MISSION CREEK RESTORATION PROJECT – PHASE 1 POST CONSTRUCTION

Mission Creek/Tunnel Trail Road, Santa Barbara County, California

Prepared For

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April 10, 2020

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APPENDICES

1. Phase 1

1.1 Original Phase 1 Plan

This document outlines Southern California Edison's (SCE) completed Phase 1 activities for the Mission Creek Access Road Project (the "Project"). The Project is located along portions of Spyglass Ridge Road, Tunnel Road and Mission Creek in Mission Canyon, Santa Barbara County, California. The Project site access coordinates are 34.465018, -119.712531. The Project is located along steep canyon access roads in the Mission Canyon Watershed. The existing drainage conditions within the Project vicinity will not be modified as a result of the Phase 1 work. The land within the work footprint of Phase 1 is primarily existing access roads, some of which are paved. All work conducted as part of Phase 1 was covered under the County's Emergency Permit (Permit) approved on March 24, 2020 (Case Number: 20EMP-00000-00001).

Previously completed work under the issued Permit included the removal of rocks, boulders, and other loose debris hazards from the access road on the slopes above Jesusita Trail. The work included the removal of rocks and stabilizing the outer edges of the access roads above the foot trail to prevent additional material from sliding down. This work was started on February 3, 2020, and was completed by February 5, 2020.

The main objective of the additional Phase 1 work is to enhance public safety along the rock wall located along Tunnel Road. In addition to previously outlined completed activities, SCE originally proposed to install temporary k-rail topped with chain link fence on the inner (uphill) side of the access road for approximately 340 feet from the Road Area 3 to the Road Area 4 location, as shown on the Updated Phase 1 Work Map in Appendix A. Check dams that were previously placed along the road in this area will be removed during placement of the k-rails. K-rails will be placed with gaps, where deemed necessary, to allow check dams to be placed. These measures will reduce the potential for rockfall materials reaching the road surface as well as reduce sediment migration during rain events. Additionally, the chain link fence will provide a barrier for pedestrian safety and deter loitering in the subject area. SCE will maintain a 12-foot road width following k-rail placement to the furthest extent practicable.

1.2 Recap of Phase 1

The Phase 1 work began on March 20, 2020, with trail closure and safety briefing, and ended March 27, 2020, at 5:00 p.m. with City concurrence and full reopening of the trail. Work completed during Phase 1 included cleanup and removal of sediment and rock along Tunnel Road and installation of 10-foot k-rail sections in the originally proposed area along Road Area 3 to Road Area 4, rock wall area. The K-rail section along the rock wall was topped with a chain link fence. K-rails were installed in additional areas based on identified heightened risks and recommendations by SCE Engineering. SCE Engineering determined that some of the installed k-rail sections did not require chain-link fencing. Sections of k-rail were pinned together in most areas; in some areas, gaps were left to allow installation of gravel bag check dams between k-rail sections. Approximately 630 feet of k-rail was installed as part of the Phase 1 activities. Refer to the As-Built Map in Appendix B for installed k-rail locations.

Notable Items:

- A bird nest was identified on March 21, 2020, along the rock wall area. A 50-foot buffer was established and marked by ESA flags. Vehicles were allowed to move through the buffer but were not permitted to park or idle within the buffer. A biologist was onsite daily to monitor activities during construction activities.
- Additional k-rail placement occurred at heightened high-risk areas identified by SCE Engineering.

- There are three locations where the desired 12-foot road width was not achieved. The three locations are adjacent to the rock wall. Refer to Appendix B for identified areas.
- Signs stating "Watch for Rocks" were placed at the top and bottom of the rock wall. These signs will remain at the site.
- Hikers continued to access the trail, despite barricades and Trail Closed signs. In response, SCE provided improved traffic control starting on March 24, which included traffic control personnel posted at the top and bottom of the trail to inform and deter hikers.

2. Scope of Work

The original and as-built scope of work are outlined in the following sections.

2.1 Original Scope of Work

2.1.1 PART 1: K-Rail/Fencing Placement – Proposed Schedule 3/16/2020 – 3/20/2020

1. Traffic control will be in place to direct vehicle and pedestrian traffic on Tunnel Road and Spyglass Ridge Road.
2. A skid steer/bobcat will remove any loose material at the base of the rock wall to make a clear area for k-rail placement. Material removed will be transported back to existing stockpile near Road Area 9 in a dump trailer and stored for future use.
3. K-rail pieces will be brought to the site on a flatbed truck the day they are to be placed.
4. K-rail pieces will be off-loaded at the access road gate using a 15k reach fork and those pieces will then be taken back to the rock wall section.
5. A second 15k reach fork will position k-rail pieces along the rock wall face, as close to the wall face as possible.
6. K-rail pieces will be placed with gaps, where necessary, to allow placement of check dams at the gap locations.
7. Once the k-rail pieces are in place, a combination of the skid steer/bobcat and/or hand crews will remove material along the outside (downhill) road edge (see hatched areas on drawing for details) to maintain 12-foot road width. Methods utilized will ensure no additional material is discharged to the creek. Material removed from the outside road edge will be transported back to existing stockpile (Near Road Area 9) in a dump trailer.
8. Once all k-rail pieces are in place, 4-foot-tall chain link fencing will be installed on top of the k-rail, to a total maximum height of 6 feet 8 inches.
9. Previously installed storm water best management practices (BMPs) in all Phase 1 work areas will be adjusted according to the Erosion and Sediment Control Plan (ESCP) in Appendix C.

2.1.2 PART 2: Steel Plate Removal for Bridge Assessment by Architectural Historian 3/18/2020

1. The removal of the steel plates will be supervised by a Qualified SWPPP Practitioner (QSP) and an Architectural Historian. The QSP will ensure that no sediment or rock is inadvertently discharged into the creek.
2. A 15k reach fork will be used to remove all six steel plates covering the bridge.
3. Plates will be stockpiled adjacent to the bridge during the assessment. The assessment will consist of documenting all bridge components to determine possible impacts to the bridge and associated features.

4. Once assessment is complete, all six steel plates will be re-installed using the 15k reach fork and left in place until future phases of construction are completed or near complete.

2.2 Completed Scope of Work

Any deviations from the originally proposed scope of work are provided below:

Scope deviations:

- The Phase 1 work began on March 20, 2020 and ended March 27, 2020, at 5:00 p.m.
- Temporary K-rails (without fencing on top) were added in additional slope locations where SCE Engineering identified heightened risk of rock fall hazard potential. Refer to Sheet 1 in Appendix B.
- Existing K-rail along Road Area 2 which was proposed to be moved to the inside/toe of slope was not moved due to the berm material/conditions on the outside road edge. As such, new temporary K-rails were installed in this location. Refer to Sheet 3 in Appendix B.
- In Road Area 4 the 12-foot road width was not able to be achieved at three locations and are identified in Appendix B, Sheet 4. The road width should accommodate typical car/truck passage, but large truck/trailer access may not be possible without the removal of the K-rail and/or berms.

3. Safety Plan

The original Safety Plan and the observations from the Safety Plan are outlined in the following sections.

3.1 Original Safety Plan

Safety Plan must be kept on-site at all times and will include:

1. All field personnel shall wear proper PPE (e.g. hard hats, reflective vests, work boots)
2. Tailboards 2 times per day (or more as needed)
3. Evacuation routes
4. Nearest medical facilities
5. Hazard identification
6. Construction monitor to check Project Activity Level (PAL) daily
7. Red flag or other high-risk conditions may result in work shutdown
8. Two-way radios will be used for on-site communication
9. Check-in sheet to ensure all SCE employees/contractors checked in to site have safely left at end of day
10. Ensure pedestrian controls are in place
11. When trail is open, flaggers will hold hikers in place until it is safe for them to pass. When pedestrians are released to hike through construction area, work will cease until last pedestrian passes the flagger on other side of work
12. Crews to have fire suppression equipment (including water buffalo, water truck, hand tools, fire extinguisher) on site at all times.

3.2 Modifications to Original Safety Plan and Observations in the Field

In addition to the originally proposed safety plan, the following safety procedures and activities were implemented during the Phase 1 work:

Modifications:

- Per City/County recommendations the following traffic/pedestrian warning signs were placed:
    - Two electronic message board signs were placed on Mission Canyon Road and Tunnel Road.
    - Type III barricade was placed at trailhead entrance with the Road Closed sign.
    - Rockfall warning signs were placed on both ends of Road Area 4.
- Tailboards were conducted at the beginning of each shift, and whenever the scope of work and/or situation on the ground changed.
- Joint Tailboards were conducted once the decision was made to allow two different contractors to work on the access road concurrently.
- Fire Hazard Conditions and Red Flag Warnings were briefed daily at Tailboard and whenever a change in conditions warranted.
- Overnight Security was established and greatly assisted in mitigating pedestrian traffic along the access road prior to the arrival of crews and traffic control.

3.2.1 Safety Observations in the Field

The following safety procedures and observations were observed during the Phase 1 work:

- The contractor adhered to the agreed upon Hazard Assessment and Safety Plan.
- Tailboards were conducted daily and when the situation on the ground and/or scope of work changed.
- Tailboards were thorough and specific to the day's identified scope of work.
- Key roles and responsibilities were briefed and clearly understood; Three Way Communication was consistently emphasized.
- Additional topics discussed included proper driving speeds, precautions while traveling along the access road, awareness of hikers transiting the area, crew actions while hikers transited the project site, utilizing ground guides, and the need for spotters in areas with overhead concerns.
- At all times, SCE and contractor personnel wore appropriate PPE.
- Fire Hazard Threat was briefed daily and fire mitigation requirements were presented to the crew and clearly understood by all.
- Coordination with Traffic Control Personnel was exceptional. After every Tailboard a separate meeting was conducted to specifically identify the locations of the day's activities, the primary concerns of the crew and traffic control, and the communication plan to ensure safety of transiting pedestrians.
- Contractor safeguarding of transiting pedestrian traffic was a primary concern throughout the project.
- Overnight Security, when established, consistently informed and turned away numerous pedestrians that would have been on the trail prior to our crew's arrival; this greatly increased our situational awareness of traffic along the access road.
- When a pedestrian was encountered during construction activities, the following procedures would occur:
    - A radio call would be made across the Project announcing the concern.
    - ALL parties would acknowledge the call.
    - ALL activities along the access road would halt.

    - Once confirmed that the route was clear, the pedestrian would be escorted through the area.
    - Once the pedestrians had transited the area, an "ALL CLEAR" announcement would be made.
    - Construction activities would then continue.
- There were occasions when, due to the constraints of the day and logistics issues, the Traffic Control Team had to be augmented with additional support. These occasions were rare and easily handled by the BC Tree and SCE Team.

4. Environmental Requirements

4.1 Original Environmental Requirements

4.1.1 General Measures

a. Crew will adhere to avoidance (e.g., no grading, no vegetation trimming or removal) and monitoring requirements within established Environmentally Sensitive Areas (ESAs). ESA locations are indicated by flagging/staking or verbally communicated by the on-site environmental monitor.
b. Vehicles and equipment must remain on existing paved or maintained unpaved roads. No woody shrubs and trees may be trimmed, crushed, removed, or otherwise impacted.
c. Crew will be instructed to minimize work area size and dispose of all trash (e.g. old equipment, water bottles, food, or other project/equipment related) within appropriate containers.
d. Vehicle speed within the access routes is 15 mph, unless otherwise posted.

4.1.2 Biological Requirements

1. A qualified biological monitor is required to survey the workspace daily prior to starting work to determine if sensitive wildlife or plants are present around the project area. If any resource is encountered, the biological monitor will work with the crews to establish a no work buffer to avoid impacts to the resource.
2. A qualified biological monitor will conduct nesting bird/woodpecker surveys for any work scheduled between February 1 and October 31. If an active nest is located in the survey area, the biological monitor will establish appropriate buffers and monitor the nesting birds to ensure work does not impact the behavior of the species. If disturbance to an active bird nest cannot be avoided, then temporary work stoppage is required and notification to the SCE's Environmental Department is required to determine next steps.
3. The biological monitor will conduct tailboards with crews daily to update status of biological resources in the area.
4. Prior to the start of work, the biological monitor will inspect their workspace for any injured or dead wildlife. In addition, the biological monitor will look in holes and trenches, construction material, and equipment for any trapped wildlife.
5. All vehicles and equipment/tools must be cleaned and free of mud, soil, and plant material prior to entering the Project site. All equipment will be cleaned at a wash station or with compressed air, pressure washers, brushes, or similar equipment prior to entering the site.
6. Crews will not move or disturb downed logs and leaf litter or other areas that may be habitat for reptiles and amphibians.
7. Crews will not touch or feed any wildlife.
8. Crew will avoid driving and walking over or working near all animal burrows.

9. To reduce the potential for impacts to wildlife (e.g. potential ringtail), no nighttime work is allowed.
10. If additional staging or work areas are identified during construction, the SCE biologist will determine if additional biological resources surveys are required prior to their use.

4.1.3 Cultural Requirements

1. An architectural historian will be present during the temporary removal of the steel plates to ensure that no damage to the existing bridge structure and associated features occurs.
2. The architectural historian and/or SCE archaeologist will conduct a tailboard with construction and environmental personnel on the day the plates are removed and replaced to instruct all crews on how to avoid damage to the resource.
3. During the tailboard, the crews will be instructed to contact the SCE archaeologist if the bridge or associated features are inadvertently impacted and/or previously unidentified archaeological resources (Native American or historical artifacts), fossils, or human remains are encountered.
4. If additional staging or work areas are identified during construction, the SCE archaeologist will determine if additional cultural resources surveys are required prior to their use.

4.1.4 Waters and Wetlands Requirements

1. No work in jurisdictional limits will occur as part of this Phase 1 scope.

4.1.5 Stormwater Requirements: Erosion and Sediment Control Plan (ESCP)

1. Phase 1 is currently covered under an approved ESCP.
    a. A full-time Qualified Stormwater Practitioner (QSP) will be on-site during work hours.
2. BMP Removal for K-Rail Placement and Berm Maintenance:
    a. Remove installed check dams on inner (uphill) slope.
    b. Partial removal of installed Erosion Control Blankets (berm area only) for road widening activities may occur at specific limited locations (see Appendix B).
3. ESCP Measures to be implemented during construction:
    a. Good Housekeeping (i.e., trash disposal, material and waste management);
    b. Material storage areas controls;
    c. Soil Disturbing Activities; and
    d. Site Access and Track Out Controls.
4. BMP Installation and Application (Temporary Stabilization):
    a. Sediment Controls:
        i. Check dams and fiber rolls may be installed as necessary during and after construction is completed as determined by the QSP.
            1. Biodegradable BMPs (burlap-wrapped) will be used in place of plastic at all times.
    b. Erosion Controls - Temporary Stabilization:
        i. Hydraulic Mulch will be applied to pre-determined disturbed areas at a 3,000 lbs/acre of wood fiber hydraulic mulch to disturbed soils for temporary stabilization. EarthGuard Fiber Matrix has been selected as the preferred Hydraulic Mulch for this project and the specification sheet can be found in the ESCP. Overspray onto vegetation will be avoided. Hydraulic Mulch application will primarily occur on the berms and adjacent slopes, but not on the road.

        ii. Hydraulic Mulch will have no plastic in the mulch or invasive seeds/plant material in mulch.
    c. Erosion Control Blankets shall be re-secured where previously installed on outer (downhill) road edge/bermed areas.
5. BMP Maintenance, Inspection, and Repair:
    a. BMP inspections will be conducted to confirm BMPs are being properly installed and maintained.
    b. The following maintenance tasks shall be performed on an as-needed basis:
        i. Removal of sediment from barriers and perimeter controls;
        ii. Replacement or repair of worn or damaged silt fence fabrics or fiber rolls;
        iii. Emptying/maintenance of waste containers;
        iv. Soil/stockpile material management;
        v. Sweeping to ensure track-out does not occur; and
        vi. Other BMP maintenance as defined in each fact sheet.
    c. Inspections will be conducted daily.

4.2 Environmental Measures Executed During Phase 1

4.2.1 General Measures Taken During Phase 1

a. Crews adhered to avoidance measures (e.g., no grading, no vegetation trimming or removal) and monitoring requirements within established Environmentally Sensitive Areas (ESAs). ESA locations were indicated by flagging/staking or verbally communicated by the on-site environmental monitor. These included two bird nests that were identified during Phase 1.
b. Vehicles and equipment remained on existing paved or maintained unpaved roads. No woody shrubs and trees were trimmed, crushed, removed, or otherwise impacted.
c. Crew were instructed to minimize work area size and dispose of all trash (e.g. old equipment, water bottles, food, or other project/equipment related) within appropriate containers. All material was removed at the end of each workday.
d. Vehicle speed within the access routes was 15 mph, unless otherwise posted.
e. Material removed will be stored for use in future phases in approved locations, as noted in the Updated Phase 1 Work Map in Appendix A.

4.2.2 Biological Requirements Executed During Phase 1

The biological surveys and daily work activity monitoring were performed by SWCA over nonconsecutive days during March 12 and March 27, 2020. Two active Bushtit (*Psaltriparus minimus*) nests were observed during pre-construction surveys and monitoring. Buffers where established around each nest; however, one nest was located so close to the required work area that a biological monitor had to watch the nest and stop work (if needed) whenever crews had to preform work within the buffer. None of the Phase 1 work activities impacted the Bushtit nests, which remained active through the duration of the work. In addition, pre-construction survey identified and flagged two special-status plants, Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) and Plummer's baccharis (*Baccharis plummerae* ssp. *plummerae*). No impacts occurred to either species because the flagging and monitoring effectively protected these plants from impacts. A Biological Survey and Monitoring Summary Report can be found in Appendix C.

4.2.3 Cultural Requirements Executed During Phase 1

The requirements associated with cultural resources were implemented in the field on March 31, 2020. The metal plates placed on the historic bridge were temporarily lifted to allow for the documentation of the bridge including visual inspection, photography and description of current conditions. The results of this effort will be captured in an Evaluation of Significance report to determine if any potential impacts occurred to the bridge as a result of SCE's activities. The report will be prepared by SCE's consultant for submittal to the City, the County, and the State Historic Preservation Office (SHPO). Due to safety concerns, the metal plates were put back on the bridge at the conclusion of the March 31, 2020 fieldwork activities with no damage to the structure. No additional cultural resources (Native American or historical artifacts), fossils, or human remains were encountered, during the work associated with the Phase 1 efforts. A cultural resources assessment evaluating the significance of the bridge is currently underway and will be provided upon finalization.

4.2.4 Waters and Wetlands Requirements Executed During Phase 1

Crews adhered to waters and wetlands measure requiring no work within jurisdictional limits. No impacts to jurisdictional limits occurred during Phase 1.

4.2.5 Storm Water Requirements Executed During Phase 1

A summary of Phase 1 BMP Stormwater maintenance activities can be found in Appendix D.

1. Phase 1 was covered under an ESCP. A set of Permit Registration Documents was submitted to the State Water Board via SMARTS, and the WDID was issued on March 30, 2020. Activities at the Project site are now authorized under National Pollutant Discharge Elimination System Construction General Permit (CGP) coverage as a Risk Level 2 project, and will comply with all associated requirements, including preparation of a Rain Event Action Plan prior to storm events, weekly inspections, and runoff sampling during storm events. Sampling points will be based on safe access.
    a. A QSP was onsite at all times during Phase 1 work.
2. BMP Removal for K-Rail Placement and Berm Maintenance:
    a. Check dams were removed to allow for k-rail placement.
    b. Removal of Erosion Control Blankets was not necessary for Phase 1 work to continue.
3. ESCP Measures to be implemented during construction
    a. All planned ESCP measures were implemented during Phase 1, including good housekeeping, material storage, soil disturbing activities, dust mitigation and trackout management. Materials were stored in the designated laydown areas, and stockpiles were covered with erosion control blankets and surrounded by linear sediment controls (burlap wrapped fiber rolls). The gate area was swept daily and kept clean at all times.
4. BMP Installation and Application (Temporary Stabilization):
    a. Sediment Controls
        i. Check dams were installed in multiple locations along the roads, including locations along the rock wall, adjacent to the bridge, along the 200 yards past the bridge, as protection for some McCarthy drains, and along the left fork past the Y.
        ii. All BMPs are biodegradable.
    b. Erosion Controls – Temporary Stabilization:

i. Hydraulic mulch was applied to all disturbed areas at a rate of 3,000 lb/acre. A product substitution was made due to limited availability of EarthGuard Fiber Matrix. A similar product called ProMatrix was used. Both products are composed of a wood fiber matrix, a photodegradable dye, and biodegradable binder. Overspray onto vegetation was avoided to the maximum extent possible.

ii. Hydraulic mulch had no plastic and was weed free. No seeding was done during the effort.

c. Erosion control blankets at Creek Site 2 were replaced on March 31, 2020, immediately following completion of Phase 1.

5. BMP Maintenance, Inspection, and Repair:
   a. BMP inspections were conducted to confirm proper installation.
   b. Maintenance was performed on an as-needed basis during Phase 1 and will continue to be performed for the full time the Project site is under CGP coverage, estimated to be through October 1, 2020.
   c. Inspections were conducted daily.

APPENDIX A

MISSION CREEK PHASE 1 WORK MAP – SUBMITTED PRIOR TO WORK

* Temporarily lift steel plates
for cultural resource inspection
at existing vehicular bridge

0 125 250 500 Feet

N

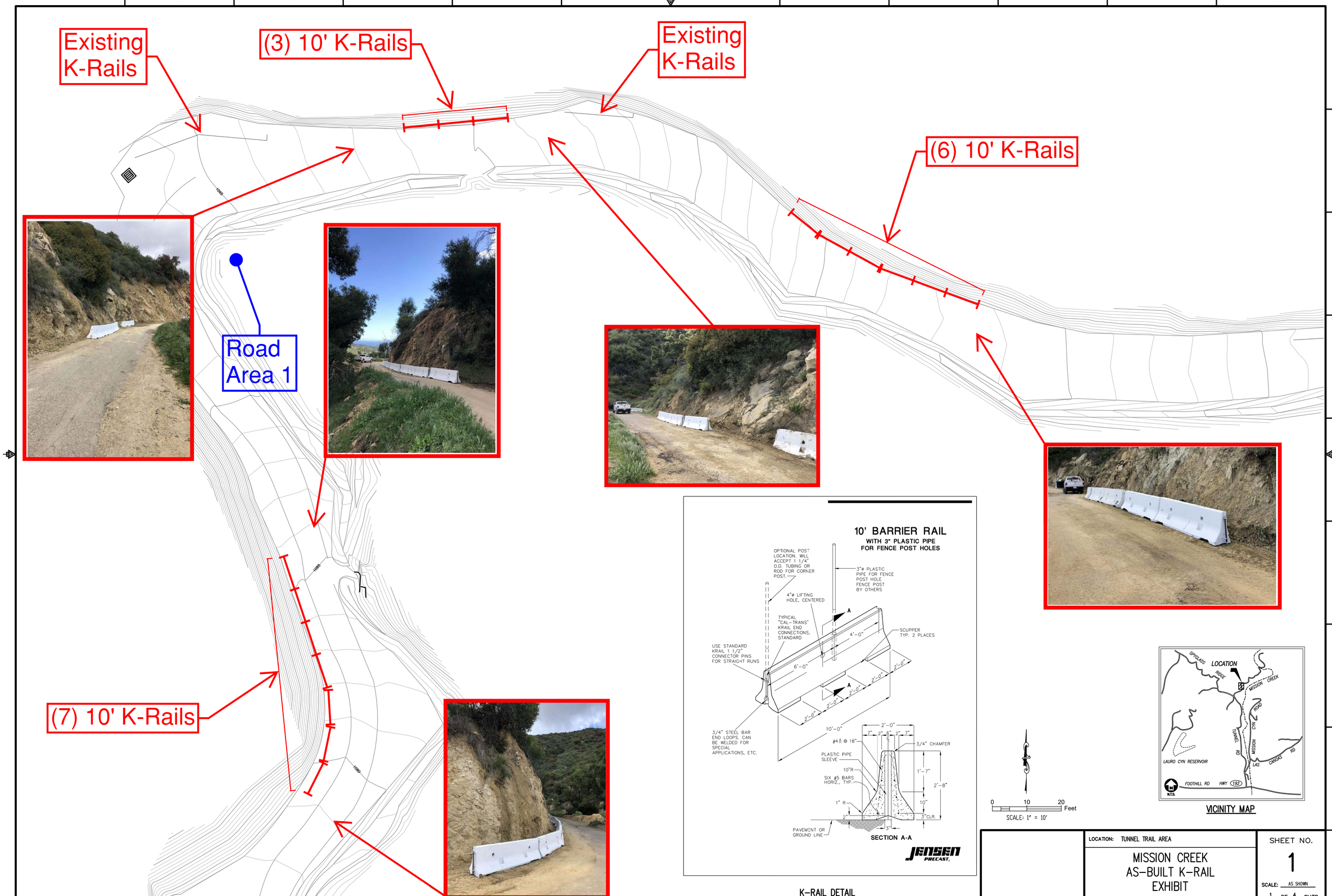
LOCATION: TUNNEL TRAIL AREA

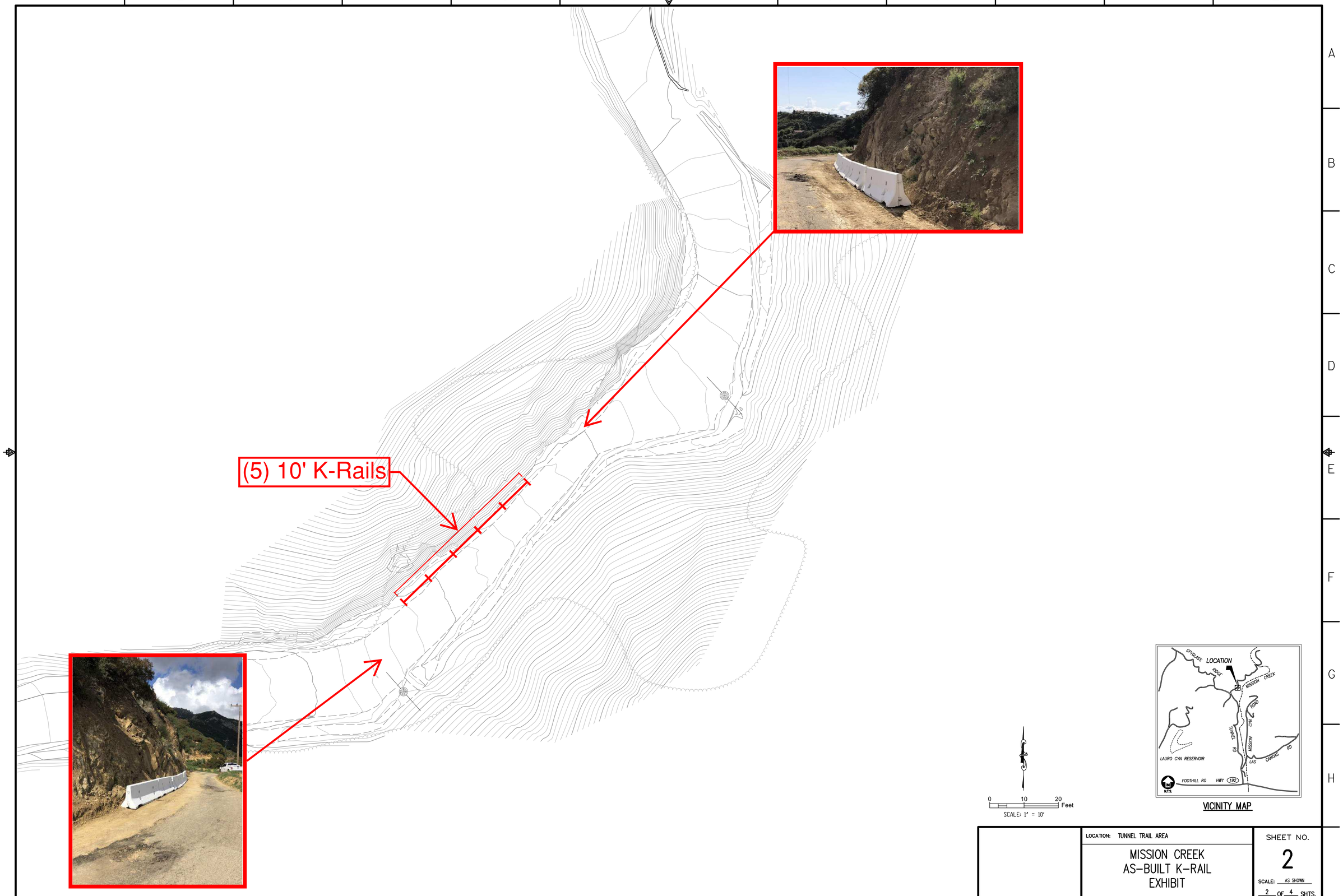
MISSION CREEK
UPDATED PHASE 1 WORK

 | REV. A | MAR 9, 2020

APPENDIX B

MISSION CREEK AS-BUILT PHASE 1 WORK MAP


Existing K-Rails
(3) 10' K-Rails
Existing K-Rails
(6) 10' K-Rails
Road Area 1
(7) 10' K-Rails
1085
1080
10' BARRIER RAIL
WITH 3" PLASTIC PIPE FOR FENCE POST HOLES
OPTIONAL POST LOCATION. WILL ACCEPT 1 1/4" O.D. TUBING OR ROD FOR CORNER POST.
3"ø PLASTIC PIPE FOR FENCE POST HOLE. FENCE POST BY OTHERS
4"ø LIFTING HOLE, CENTERED
TYPICAL "CAL-TRANS" KRAIL END CONNECTIONS, STANDARD
SCUPPER TYP. 2 PLACES
USE STANDARD KRAIL 1 1/2" CONNECTOR PINS FOR STRAIGHT RUNS
3/4" STEEL BAR END LOOPS. CAN BE WELDED FOR SPECIAL APPLICATIONS, ETC.
4'-0"
6'-0"
2'-0"
10'-0"
#4 @ 18"
3/4" CHAMFER
PLASTIC PIPE SLEEVE
10"R
SIX #5 BARS HORIZ., TYP.
1'-7"
2'-8"
10"
3"CLR.
1" R
PAVEMENT OR GROUND LINE
SECTION A-A
JENSEN PRECAST
K-RAIL DETAIL
0 10 20 Feet
SCALE: 1" = 10'
SPYGLASS RIDGE
LOCATION
MISSION CREEK
TUNNEL RD
MISSION CYN ROAD
LAS CANDAS RD
LAURO CYN RESERVOIR
FOOTHILL RD
HWY 192
N.T.S.
VICINITY MAP
LOCATION: TUNNEL TRAIL AREA
MISSION CREEK
AS-BUILT K-RAIL
EXHIBIT
SHEET NO.
1
SCALE: AS SHOWN
1 OF 4 SHTS.

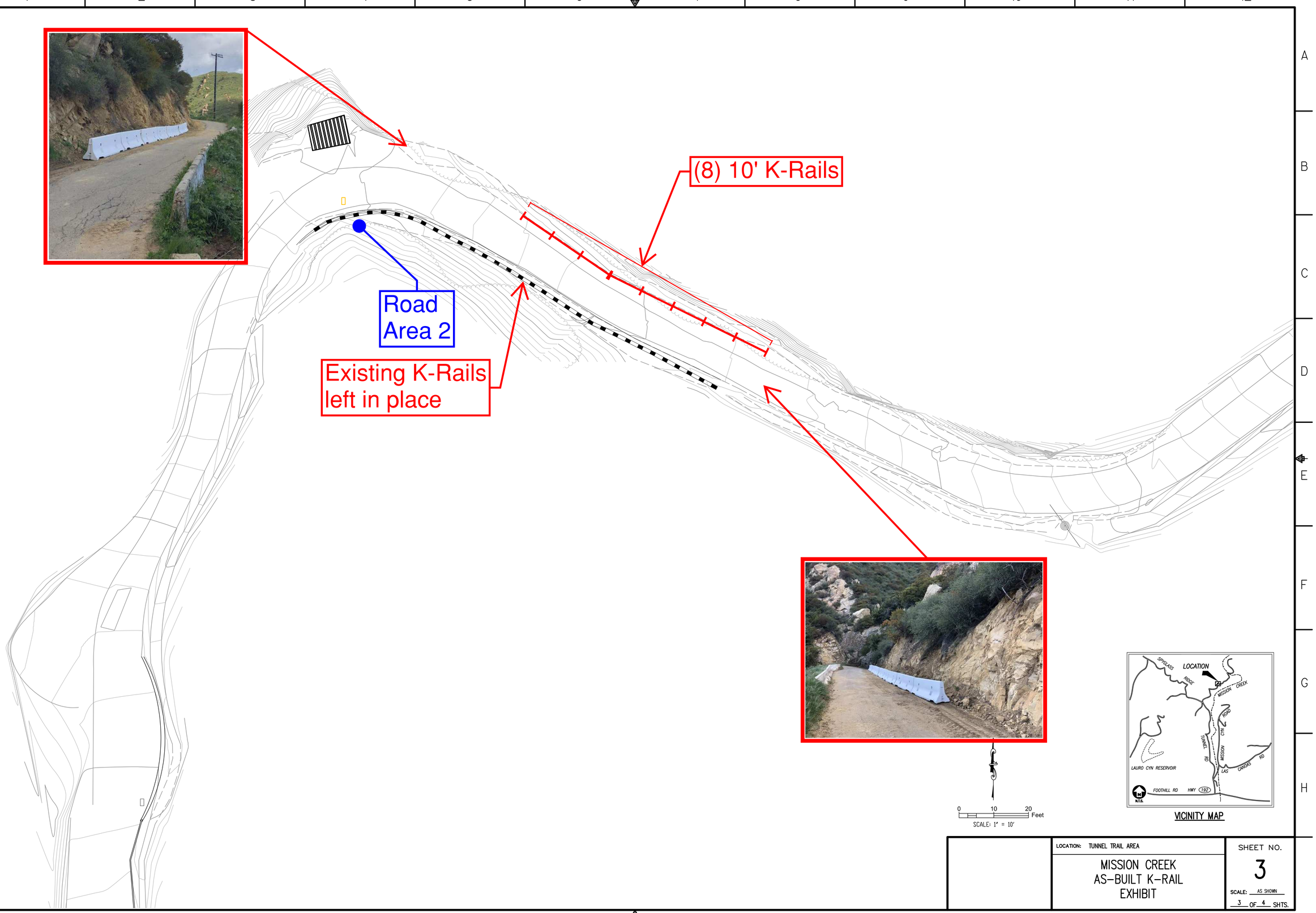


VICINITY MAP

LOCATION: TUNNEL TRAIL AREA

MISSION CREEK
AS-BUILT K-RAIL
EXHIBIT

SHEET NO.
2
SCALE: AS SHOWN
2 OF 4 SHTS.



VICINITY MAP

LOCATION: TUNNEL TRAIL AREA

MISSION CREEK
AS-BUILT K-RAIL
EXHIBIT

SHEET NO.
3
SCALE: AS SHOWN
3 OF 4 SHTS.

(5) 10' K-Rails

Road Area 4

Photo #2

(8) 10' K-Rails

(9) 10' K-Rails

Road width <12'

(12) 10' K-Rails

Existing K-Rails

Road width <12'

Existing K-Rails

(3) 1' Gaps between each K-Rail Section

Photo #1

Road width <12'

PROPOSED MATERIAL REMOVAL TO MAINTAIN 12' WIDTH (TO BE HAULED TO DESIGNATED MATERIALS STORAGE)

EXISTING VEHICULAR BRIDGE

BMP'S TO BE RE-ESTABLISHED AFTER K-RAIL INSTALLATION

TEMPORARILY LIFT STEEL PLATES FOR CULTURAL INSPECTION

NOTE:
* BOTH 5' AND 10' LENGTH SEGMENTS OF K-RAIL BARRIERS WILL BE USED. K-RAILS TO BE PLACED WITH GAPS, WHERE NECESSARY, TO ALLOW PLACEMENT OF GRAVEL BAG CHECK DAMS.

TEMPORARY K-RAILS* WITH CHAIN LINK FENCE (MAX. 6'-8" HIGH), SEE K-RAIL DETAIL HEREON

EXISTING K-RAIL

EXISTING ROCK FALL FENCE

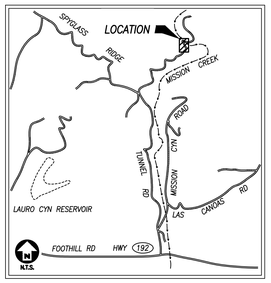
BMP'S TO BE RE-ESTABLISHED AFTER K-RAIL INSTALLATION

EXISTING K-RAIL

PROPOSED MATERIAL REMOVAL TO MAINTAIN 12' WIDTH (TO BE HAULED TO DESIGNATED MATERIALS STORAGE)

Photo #1 - After chainlink fence installation

Photo #2 - After chainlink fence installation



VICINITY MAP

0 10 20 Feet
SCALE: 1" = 10'

LOCATION: TUNNEL TRAIL AREA

MISSION CREEK
AS-BUILT K-RAIL
EXHIBIT

SHEET NO.
4
SCALE: AS SHOWN
4 OF 4 SHTS.

APPENDIX C

PHASE 1 BIOLOGICAL SURVEY AND MONITORING SUMMARY

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

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April 6, 2020

Brian Bielfelt
Southern California Edison
2244 Walnut Grove Avenue
Rosemead, California 91170

Re: Biological Survey and Monitoring Summary Report for Phase 1 of the Mission Creek Project, Santa Barbara County, California / SWCA Project No. EC0026.10.02

Dear Mr. Bielfelt:

This Biological Survey and Monitoring Summary Report summarizes the results of the nesting bird and rare plant surveys and daily monitoring activities performed by SWCA Environmental Consultants (SWCA) at the request of Southern California Edison (SCE) in support Phase 1 of the Mission Creek Project (the project) in Santa Barbara County, California. The biological surveys and daily work activity monitoring were performed by SWCA biologists Austin Xu, Ryan Myers and Marshall Webb and SWCA botanist Maisie Borg over nonconsecutive days starting March 12 and ending March 27, 2020. Two active Bushtit (*Psaltriparus minimus*) nests and several special-status plant species were located during the survey and monitoring period, and avoidance area buffers were established to protect them during work activities. None of the Phase 1 work activities directly impacted these resources. Additional nesting bird surveys and continued biological monitoring is recommended when future project activities are planned in the area to ensure that additional disturbance is minimized, and impacts are avoided.

SITE LOCATION, PROJECT DESCRIPTION, AND GENERAL HABITAT CONDITIONS

The project was located along Spyglass Ridge Road north of the community of Mission Canyon and west of Mission Creek, in Santa Barbara County, California. The Phase 1 project activities included road debris removal for concrete barrier (i.e., type K rail) and fence installations along Spyglass Ridge Road that were needed to reduce rock fall hazards for public safety (Figure 1 and Photographs 1–5). Each of these activities occurred within a defined action area that included the road prism and a 25-foot survey buffer around the associated disturbance footprint. In addition to the action areas for debris removal and K-rail and fence installation, three material and equipment staging sites located in approved and previously disturbed open areas were included in the project area (see Figure 1). SWCA biologists and botanists surveyed the project area for nesting birds and rare plants prior to the commencement of the Phase 1 project activities; they also conducted monitoring during performance of those activities. SWCA cultural resources staff were present to monitor the project's bridge inspection activities (see Figure 1 and Photograph 6); the summary of those efforts are covered in a separate report.

Vegetation communities immediately adjacent to the work sites generally include coast live oak woodland, coastal sage scrub, and chaparral, with coast live oaks (*Quercus agrifolia*) and wild lilac species (*Ceanothus* spp.) dominating the landscape. A busy public hiking trail runs through project area.

Nesting Bird and Rare Plant Surveys—March 12 and 13

Performed by: SWCA biologist Austin Xu and SWCA botanist Maisie Borg

Site Conditions:

- March 12**,** 2020, the weather was 57 degrees Fahrenheit (°F) and partly cloudy at 0645 when the survey began; the survey ended at 1100 to avoid the approaching hazardous storm conditions.
- March 13, 2020, the weather was 54°F with light to heavy drizzle occurring throughout the day from 0645 when survey began, to survey conclusion at 1330.

Results: One active Bushtit nest was located on March 12 within the K-rail action area (Photograph 7); a pair of Bushtit were seen carrying unknown items into the nest and remained active during the first day of survey, but the survey period that day was ended early since weather conditions worsened with the storm's arrival. No activity at the nest was observed the following day in the rainy conditions. A 150-foot buffer was established around the Bushtit nest until status of the nest (inactive or active) could be confirmed.

Six populations comprising 16 total individuals of Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), which has a 1B.2 California Rare Plant Rank (CRPR), were located within the planned action areas of Phase 1 and just outside the 25-foot road buffer (see Figure 1; Photograph 8). There were also five populations comprising approximately 16 individuals of Plummer's baccharis (*Baccharis plummerae* ssp. *plummerae*), which has a 4.3 CRPR, found within the K-rail action area road buffer and along the road buffer towards the Jesusita trail staging area (Photograph 9). All rare plants were marked and flagged for avoidance.

During the survey, the SWCA biologist noted pre-work activities by SCE crews working on related tasks near the Mission Creek. The work included using a bobcat to carry fallen debris from the road to some loader trucks, which was being overseen by SCE stormwater lead.

NESTING BIRD SURVEY AND SAFETY JOB-WALK—MARCH 18

Performed by: SWCA biologist, Ryan Myers

Site Conditions:

- March 18, 2020, the weather was 60°F and sunny from 0700 to 1145.

Results: Upon arrival at the site, the SWCA biologist observed the known Bushtit nest for approximately two hours and witnessed two adult males bringing nest materials and performing maintenance to the nest. No female was observed, and the nest was presumed to be in the incubation stage. During the job walk with SCE representatives, the biologist discussed the active Bushtit nest, logistics, safety, applicable best management practices, and other environmental concerns within the action area. With SCE's confirmation, the buffer size surrounding the nest was reduced to 50 feet as the species is known to be generally tolerant of human activities and the nest location allowed it to be physically out of harm's way by passing equipment.

BIOLOGICAL MONITORING—MARCH 20–21 AND 24–27

Performed by: SWCA biologists, Ryan Myers, Austin Xu, and Marshall Webb

Site Conditions:

- March 20, 2020, the weather was mostly cloudy, and temperatures ranged from 50°F at 0730 to a high of 60°F by early afternoon. The temperature reduced to 58°F by the time work activities ended at 1600.

Results: SWCA biologist, Ryan Myers, monitored K-rail installation activities near the Bushtit nest throughout the day and no changes in behavior were observed; the birds continued to bring nesting material to the nest (Photograph 10). A single individual California scrub-jay (*Aphelocoma californica*), which is a species known to predate nests, was observed in the branches above the nesting site. Bushtit activity resumed 45 minutes after the California scrub-jay left. All action areas were surveyed prior to the start of any construction activities and no incidents occurred.

Site Conditions:

- On March 21, 2020, the weather was mostly cloudy, and temperatures ranged from 51°F at 0745 to a high of 61°F by 1300 and remained so until work activated ended at 1700.

Results: SWCA biologist, Austin Xu, monitored K-rail installation activities at the Bushtit nest and noted frequent visits and material carries throughout the day from 0800 to 1400. A single California Scrub-jay was observed foraging in nearby bay laurel trees by the SWCA biologist, but this bird did not go near the Bushtit nest. The SWCA biologist then followed the SCE crew's work activities southwest down the road toward the project area's gated entrance. Additional K-rail installation areas were surveyed in this area, and no nesting birds were observed. No incidents occurred.

Site Conditions:

- March 24, 2020, the weather was partly cloudy, and temperatures ranged from 45°F at 0700 and rose to 56°F by midday and remained so until the work activities ended at 1530.

Results: SWCA Biologist, Marshall Webb, monitored fence pole and guideline installation activities that began further south of the nesting site. By 1130, a Bushtit was observed in a tree adjacent to the tree housing the nest. No noticeable nesting behavior observed. The Bushtit activity was likely limited due to poor weather conditions. No activity was observed at the nest itself. No incidents occurred.

Site Conditions:

- March 25, 2020, the weather was mostly cloudy, and temperatures averaged 46°F from 0700 to 1500 when work activities ended.

Results: SWCA biologist, Marshall Webb, monitored fencing installation activities. A pair of Bushtit were observed around the nest around 1045, and when approached by the biologist, they expressed defensive behavior. The biologist backed away from tree and monitored from a distance. Foraging activity continued (Photograph 11). Bushtit activity was likely limited due to cold and near rainy weather conditions. No incidents occurred.

Site Conditions:

- March 26, 2020, the weather was sunny with 15% cloud cover; temperatures ranged from 42°F at 0700 to a high of 60°F by 1200 and remained so until work activities ended by 1515.

Results: SWCA biologist, Austin Xu, monitored additional K-rail installation activities closer to the trail entrance at five additional locations (see Figure 1). At 0745, the biologist observed a Bushtit carrying an insect to another nest near K-rail area 1 (see Figure 1 and Photographs 12 and 13). A 50-foot buffer was flagged around the nest along the road, and any vehicle that was staged within the buffer was moved elsewhere. The monitor observed that the Bushtit remained active during the temporary disturbance within the buffer area caused by the SCE crew using a Bobcat excavator to clear debris for the K-rail installations (Photograph 14). The Bushtit did not appear to be at all distressed by the nearby work activities. Between 0830 and 0930, the SWCA biologist conducted a survey for K-rail areas 2 through 5 for nests and other biological resources. At K-rail area 4, the SWCA biologist flagged four Santa Barbara honeysuckle for avoidance (see Figure 1 and Photograph 15). No other nests or resources observed at K-rail areas 2 through 5. At 0945, the SWCA biologist returned to K-rail area 1 to monitor the Bushtit nest again. He observed at least two different adults, including a female, carrying insects to the nest. The birds continued this behavior for the next 1.5 hours. At 1115, while the crew was on break, the biologist visited the other known Bushtit nest near the bridge. The SWCA biologist immediately observed an adult carrying material to the nest. This Bushtit nest appeared more intact than previous visits. By 1145, the crew resumed work and continued to install K-rails in area 1 and the biologist continued to monitor the newly found nest. The Bushtit remained active and were presumed to be feeding nestlings. The additional flagged rare plants were avoided. No incidents occurred.

Site Conditions:

- March 27, 2020, the weather was sunny with less than 5% cloud cover; temperatures ranged from 45°F at 0700 to a high of 67°F by 1500 when work activities ended.

Results: SWCA biologist, Austin Xu, monitored inspection cleanup activities and remained with the nest while the bridge inspection for cultural resources occurred later in the afternoon. At 0815, the biologist returned to observe the previously identified Bushtit nest at K-rail area 1 and observed an adult Bushtit visiting the nest. At 0845, the biologist arrived at the other Bushtit nest near the bridge. Upon arrival, the biologist observed a California Scrub-jay had raided the Bushtit nest, but it did not appear the scrub-jay had taken anything from the Bushtit nest. During this time, there were vehicles parked within the buffer because the bridge inspection task was blocking access to the nearest equipment storage area (Photograph 16). From 1115 to 1345, the biologist monitored the Bushtit nest near the bridge and observed Bushtit carrying material to the nest multiple times, despite that fact that it had been raided by a scrub-jay earlier in the morning. From 1345 to 1430, the crew made minor adjustments to some of the K-rails along the road, but this construction activity did not appear to affect the Bushtit behavior at this nest. No incidents occurred.

OBSERVED NON-SPECIAL-STATUS WILDLIFE

Non-special-status wildlife observed during the March survey period included California Quail (*Callipepla californica*), Mourning Dove (*Zenaida macroura*), Anna's Hummingbird (*Calypte anna*), Acorn Woodpecker (*Melanerpes formicivorus*), Nuttall's Woodpecker (*Picoides nuttallii*), Northern Flicker (*Colaptes auratus*), California Scrub-jay (*Aphelocoma californica*), Oak Titmouse (*Baeolophus inornatus*), Bushtit (*Psaltriparus minimus*), Wrentit (*Chamaea fasciata*), Bewick's Wren (*Thryomanes bewickii*), House Wren (*Troglodytes aedon*), Canyon Wren (*Catherpes mexicanus*), California Thrasher (*Toxostoma redivivum*), Spotted Towhee (*Pipilo maculatus*), and Yellow-rumped Warbler (*Setophaga coronata*).

Flyover observations included Turkey Vulture (*Cathartes aura*), Red-tailed Hawk (*Buteo jamaicensis*), and Cooper's Hawk (*Accipiter cooperii*).

Sincerely,

Francesca Massarotto Petersen, B.S.
Assistant Project Manager; Biologist

ATTACHMENT A

Site Map

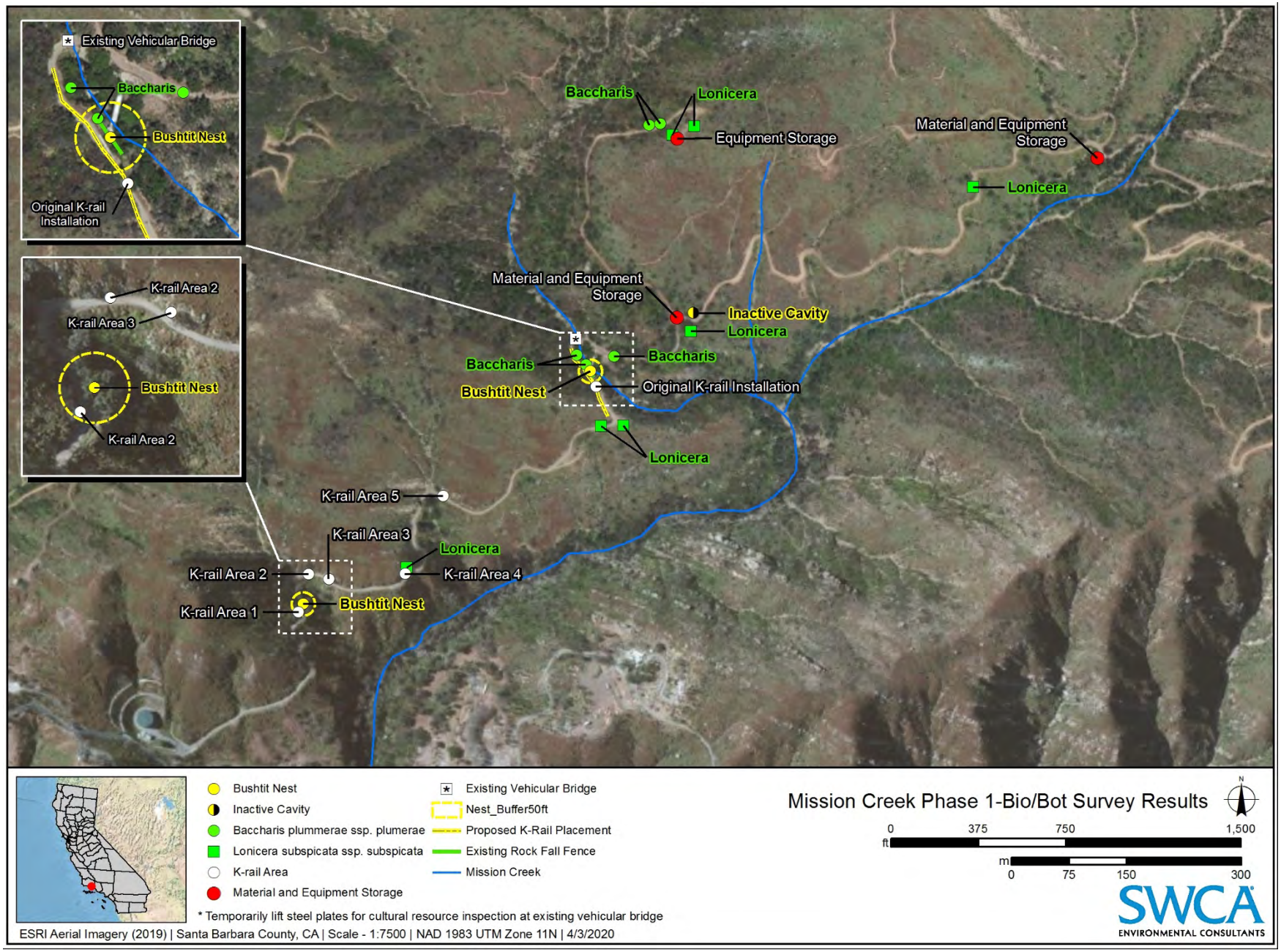


Figure 1. Field support results shown on the project site for Mission Creek Phase 1.

ATTACHMENT B

Field Photographs

Photograph 1. Looking northeast, March 18, Spyglass Ridge Road rock fall debris from a storm just days prior, preventing access.

Photograph 2. Looking south, March 20, start of K-rail preparations south of the Bushtit nest buffer.

Photograph 3. Looking south, March 21, K-rails being placed within the Bushtit nest buffer.

Photograph 4. Looking north, March 24, crew setting posts with Quikrete mixture, south of the Bushtit nest.

Photograph 5. Looking southwest, March 25, crew sawing off excess tops of poles, approaching the Bushtit nest buffer.

Photograph 6. Facing northeast, March 27, crew lifting the steel plates on bridge for inspection. A SWCA cultural resources staff representative was present to monitor the task.

Photograph 7. Looking east, March 12, Bushtit nest located near the previously installed fencing.

Photograph 8. Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) (CNPS List 1B.2)

Photograph 9. Plummer's baccharis (*Baccharis plummerae* ssp. *plummerae*) (CNPS List 4.3)

Photograph 10. Looking southeast, March 21, at Bushtit nest in a coast live oak tree (*Quercus agrifolia*).

Photograph 11. March 25, Bushtit foraging within the work site near the Bushtit nest buffer.

Photograph 12. Looking east, March 26, at the general location of a new Bushtit nest.

Photograph 13. March 26, closeup of new Bushtit nest.

Photograph 14. Looking southwest, March 26,
crew installing K-rails within the new Bushtit nest buffer.

Photograph 15. Looking southwest, March 26, crew installing K-rails, while avoiding flagged *Lonicera subspicata* var. *subspicata* (CNPS List 1B.2) on the lower clifface.

Photograph 16. Looking north, March 27, vehicles stopped within the Bushtit nest buffer due to work happening at the bridge that was blocking the nearest staging area.

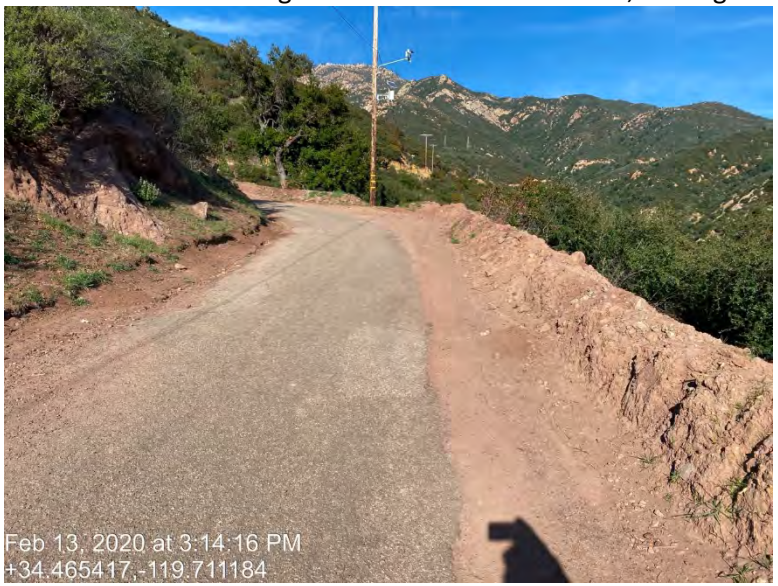
APPENDIX D

PHASE 1 STORMWATER SUMMARY AND PHOTO LOG

Before Phase 1

After Phase 1

The storm drain at the gate was cleared of sediment, and a gravel bag check dam was added.



All loose berm areas were sprayed with hydromulch from the entry gate to Road Area 10, and up the left fork to the towers. Portions of the steep section on the left fork were protected using erosion control blanked because the hydromulch vehicle was not able to climb the steep slope.

Before Phase 1

After Phase 1

The rock wall area is protected with k-rail, chain link fence, gravel bag check dams, and hydromulch.

Creek areas 1a and 1b are protected with erosion control blanket. This was completed prior to Phase 1 commencement.

Before Phase 1

After Phase 1

Creek Area 2 was protected with erosion control blanket prior to Phase 1 commencement.

Accumulated water and mud were removed from the low area near the bridge. Also, a Narrow Road sign was placed at top and bottom of the rock wall, as seen in the right photo.