of the I-40 median/ADI through the establishment of Environmentally Sensitive Areas (ESAs) and Archaeological Monitoring Areas (AMAs).

Pursuant to Stipulation X.B.2.a of the Section 106 PA, Caltrans has found that the proposed undertaking will have no adverse effect to historic properties given the above reasons. Based on a review of Caltrans' submitted documentation and proposed conditions to implement ESAs and AMAs to avoid adverse effects to historic properties within the APE, **I do not object**.

If you have any questions, please contact State Historian Natalie Lindquist at natalie.lindquist@parks.ca.gov or Associate State Archaeologist Alicia Perez at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer