

Natural Environment Study

(Minimal Impacts)

State Route 1 in Monterey County

District 05-MON-1-PM 63

EA: 05-1H800

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STATE OF CALIFORNIA
Department of Transportation

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1. Summary

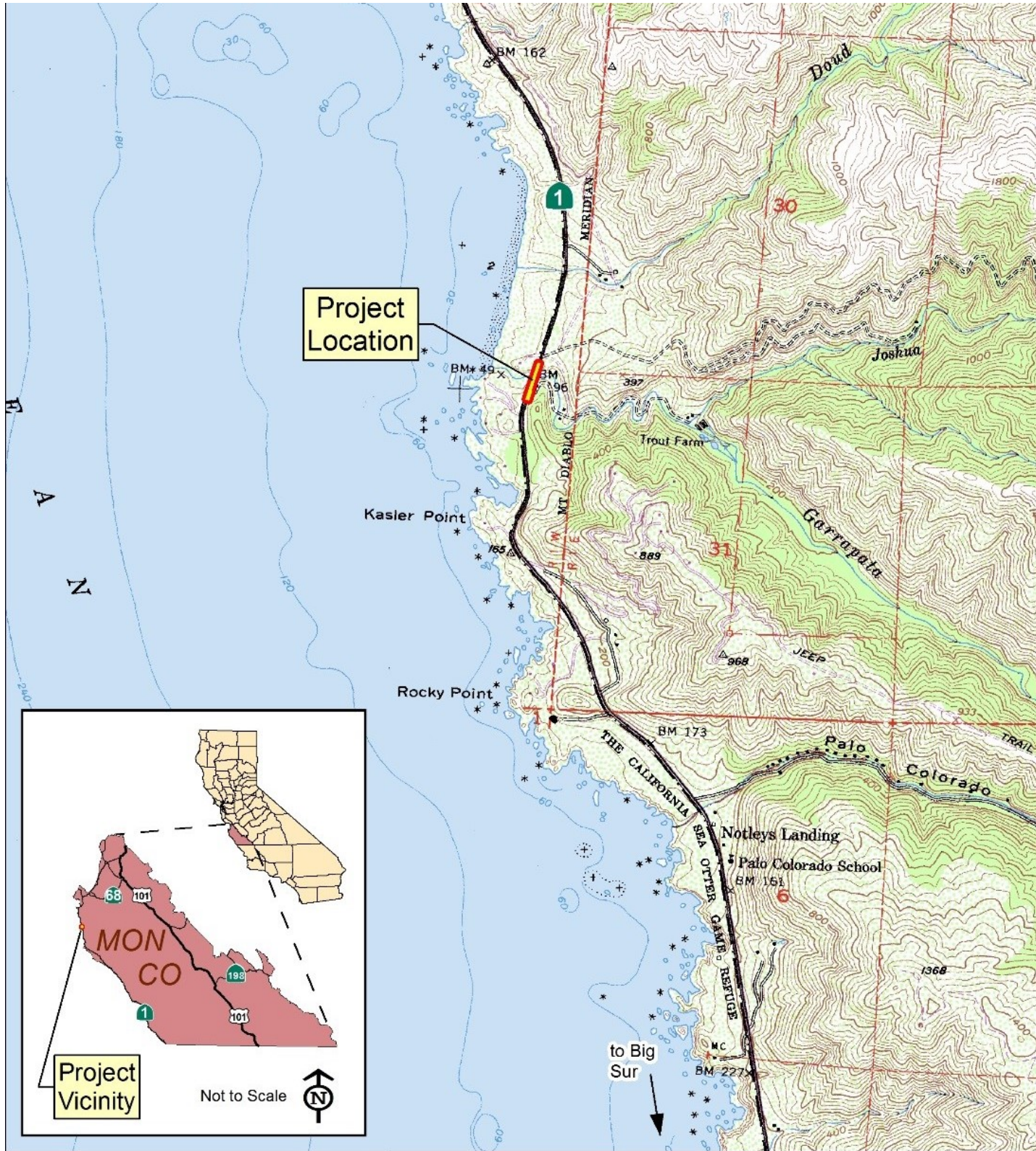
Caltrans proposes to replace the deteriorated nonstandard concrete baluster bridge rail and approach railing on the Garrapata Creek Bridge (No. 44-0018) located on State Route 1 (SR-1) in Monterey County, approximately 11.3 miles south of Carmel-By-The-Sea (Figure 1). The purpose of the project is to ensure the safety and reliability of SR-1.

The Garrapata Creek Bridge Rail Replacement Project is needed because the existing rails do not meet current traffic safety standards, and portions of the existing Garrapata Creek Bridge rails have developed severe cracking caused by deterioration of concrete and reinforcing steel. Existing vehicle pull outs will be used by the contractor for staging. The locations and types of biological surveys within the BSA were based on preliminary plans of the proposed project as provided by Caltrans project engineers (Appendix A).

The purpose of this Tier 2 Natural Environment Study (Minimal Impact) is to describe and analyze potential impacts to biological resources, and this report includes the results of literature and database searches, and field surveys conducted to determine the presence of special-status plant and wildlife species. No special-status plant species were observed during appropriately timed floristic surveys. Protocol surveys for the federally endangered Smith's blue butterfly (*Euphilotes enoptes smithi*) were conducted in 2018 and 2019. No Smith's blue butterflies were observed. One California species of special concern, a deceased Monterey big-eared woodrat (*Neotoma macrotis luciana*) was discovered under a bridge abutment. Measures have been incorporated to avoid impacts to woodrats. Garrapata Creek is federally designated critical habitat for south-central California coast steelhead (*Oncorhynchus mykiss irideus*); however, this habitat would not be affected by the proposed project.

The Federal Endangered Species Act Section 7 effects determination is that the proposed project would have no effect on federally listed species or designated critical habitat. This project would not require permits from the California Department of Fish and Wildlife, the U.S. Army Corps of Engineers, or the Regional Water Quality Control Board. The proposed project occurs in the coastal zone and may require a Coastal Development Permit (or waiver) from the California Coastal Commission.

Figure 1: Project Location and Vicinity Map



2. Introduction

This Natural Environment Study (minimal impacts) (NESMI) provides technical information and reviews the project to assess its effects on special-status species and communities. This NESMI has been prepared to provide information for the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) environmental review processes, with Caltrans regulation, policy, and guidance. The Federal Highway Administration (FHWA) is a source of funding for the project, and Caltrans has been assigned the authority to act as the lead federal agency on FHWA-funded projects.

The Garrapata Creek Bridge (Bridge No. 44-0018) is located on State Route 1 in Monterey County at postmile (PM) 62.97, approximately 10 miles south of Carmel-by-the-Sea (see Figure 1). This project proposes to replace the guardrails along the bridges to ensure the safety and reliability of SR 1 at this specific location. There are no permanent impacts associated with this project. Temporary impacts would consist of clearing vegetation for a temporary access road to allow equipment and worker foot traffic. This temporary access road lies immediately adjacent to the bridge on the south-east side. The dominant vegetation in the impact area is non-native iceplant (*Carpobrotus* sp.) with small patches coastal scrub mixed in.

3. Study Methods

A query of the California Natural Diversity Database (CNDDDB) was originally requested and reviewed in August 2016, and an updated list was received on August 24, 2020. The search area encompassed the USGS 7.5-minute quadrangle surrounding the project features (Soberanes Point) (Appendix B). A request for an official USFWS species list from Ventura USFWS office was made via the USFWS Information, Planning, and Conservation System (IPAC) website (USFWS 2020) on August 25, 2020 (Appendix C). In addition, an Official Species List was obtained from National Marine Fisheries Service (NMFS) West Coast Region-California Google Earth tool on August 25, 2020 (Appendix D). In addition to the information obtained from CNDDDB, USFWS, and NMFS, the California National Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2002) provided additional information on rare plants known to occur in and adjacent to the project vicinity. The species on the CNDDDB, USFWS, NMFS, and CNPS lists were evaluated for their potential to occur within the project area (see Section 4).

The BSA is defined as the area that may be directly, indirectly, temporarily, or permanently impacted as a result of project activities. The area of potential impact (API) and BSA were surveyed by foot and buckwheat plants were mapped using a Trimble global positioning system (GPS) unit. Studies conducted for this project included botanical surveys for sensitive plant species, general reconnaissance-level wildlife surveys, and protocol-level Smith's blue butterfly (*Euphilotes enoptes smithi*) surveys. The Big Sur Coast Land Use Plan, which was adopted by the Monterey County Board of Supervisors on January 9, 1996 was reviewed in regard to Environmental Sensitive Habitat Areas (ESHAs) per the Local Coastal Program for Monterey County. Botanical surveys for sensitive plants and reconnaissance wildlife surveys were conducted by Caltrans Biologists in 2018, and 2019. The botanical surveys were floristic (i.e., every plant observed was identified to species, subspecies, or variety as applicable) and were conducted when target species would be flowering and identifiable. Botanical surveys followed the protocol guidelines of USFWS (2000) and CDFW (2018). Plants were identified with dichotomous keys using *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). A list of species observed is included as Appendix E. General reconnaissance-level wildlife surveys coincided with the botanical surveys.

Protocol surveys for Smith's blue butterfly (*Euphilotes enoptes smithi*) were conducted on July 12, July 19, July 27, August 3, and August 10, 2018 and on July 18, July 30, and August 7 in 2019 (Table 1: Biological Surveys and Survey Personnel). Surveys were conducted in accordance with the *Protocol for presence-absence surveys of the endangered Smith's blue butterfly on the Los Padres National Forest in Monterey and northern San Luis Obispo counties, CA.* (Arnold 2002).

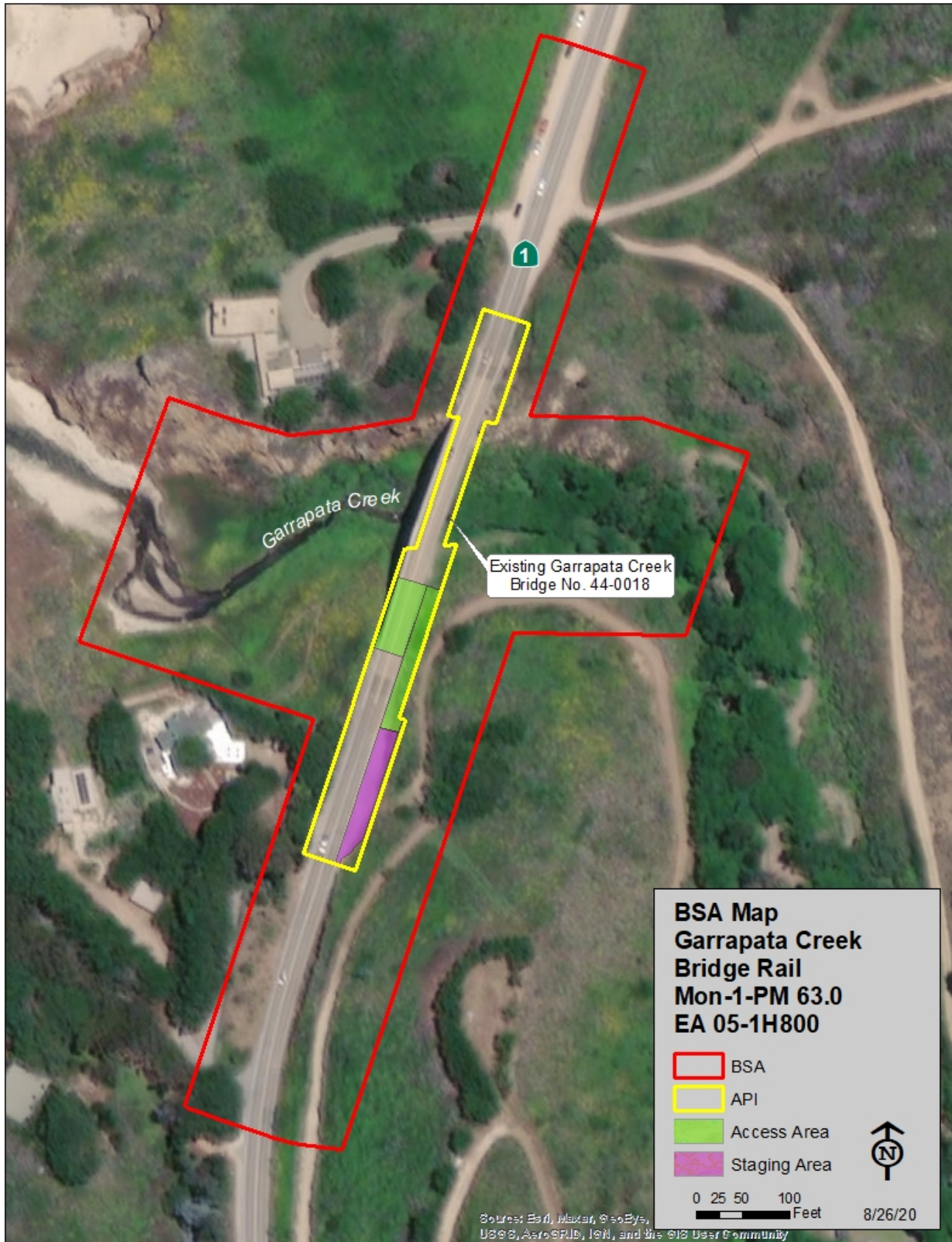
Table 1. Survey Dates, Type, and Personnel

Date	Survey Type	Survey Personnel
October 23, 2017	Field review/ Botanical surveys/general wildlife survey	Caltrans biologist Andrew Domingos
March 5, 2018	Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos and Mindy Trask
April 11, 2018	Field review/ Botanical surveys/general wildlife survey	Caltrans biologist Andrew Domingos
May 9, 2018	Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos, Mindy Trask and SWCA biologist John Moule
July 12, 2018	Smith's blue butterfly protocol/Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos and Michaela Robbins
July 19, 2018	Smith's blue butterfly protocol/Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos, Stephanie Herbert and SWCA biologist John Moule
July 27, 2018	Smith's blue butterfly protocol/Field review/ Botanical surveys/general wildlife survey	Caltrans biologist Andrew Domingos and SWCA biologist Geoff Hoetker
August 3, 2018	Smith's blue butterfly protocol/Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos, Amy Milan and SWCA biologist Geoff Hoetker
August 10, 2018	Smith's blue butterfly protocol/Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos, Mindy Trask and SWCA biologist John Moule
September 11, 2018	Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos and Stephanie Herbert
July 18, 2019	Smith's blue butterfly protocol/Field review/ Botanical surveys/general wildlife survey	Caltrans biologist Andrew Domingos, Stephanie Herbert, and Patrick Scott
July 30, 2019	Smith's blue butterfly protocol/Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos and Tori Escobar
August 7, 2019	Field review/ Botanical surveys/general wildlife survey	Caltrans biologists Andrew Domingos and Tori Escobar

Limitations that may Influence Results

Surveys were timed to optimize the potential for confirming presence/absence of special-status plant and animal species. Special-status animal species with the potential to occur in the project area may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of special-status species may also fluctuate through time.

Figure 2. Biological Study Area



4. Environmental Setting

4.1. Description of the Existing Biological and Physical Conditions

The Biological Study Area (BSA) is defined as the area that may be directly, indirectly, temporarily, or permanently impacted by construction, construction-related activities, and vehicles. Caltrans design engineers determined an Area of Potential Impact (API) and a Staging Area that include the areas needed to work around the bridge abutments and an area to stage materials, equipment and vehicles. The BSA includes the API, the Staging Area, and a buffer around both (Figure 2).

Following are descriptions of the existing physical and biological conditions in the BSA. The BSA occurs on a coastal terrace along the Big Sur Coast on SR-1, between the Santa Lucia Mountains and the Pacific Ocean. Elevations vary from 25 to 32 meters (83 and 106 feet) above mean sea level. Winter temperatures in the region average 51° Fahrenheit (°F) and summer temperatures average 60°F, with annual average precipitation of 19.85 inches. Garrapata Creek is an intermittent creek with headwaters in the Santa Lucia Mountains that outlets into the Pacific Ocean approximately 700 feet downstream of the project area. Characterizations of natural vegetation communities follow Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986) and A Manual of California Vegetation (Sawyer et al. 2009), where applicable. According to the Soil Survey Geographic (SSURGO 2018) Database, the soils present in the BSA consist of Arroyo Seco (gravelly sandy loam), Junipero (coarse-loamy), and Fluvents stony (sandy loam), which are typical of the Coast Range in the region.

The existing natural habitat in the BSA consists of iceplant mats (*Carpobrotus* sp.), ruderal/disturbed areas, and coastal scrub growing along steep slopes. Iceplant mat vegetation dominates the slopes adjacent to the bridge and the areas below the bridge (Appendix F). Within the BSA, some native plants are mixed with the iceplant mats, along with a combination of exotic and native species resulting from invasive species introduction, highway construction, operation, and maintenance (Frenkel 1970). Appendix E provides a list of flora and fauna observed during surveys of the BSA.

4.2. Habitats and Natural Communities of Special Concern

The National Marine Fisheries Service (NMFS) species list (Appendix D) identifies Essential Fish Habitat (EFH) for groundfish, costal pelagic, and highly migratory species as being present within the USGS California Soberanes Point 7.5-minute quadrangle map. None of these habitats occur within the project area and will not be impacted by this project.

The Big Sur coast supports a diverse array of environmentally sensitive habitat areas (ESHA) including marine habitats (intertidal and submerged rock areas, kelp beds, important spawning areas), plant habitats (sensitive plants, dunes, serpentine rock associations, riparian corridors, coastal prairies, and grasslands), and wildlife habitats (rare endangered, sensitive wildlife). Marine habitat ESHA occurs along this section of Big Sur coastline, but does not occur within the project area, and will not be impacted by the project. Additionally, the proposed project does not occur within a stream buffer, wetland setback, or any other setbacks.

4.3. Vegetation

The plants listed in Table 2 are of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. Each species is analyzed for its potential to occur within the BSA. No rare plant species were found during surveys. The proposed project is expected to have No Effect on listed plant species and their designated critical habitat. The BSA includes two plant communities: coastal scrub and ruderal/disturbed. Native and non-native species occur within both of these communities, to varying degrees. A full inventory of plant species observed during floristic surveys can be found in Appendix E. No trees are proposed for removal for this project, but vegetation clearing and/or trimming will be required for construction.

Coastal Scrub

Coastal scrub within the BSA is best described as Central Lucian Coastal Scrub (Holland 1986). Dominant species include black sage (*Salvia mellifera*), California sagebrush (*Artemisia californica*), coyote bush (*Baccharis pilularis*) and sticky monkeyflower (*Mimulus aurantiacus*) with scattered annual grasses and forbs in between the shrub layer. Seacliff buckwheat (*Erigonium parvifolium*) can also be found within this community. This habitat is common on the ocean side of the Santa Lucia mountain range, between Monterey and Point Conception, and usually below 2,000 feet above sea level. This community consists of dense shrubs 3-6 feet in height and lacks grassy/herbaceous openings.

Coastal Scrub may support habitat for certain special-status plant species, reptile species, various nesting bird species, as well as invertebrates such as Smith's blue butterfly. The access road will have already been established by the Garrapata ECE project and the new road will be limited to that same footprint. No new impacts are anticipated to coastal scrub within this project.

Ruderal/Disturbed

Ruderal/disturbed areas contain mainly non-native weedy and or invasive species tolerant of disturbed conditions (e.g., compacted soils, roadsides subjected to vehicle disturbances, etc.). Invasive species were identified by California Invasive Plant Council (Cal-IPC) database (Cal-IPC 2020). Invasive plant species observed can be found in Appendix E. Ruderal/disturbed areas are found throughout the BSA and in the project area where vehicle-impacts and maintenance activities have routinely impacted and compacted the unpaved shoulders along SR 1.

4.4. Animals

Animals listed in Table 3 are of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status animals occurring on site. Each species is analyzed for its potential to occur within the BSA (marine species [i.e., pinnipeds, cetaceans] from the NMFS species list are grouped due to lack of marine habitat within the project area). A list of observed species can be found in Appendix E. No federally or state listed species will be affected by the proposed project.

A deceased Monterey big-eared woodrat (*Neotoma macrotis luciana*) was observed under the southern bridge abutment (Appendix F, photograph 5). A single monarch butterfly (*Danaus plexippus*) was observed flying through the BSA. No other special-status animal species were observed within or adjacent to the project limits. Animals encountered within and adjacent to the BSA are included in the species list in Appendix E and photographs of the area are included in Appendix F.

Smith's Blue Butterfly (*Euphilotes enoptes smithi*)

The project is within the known range of the Smith's blue butterfly (*Euphilotes enoptes smithi*; federally endangered) (USFWS 2006). The Smith's blue butterfly inhabits coastal sand dunes and cliff/chaparral areas along the central California coast in Monterey, Santa Cruz, and San Mateo Counties. Individuals spend their entire lives in association with one of two species of buckwheat, seacliff buckwheat (*Eriogonum parvifolium*) and seaside buckwheat (*Eriogonum latifolium*). These plants are obligate host plants for the larvae and the principle nectar sources for adults. Smith's blue butterflies emerge in late summer and early autumn and the adults mate and lay eggs on the flowers of the host plants. Individuals typically spend their lifetime within 200 feet of the host plant on which they emerged. The major threat to this species is loss of habitat, especially in the coastal sand dune habitat (Black and Vaughan 2005).

The project area supports seacliff buckwheat and seaside buckwheat, which can serve as host plants for the Smiths blue butterfly along this portion of the California coast. Protocol-level surveys were conducted for Smith's blue butterfly in 2018. Surveys were negative. It was determined that this project will have no effect on Smith's blue butterfly.

Smith's blue butterflies were observed at a reference site approximately 27 miles south of the BSA, just south of McWay Falls, on July 19, 2018. This reference location was surveyed to confirm activity of Smith's blue butterfly on the same day as the survey conducted in the BSA

Table 1: Listed, Proposed Plant Species, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area

Common / Scientific Name	Federal / State / CNPS Status & Threat Code	General Habitat Description	Habitat Present / Absent in BSA	Rationale
Little Sur manzanita <i>Arctostaphylos edmundsii</i>	-- / -- / 1B.2	<ul style="list-style-type: none"> Perennial evergreen shrub; occurs in sandy areas in coastal bluff scrub and chaparral Flowers November-April 30-105 meters 	HP	<ul style="list-style-type: none"> Suitable habitat occurs within the BSA. No manzanitas were observed in the BSA. Not expected to occur within the BSA. No further studies recommended.
marsh sandwort <i>Arenaria paludicola</i>	FE / SE / 1B.1	<ul style="list-style-type: none"> Perennial herb that occurs in marshes and swamps. Grows through dense mats of <i>Typha</i>, <i>Juncus</i>, <i>Scirpus</i>, etc. in freshwater marsh 10-170 meters Flowers May-August 	A	<ul style="list-style-type: none"> The BSA does not occur within or directly adjacent to freshwater marshes or swamps and is not suitable for the species. Was not observed during appropriately timed floristic surveys. Effects determination is the project will have no effect on marsh sandwort. No further studies recommended.
Jolon clarkia <i>Clarkia jolonensis</i>	-- / -- / 1B.2	<ul style="list-style-type: none"> Annual herb; occurs in chaparral, cismontane woodland, coastal scrub, riparian woodland Flowers April-June 20-660 meters 	HP	<ul style="list-style-type: none"> Suitable habitat occurs within the BSA. Was not observed during appropriately timed floristic surveys. Not expected to occur within the BSA. No further studies recommended.
seaside bird's-beak <i>Cordylanthus rigidus ssp. littoralis</i>	-- / SE / 1B.1	<ul style="list-style-type: none"> Annual herb (hemiparasitic); occurs on sandy/disturbed sites in closed-cone coniferous forest, chaparral, cismontane woodland, coastal dunes, and coastal scrub Flowers April-October 0-425 meters 	HP	<ul style="list-style-type: none"> Suitable habitat occurs within the BSA. Was not observed during appropriately timed floristic surveys. Not expected to occur within the BSA. No further studies recommended. CESA determination: no effect
Hutchinson's larkspur <i>Delphinium hutchinsoniae</i>	-- / -- / 1B.2	<ul style="list-style-type: none"> Perennial herb; occurs in broadleaved upland forest, chaparral, coastal prairie, and coastal scrub Flowers March-June 0-427 meters 	HP	<ul style="list-style-type: none"> Suitable habitat occurs within the BSA. Was not observed during appropriately timed floristic surveys. Not expected to occur within the BSA. No further studies recommended.

Common / Scientific Name	Federal / State / CNPS Status & Threat Code	General Habitat Description	Habitat Present / Absent in BSA	Rationale
Sand-loving wall flower <i>Erysimum ammophilum</i>	-- / -- / CNPS 1B.2	<ul style="list-style-type: none"> • Perennial herb. Chaparral (maritime), coastal dunes, coastal scrub. • Sandy openings. • Flowers February - June. • 0-60 m. 	HP	<ul style="list-style-type: none"> • Suitable habitat occurs within the BSA. • Was not observed during appropriately timed floristic surveys. • Not expected to occur within the BSA. • No further studies recommended.
Clover lupine <i>Lupinus tidestromii</i>	FE / SE / 1B.1	<ul style="list-style-type: none"> • Perennial rhizomatous herb; occurs in coastal dunes • Flowers April-June • 0-100 meters 	HP	<ul style="list-style-type: none"> • Potentially suitable habitat occurs within the BSA. • Was not observed during appropriately timed floristic surveys. • Effects determination is the project will have no effect on Clover lupine. • No further studies recommended.
Monterey pine <i>Pinus radiata</i>	-- / -- / 1B.1	<ul style="list-style-type: none"> • Perennial evergreen tree; occurs in closed-cone coniferous forest and cismontane woodland • Flowering: N/A • 25-185 meters 	HP	<ul style="list-style-type: none"> • Suitable habitat occurs within the BSA. • Species was not observed in the BSA. • Monterey pines along SR-1 near Point Lobos are recognized as native stands for this taxon, but others scattered along the BSA are trees that were planted/naturalized (USGS 1999; Critchfield and Little 1966) • No pine trees will be impacted as a result of this project • No further studies recommended.
Yadon's rein orchid <i>Piperia yadonii</i>	FE / -- / 1B.1	<ul style="list-style-type: none"> • Perennial herb; occurs in sandy areas in coastal bluff scrub, closed-cone coniferous forest, and chaparral (maritime) • Flowers February-August • 10-510 meters 	HP	<ul style="list-style-type: none"> • Potentially suitable habitat occurs within the BSA; no critical habitat in the BSA. • Was not observed during appropriately timed floristic surveys. • Effects determination is the project will have no effect on Yadon's rein orchid or critical habitat. • No further studies recommended.
maple-leaved checkerbloom <i>Sidalcea malachroides</i>	-- / -- / 4.2	<ul style="list-style-type: none"> • Perennial herb; occurs in broadleaved upland forest, coastal prairie, coastal scrub, North Coast coniferous forest, and riparian woodland, often in disturbed areas • Flowers March-August • 2-730 meters 	HP	<ul style="list-style-type: none"> • Suitable habitat occurs within the BSA. • Was not observed during appropriately timed floristic surveys. • Not expected to occur within the BSA. • No further studies recommended.

Common / Scientific Name	Federal / State / CNPS Status & Threat Code	General Habitat Description	Habitat Present / Absent in BSA	Rationale
California screw moss <i>Tortula californica</i>	-- / -- / CNPS 1B.2	<ul style="list-style-type: none"> • Moss. Chenopod scrub, valley and foothill grassland. • Moss growing on sandy soil. • Flowering period N/A. • 10-1460 m. 	A	<ul style="list-style-type: none"> • No suitable habitat occurs within the BSA. • Was not observed during floristic surveys. • Not expected to occur within the BSA. • No further studies recommended.
<p>Status Codes: Federal: FE = Federal Endangered FT = Federal Threatened FC = Federal Candidate FD = Federal Delisted CH = Critical Habitat Designated in the BSA</p> <p>State: SE = State Endangered ST = State Threatened SR = State Rare SC = State Candidate Species</p>		<p>California Rare Plant Rank (CRPR): 1A = Plants presumed extirpated in California and either rare or extinct elsewhere 1B = Plants rare, threatened, or endangered in California and elsewhere 2A = Plants presumed extirpated in California but common elsewhere 2B = Plants rare, threatened, or endangered in California, but more common elsewhere 3 = Plants about which more information needed (review list) 4 = Plants of limited distribution (watch list)</p> <p>Threat Rank: .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) .2 = Fairly endangered in California (20-80% occurrences threatened) .3 = Not very endangered in California (<20% of occurrences threatened or no current threats known)</p> <p>Habitat: Presence/Absence A = suitable habitat is absent; no further study is needed. HP = suitable habitat is present in the BSA P = the species is confirmed present in the BSA CH = the BSA is located within federally designated critical habitat, but not necessarily suitable habitat</p>		

Table 2: Listed, Proposed Animal Species, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area.

Common / Scientific Name	Federal / State / Other Status	General Habitat Description	Habitat Present/ Absent	Rationale
Invertebrates				
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT / -- / --	Vernal pools, usually less than 0.05 acres in size; swales or basalt flow depression pools in unplowed grasslands.	A	<ul style="list-style-type: none"> • No vernal pools occur within the BSA; no critical habitat occurs in the BSA. • Effects determination is the project will have no effect on vernal pool fairy shrimp or critical habitat. • No further studies recommended.
monarch butterfly <i>Danaus plexippus</i>	-- / -- / SA	Winter roost sites along the coast in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar/water sources.	P	<ul style="list-style-type: none"> • Single individual observed flying through BSA in 2018 • Foraging butterfly's will simply fly away if disturbed. • No further studies recommended.
Smith's blue butterfly <i>Euphilotes enoptes smithi</i>	FE / -- / --	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and northern San Luis Obispo Counties. Host plants are seacliff buckwheat (<i>Eriogonum parvifolium</i>) and coast buckwheat (<i>Eriogonum latifolium</i>) both are utilized as larval and adult food plants.	HP	<ul style="list-style-type: none"> • Suitable habitat occurs in the BSA with scattered seacliff and seaside buckwheat plants. • Protocol level surveys conducted in 2018 and 2019 concluded that Smith's blue butterfly were not present within the BSA. • Effects determination is the project will have no effect on Smith's blue butterfly. • No further studies recommended.
Fish				
south-central California coast steelhead DPS <i>Oncorhynchus mykiss irideus</i>	FT, CH / -- / SSC	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	HP, CH	<ul style="list-style-type: none"> • Garrapata creek, within the BSA is a documented steelhead creek and federally designated critical habitat for steelhead • No work will occur in the creek or jurisdictional areas. • Effects determination is the project will have no effect on south-central California coast steelhead or critical habitat. • No further studies recommended.

Common / Scientific Name	Federal / State / Other Status	General Habitat Description	Habitat Present/Absent	Rationale
tidewater goby <i>Eucyclogobius newberryi</i>	FE/ -- / SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River in Del Norte County. Found in shallow lagoons and lower stream reaches. Needs fairly still, but not stagnant water and high oxygen.	HP	<ul style="list-style-type: none"> • Marginal suitable aquatic habitat for tidewater goby occurs within the BSA; no critical habitat occurs in the BSA. • No work will occur in the creek or jurisdictional areas. • Effects determination is the proposed project will have no effect on tidewater goby or critical habitat. • No further studies recommended.
Southern DPS green sturgeon <i>Acipense medrostris</i>	FT, CH / - / -	Bays and estuaries Mexico to Alaska, marine depths 65 to 230 ft; only spawning habitat in California is Sacramento River basin.	A	<ul style="list-style-type: none"> • No suitable habitat occurs within the BSA. • Effects determination is the project will have no effect on green sturgeon or its Critical Habitat. • No further studies recommended.
Amphibians				
foothill yellow-legged frog <i>Rana boylei</i>	-- / CT/ SSC	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Partly shaded streams and riffles. Needs some cobble-sized substrate for egg-laying. Requires 11-20 weeks of permanent water for larval development. Nests in dense colonies on sandy estuarine shores, on levees in salt ponds, and on islands in alkali and freshwater lakes.	A	<ul style="list-style-type: none"> • No potential habitat occurs along banks of the Garrapata creek within the BSA. • BSA lacks deep water, cobble sized substrate, and sandy estuarine shores. • <i>Rana</i> spp. Not observed during surveys. • No work will occur in the creek or jurisdictional areas.
California red-legged frog <i>Rana draytonii</i>	FT, CH / -- / SSC	Aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails. Upland habitat contains refuge such as fossorial animal burrows or other shelters within a 2 mile proximity to aquatic habitat, and without significant barriers to migration.	A	<ul style="list-style-type: none"> • No suitable aquatic breeding habitat or aquatic non-breeding habitat occurs within the BSA. • Potentially suitable upland habitat and dispersal habitat does occur in the BSA. • Federally designated critical habitat for California red-legged frog does not occur within the BSA. • Not observed during surveys. • Effects determination is the proposed project will have no effect on California red-legged frog or critical habitat.
Birds				

Common / Scientific Name	Federal / State / Other Status	General Habitat Description	Habitat Present/ Absent	Rationale
marbled murrelet <i>Brachyramphus marmoratus</i>	FT / SE / --	A sea bird predominantly occurring in the Pacific Northwest, but small populations are known to nest as far south as Santa Cruz County in old-growth coniferous forests. The only California alcid species to nest inland. Typically nests in the upper branches of redwoods or Douglas fir forests, as high as 150 feet. Builds its nest as a depression in lichens and mosses. Winters at sea.	A	<ul style="list-style-type: none"> • No suitable old growth coniferous nesting habitat in BSA for this taxon; no critical habitat occurs in the BSA. • Effects determination is the project will have no effect on marbled murrelet or critical habitat. • No further studies recommended.
western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT, MBTA / -- / CH, SSC	Occurs on sandy beaches, salt pond levees, and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	A	<ul style="list-style-type: none"> • No sandy marine or estuarine shore nesting habitat in BSA for this taxon; no critical habitat occurs in the BSA. • Effects determination is the project will have no effect on western snowy plover or critical habitat. • No further studies recommended.
southwestern willow flycatcher <i>Empidonax traillii extimus</i>	FE / SE / --	Breeds in marshes and riparian areas, while wintering in shrubby clearings and early successional growth. Nests are near water and low, especially in crotch of trees or bushes. Habitat patches of .25 acres and 30ft minimum width.	A	<ul style="list-style-type: none"> • No suitable nesting habitat in BSA for this taxon; no critical habitat occurs in the BSA. • Effects determination is the project will have no effect on southwestern willow Flycatcher or critical habitat. • No further studies recommended.
California condor <i>Gymnogyps californianus</i>	FE / SE, FP / --	Nests in association with rocky cliffs. Forages in open savannah, grasslands, and foothill chaparral with cliffs, trees, and snags.	A	<ul style="list-style-type: none"> • No suitable nesting habitat in BSA for this taxon; no critical habitat occurs in the BSA. • Effects determination is the project will have no effect on California condor or critical habitat. • No further studies recommended.
ashy storm petrel <i>Oceanodroma homochroa</i>	-- / -- / SSC	Quiet waters of ponds, lakes, streams, and marshes. Typically in the deepest parts with an abundance of basking sites.	A	<ul style="list-style-type: none"> • No suitable nesting habitat within BSA for this taxon. • No further studies recommended.
California least tern <i>Sterna antillarum browni</i>	FE / SE, FP / --	Largely a coastal species that feeds on fish and nests on sandy dunes or beaches and on bare or sparsely vegetated, flat substrates. Once a common species in California; currently nesting colonies are isolated to Southern California and scattered Bay Area beaches.	A	<ul style="list-style-type: none"> • No suitable nesting habitat within BSA for this taxon. • Effects determination is the project will have no effect on California least tern. • No further studies recommended.

Common / Scientific Name	Federal / State / Other Status	General Habitat Description	Habitat Present/Absent	Rationale
least Bell's vireo	FE / SE / --	Summer resident of Monterey county and Central & Southern California coasts in low riparian areas in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, mesquite, redwoods or douglas-firs. Builds its nests with lichens and mosses.	A	<ul style="list-style-type: none"> • No suitable nesting habitat within BSA for this taxon; no critical habitat in the BSA. • Effects determination is the project will have no effect on least Bell's vireo or critical habitat. • No further studies recommended.
other nesting birds Class Aves	MBTA / -- / FGC Section 3503	Various habitats (nesting).	HP	<ul style="list-style-type: none"> • Marginal nesting habitat present in trees and possibly shrubs within the BSA; these habitats are exposed to regular sound disturbance from vehicles on SR-1 • No trees will be trimmed or removed by this project, but any shrub within 2 feet of pavement could be removed. • No nesting birds were observed during surveys. • Avoidance and minimization measures will be implemented
Mammals				
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	-- / -- / SSC	Occurs in a wide variety of habitats. Most common in mesic sites. Roosts in the open hanging from walls and ceilings. Extremely sensitive to human disturbance.	A	<ul style="list-style-type: none"> • Trees in the BSA occur mainly in an exposed coastal setting and do not provide suitable thermal conditions for bat roosting habitat. • No further studies recommended.
southern sea otter <i>Enhydra lutris nereis</i>	FT / -- / FP	Kelp forests and shallow waters along California coastline from San Mateo County to Santa Barbara County.	A	<ul style="list-style-type: none"> • No suitable habitat within BSA; • Effects determination is the project will have no effect on southern sea otter • No further studies recommended.
Other FESA and MMPA marine mammals	FE, MMPA / -- / --	Occur in deep water marine environments of the Pacific and other oceans.	A	<ul style="list-style-type: none"> • No suitable habitat in BSA. • Pinnepeds are not known to use beaches adjacent to the project area as haul out sites • Effects determination is the project will have no effect on ESA and MMPA whales (Cetaceans) and Pinnipeds. • No further studies recommended
Monterey big-eared woodrat <i>Neotoma macrotis luciana</i>	-- / -- / SSC	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Shaded areas, can build stick homes up to 5 ft high and 8 ft diameter on the ground or in trees.	HP, P	<ul style="list-style-type: none"> • Suitable habitat within BSA; • Species observed deceased under the south abutment of the bridge. • Avoidance and minimization measures will be implemented

Common / Scientific Name	Federal / State / Other Status	General Habitat Description	Habitat Present/Absent	Rationale
<p>Status Codes: Federal: FE = Federal Endangered FT = Federal Threatened FPT = Federal Proposed Threatened FC = Federal Candidate FD = Federal Delisted CH = Critical Habitat designated PCH = Proposed Critical Habitat BGEPA = Protected by the Federal Bald and Golden Eagle Protection Act MBTA = Protected by Federal Migratory Bird Treaty Act</p> <p>State: SE = State Endangered ST = State Threatened CE = Candidate State Endangered CT = Candidate State Threatened SD = State Delisted FP = Fully Protected CEQA = Protected under CEQA (no other legal protection)</p>			<p>California Department of Fish and Wildlife: SSC = California Species of Special Concern WL = CDFW Watch List species. Taxa that were previously SSCs, no longer merit SSC status, but for which there is concern. CDFW Watch List species are included on the CNDDDB Special Animals List and are protected under CEQA SA = Included on CNDDDB Special Animals List (also protected under CEQA) FP = Fully Protected FGC Section 3503 = Protected by California Fish and Game Code Section 3503</p> <p>Habitat Present/Absent Absent [A]-suitable habitat is absent; no further study needed. Habitat Present [HP]-suitable habitat is present in the BSA. Present [P]-the species is confirmed present in the BSA. Critical Habitat [CH] – the project footprint is located within federally designated critical habitat, but does not necessarily mean that suitable habitat is present.</p>	

5. Project Impacts

Natural Communities

Garrapata Creek is federally designated critical habitat for south-central California coast steelhead, but this habitat would not be affected by the proposed project. All work will be conducted well outside of the jurisdictional areas of the creek.

Permanent impacts are not anticipated with this project. Temporary impact areas will result mainly from construction of the temporary access road. Sources of impacts would be primarily from the use of construction equipment and associated worker foot-traffic. Trucks, bulldozers, backhoes, compactors, clamshells, excavators, compressors, scrapers, water trucks, sweepers, and any other equipment necessary in the course of construction. Equipment would be temporarily staged in an identified roadside turnout at the edge of State Route 1.

Following construction, areas of temporary disturbance to natural habitats will be stabilized and revegetated; these include areas supporting coastal scrub. Permanent erosion control, planting, or a combination of both will be used to vegetate all temporarily impacted areas. Caltrans Landscape Architecture Division will prepare erosion control and planting plans in coordination with the project Biologist. Permanent erosion control seed will consist of a mix of species native to the area. Areas of temporarily disturbed coastal scrub will be replaced in kind.

The BSA does not occur within a known wildlife corridor and no wildlife connectivity impacts are anticipated. Certain invasive/weedy plants occur within the API and measures will be implemented to avoid/minimize the spread of these species throughout the API. No impacts to other waters, riparian areas and/or ESHAs under the jurisdiction of USACE, RWQCB, CDFW, and the California Coastal Commission (CCC) are anticipated with the current scope of the project.

The Federal Endangered Species Act Section 7 effects determination is that, with implementation of the included avoidance and minimization measures, the proposed project would have no effect on federally listed species or designated critical habitat.

6. Avoidance and Minimization Measures

The following general avoidance and minimization measures will be implemented:

1. Avoidance and minimization of ground disturbance due to project related actions will be achieved with the establishment of Environmentally Sensitive Areas (ESAs). The ESAs will ensure that unnecessary disturbance does not occur outside of the project limits. ESA limits will be depicted on the final layout plans.
2. Five days prior to the beginning of work, the Resident Engineer shall meet with the Project Biologist in the field at the project site for the identification of select locations where ESA fence and flagging shall be incorporated.
3. All equipment staging and material storage, stockpile, disposal, and borrow sites must be inspected for potentially sensitive biological resources prior to use or equipment mobilization. If sites are selected other than those already designated on the approved project plans, the Resident Engineer shall contact the Environmental Construction Liaison or Project Biologist no less than two weeks prior to use of equipment staging and material storage, stockpile, disposal, and borrow sites. If sensitive biological resources are found at such sites, then new locations shall be selected.

The following avoidance and minimization measures are recommended for Monterey big-eared woodrat and are applicable to project activities occurring within the API:

1. Prior to implementation of proposed project activities, a pre-construction visual survey will be conducted by a Caltrans biologist within suitable woodrat habitat in the API to determine the presence or absence of woodrat nests.
2. If woodrat nests are located during this survey, the biologist will flag the area to establish a 25-foot buffer around active nests where work would not occur.
3. If nests are present in a location that cannot be avoided by work activities, a Caltrans biologist will dismantle the woodrat nest by hand immediately prior to work, allowing individuals to move out of the area.

The following avoidance and minimization measures will be implemented for all nesting birds:

1. Prior to construction, a nesting bird survey will be conducted by a Caltrans biologist to determine presence/absence of nesting birds within the project area, if construction activities are to take place during the typical nesting season (February 1- September 30). If an active nest of a migratory bird is discovered, all work will cease until a Caltrans biologist determines an appropriate buffer and monitoring strategy based on the habits and needs of the species. The buffer area will be avoided until a qualified biologist has determined that juveniles have fledged. Active nests shall not be disturbed and eggs, or

young of birds covered by the MBTA and California Fish and Game Code shall not be killed, injured, or harassed at any time.

7. Permits Required

The proposed project occurs in the coastal zone and may require a Coastal Development Permit or Waiver from the California Coastal Commission.

Federal Endangered Species Act Section 7 Consultation will not be required with USFWS or NOAA/NMFS. A 2081 ITP from CDFW will not be required.

The proposed project will not impact any wetlands, riparian areas, or jurisdictional waterway. Therefore, the proposed project will not require a Section 1600 agreement from CDFW, a CWA Section 404 permit from USACE, or CWA 401 water quality certification from RWQCB.

8. References

- American Association of State Highway and Transportation Officials (AASHTO). 2016. Manual for Assessing Safety Hardware, second edition. <https://store.transportation.org/item/publicationdetail/2707>. Accessed in May 2020.
- Arnold, R. A. 2002. Protocol for Presence-Absence Surveys of the Endangered Smith's Blue Butterfly on the Los Padres National Forest in Monterey and northern San Luis Obispo counties, CA. U.S. Forest Service Contract #53-91Y9- 1-1G096. November 2002.
- Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken. 2012. The Jepson Manual: Vascular Plants of California. Second Edition. University of California Press. Berkeley, California.
- Black, S. H., and D. M. Vaughan. 2005. Species Profile: *Euphilotes enoptes smithi*. In Shepherd, M. D., D. M. Vaughan, and S. H. Black (Eds). Red List of Pollinator Insects of North America. CD-ROM Version 1. Portland, Oregon. The Xerces Society for Invertebrate Conservation. May 2005.
- California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>. Accessed in April 2018.
- CDFW. 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Online: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>. Accessed in 2018.
- California Invasive Plant Council (Cal-IPC). 2020. California Invasive Plant Inventory. Website: <https://www.cal-ipc.org/plants/inventory/>. Accessed June 2020.
- California Department of Transportation. 2002. Big Sur Coast Highway Management Plan Site Restoration Guidelines: Highway 1 in Monterey and San Luis Obispo Counties. 11 pp. and appendices.
- California Department of Transportation. 2004. Big Sur Coast Highway Management Plan Guidelines for Vegetation Management. 43 pp. and appendices.
- California Natural Diversity Data Base (CNDDB). 2020. Rarefind data output for the Lopez Point, California USGS 7.5-minute quadrangle. California Department of Fish and Game. Sacramento, California.
- California Native Plant Society (CNPS), Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website <http://www.rareplants.cnps.org> [accessed 29 June 2020].

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Department of Fish and Game.

Natural Resources Conservation Service, United States Department of Agriculture. 2020. Soil Survey Geographic (SSURGO) Database. Website: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed June 2020.

Stebbins, R. C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Company.

USFWS. 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants. January 2000.

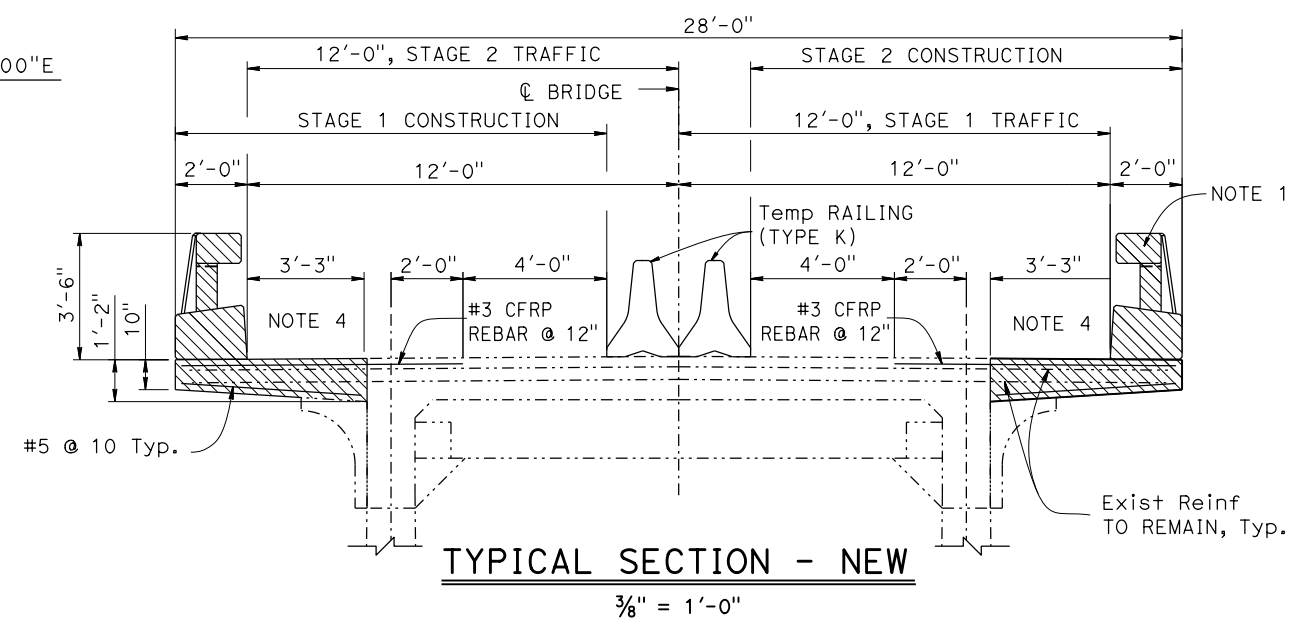
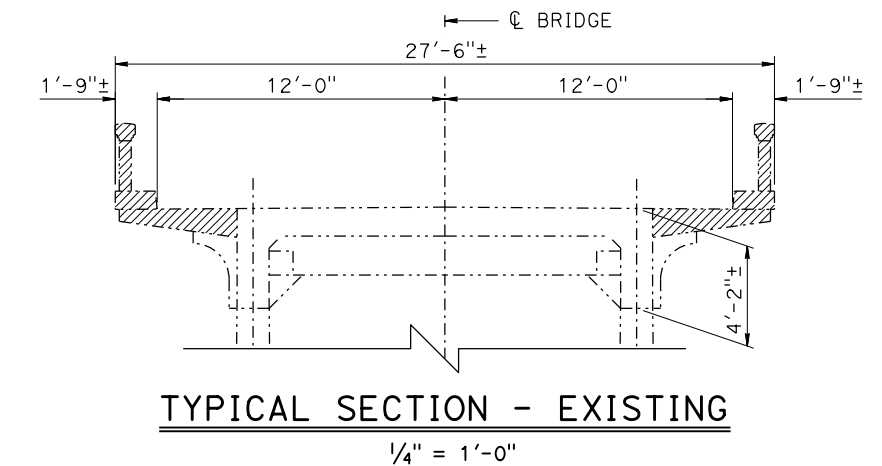
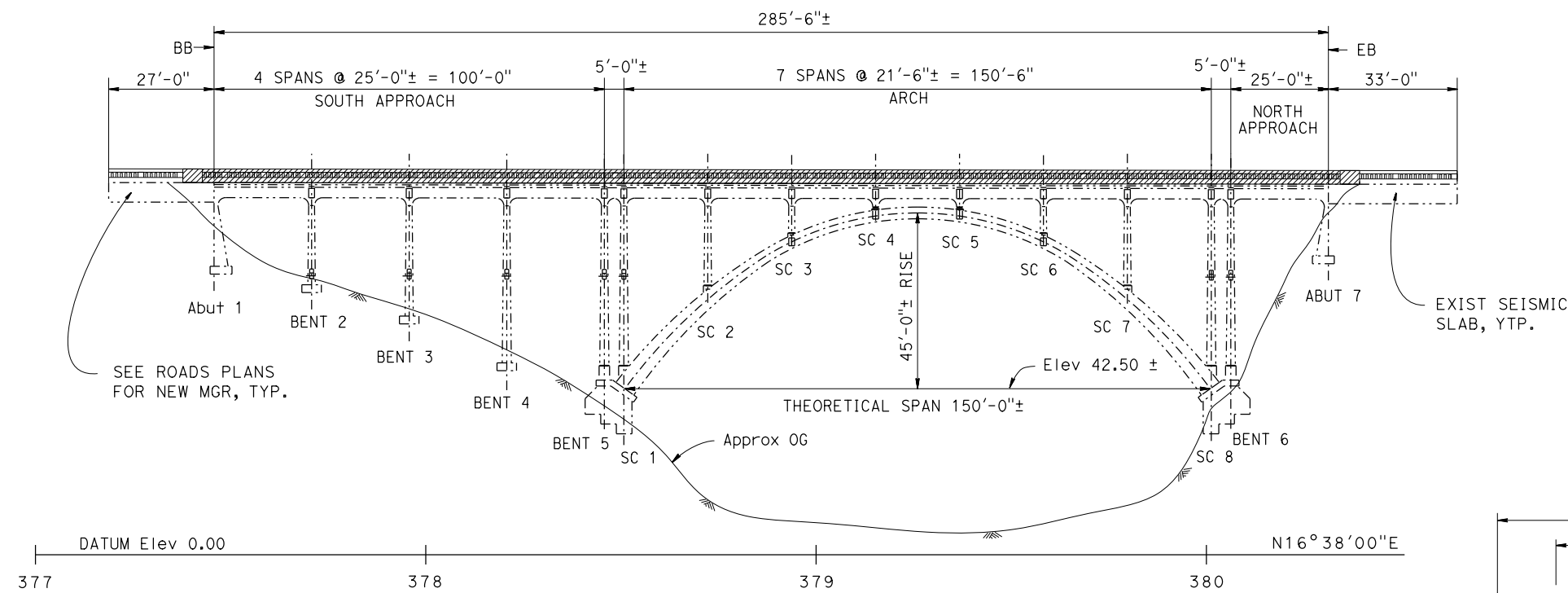
U.S. Fish and Wildlife Service (USFWS). 2006. Smith's blue butterfly: 5-Year Review. U.S. Fish and Wildlife Service. Ventura, California.

USFWS. 2008. Programmatic Biological Opinion for Highway 1 Management Activities that Affect the Smith's Blue Butterfly, Monterey and San Luis Obispo Counties, California (1-8-07-F-68). U.S. Fish and Wildlife Service. Ventura, California. 17 pp.

USFWS. 2020. IPaC - Information, Planning, and Conservation System. Retrieved August 25, 2020 from Environmental Conservation Online System: <https://ecos.fws.gov/ipac/>.

Appendix A- Project Plans

Dist	COUNTY	ROUTE	POST MILE
05	Mon	1	63.0



ALTERNATIVE 1A

DATE OF ESTIMATE	05/18/20
AREA (SQFT)	3,283
STRUCTURE SUBTOTAL	\$1,270,106
BR. REMOVAL SUBTOTAL	
TOTAL COST	\$1,940,000

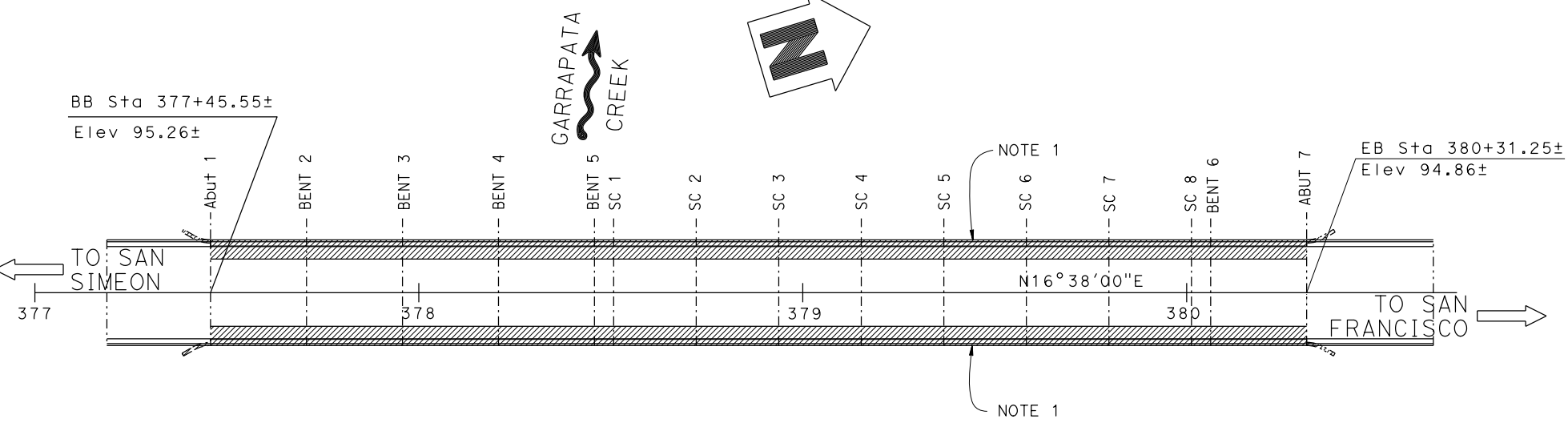
Total includes 10% TRO, 10% mobilization and 25% contingency

ALTERNATIVE 1B

DATE OF ESTIMATE	05/18/20
AREA (SQFT)	3,283
STRUCTURE SUBTOTAL	\$1,318,399
BR. REMOVAL SUBTOTAL	
TOTAL COST	\$2,014,000

Total includes 10% TRO, 10% mobilization and 25% contingency

ELEVATION
1" = 20'-0"



- NOTES:**
- REMOVE EXISTING OVERHANG, CURB AND BARRIER, REPLACE WITH NEW OVERHANG AND BARRIER TYPE 86H (ALT 1a) OR TEXAS DOT TYPE C412 (ALT 1b) EXTENDED TO END OF SEISMIC SLABS.
 - BARRIER TYPE 86H SHOWN, TEXAS DOT TYPE C412 SIMILAR, NOT SHOWN, BOTH ARE PENDING APPROVAL.
 - STAGE CONSTRUCTION WITH ONE WAY TRAFFIC CONTROL WILL BE NECESSARY.
 - PREPARE CONCRETE DECK AND PLACE 1" POLYESTER CONCRETE OVERLAY, AND MATCH EXISTING GRADE, TYP.
 - SCUPPER OR DROP-THRU DECK DRAINS TO BE INSTALLED IN OR NEAR NEW BARRIERS

- LEGEND:**
- INDICATES NEW CONSTRUCTION
 - INDICATES EXISTING STRUCTURE
 - INDICATES REMOVAL EXISTING CONCRETE BARRIER AND OVERHANG
 - INDICATES NEW OVERHANG & CONCRETE BARRIER TYPE 86H OR TEXAS DOT TYPE C412
- CFRP = Carbon Fiber Reinforced Polymer

ALT 1a & 1b

PLAN
1" = 20'-0"

DESIGNED BY Rene Coria	DATE 02/21/2020
DRAWN BY Mohammad Sharif	DATE 02/21/2020
CHECKED BY Michael Pope	DATE 02/21/2020
APPROVED Michael Pope	DATE 02/21/2020

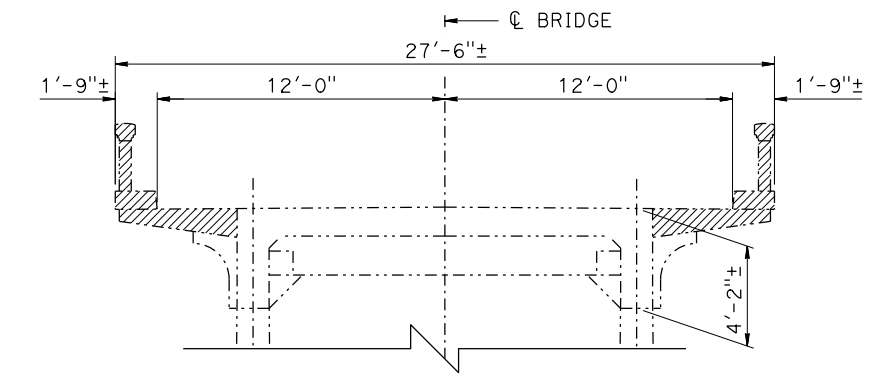
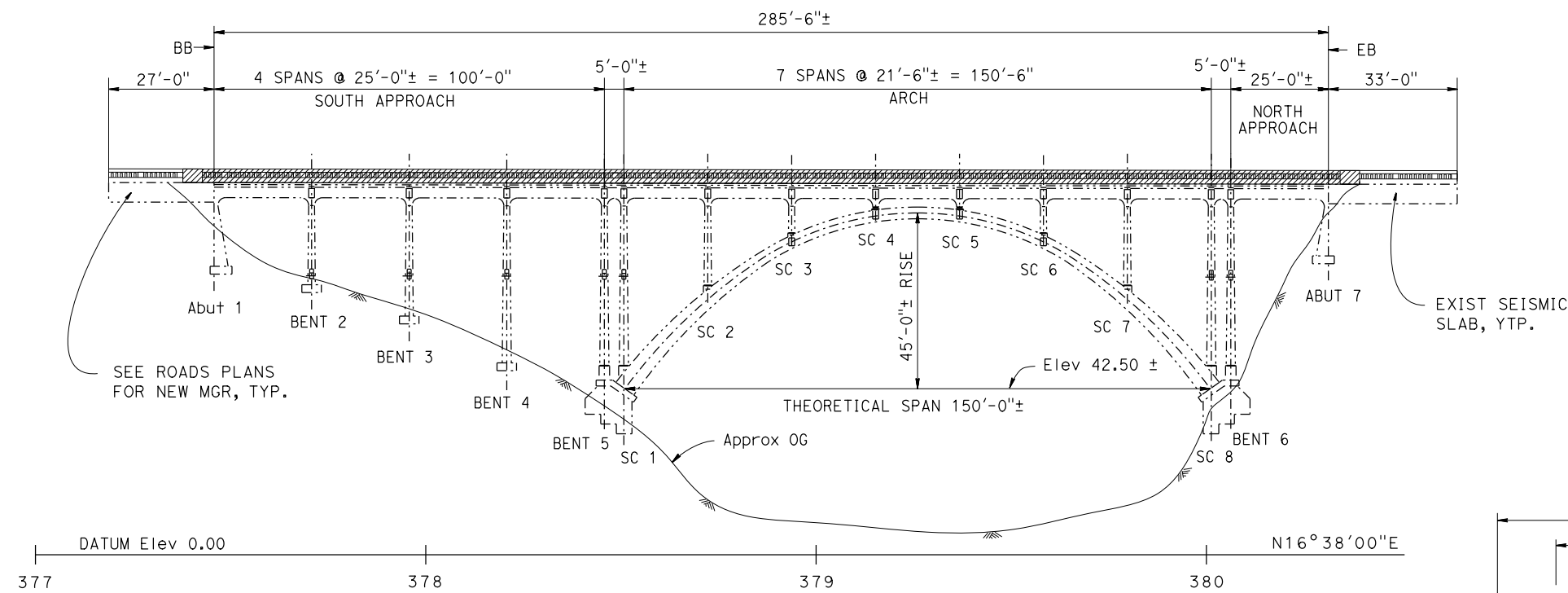
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DESIGN BRANCH

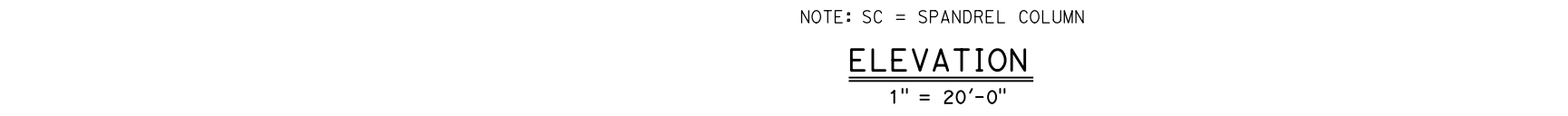
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PLANNING STUDY	
GARRAPATA Cr BRIDGE	
UNIT: 3603	BRIDGE No.: 44-0018
PROJECT EA: 05-1H800	PROJECT No. & PHASE: 0516000163

Dist	COUNTY	ROUTE	POST MILE
05	Mon	1	63.0



TYPICAL SECTION - EXISTING
1/4" = 1'-0"



ALTERNATIVE 1A

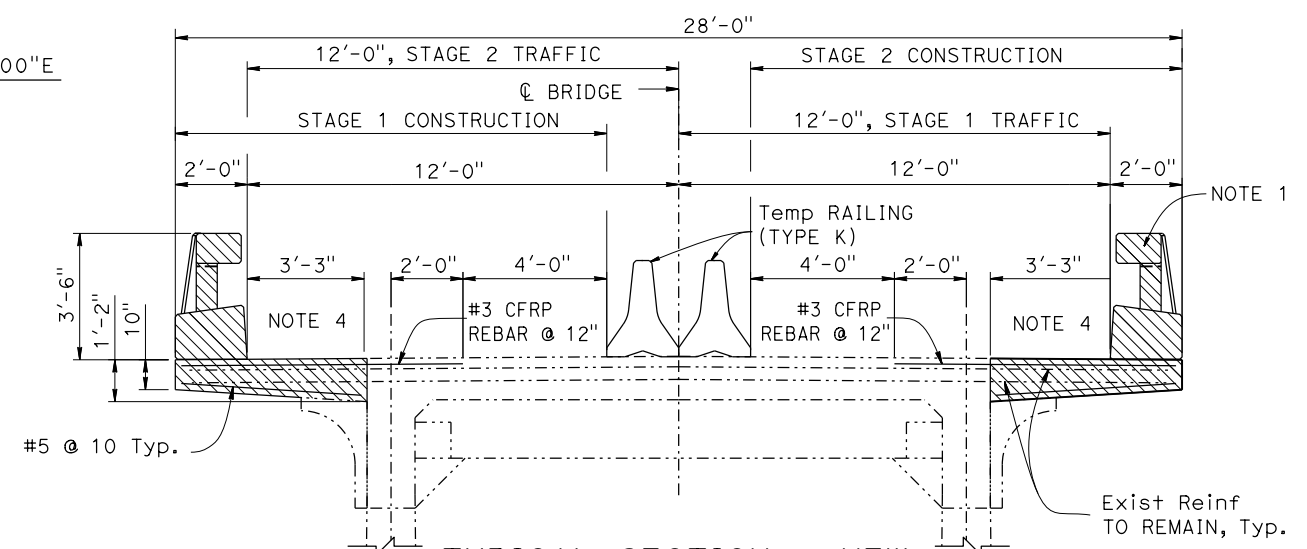
DATE OF ESTIMATE	05/18/20
AREA (SQFT)	3,283
STRUCTURE SUBTOTAL	\$1,270,106
BR. REMOVAL SUBTOTAL	
TOTAL COST	\$1,940,000

Total includes 10% TRO, 10% mobilization and 25% contingency

ALTERNATIVE 1B

DATE OF ESTIMATE	05/18/20
AREA (SQFT)	3,283
STRUCTURE SUBTOTAL	\$1,318,399
BR. REMOVAL SUBTOTAL	
TOTAL COST	\$2,014,000

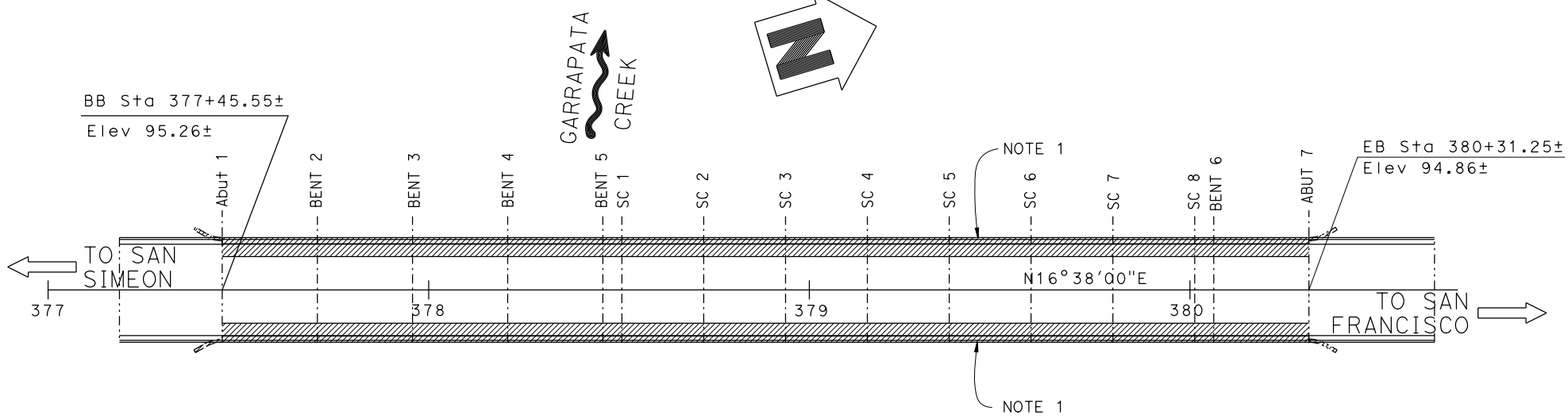
Total includes 10% TRO, 10% mobilization and 25% contingency



TYPICAL SECTION - NEW
3/8" = 1'-0"

- NOTES:**
- REMOVE EXISTING OVERHANG, CURB AND BARRIER, REPLACE WITH NEW OVERHANG AND BARRIER TYPE 86H (ALT 1a) OR TEXAS DOT TYPE C412 (ALT 1b) EXTENDED TO END OF SEISMIC SLABS.
 - BARRIER TYPE 86H SHOWN, TEXAS DOT TYPE C412 SIMILAR, NOT SHOWN, BOTH ARE PENDING APPROVAL.
 - STAGE CONSTRUCTION WITH ONE WAY TRAFFIC CONTROL WILL BE NECESSARY.
 - PREPARE CONCRETE DECK AND PLACE 1" POLYESTER CONCRETE OVERLAY, AND MATCH EXISTING GRADE, TYP.
 - SCUPPER OR DROP-THRU DECK DRAINS TO BE INSTALLED IN OR NEAR NEW BARRIERS

- LEGEND:**
- INDICATES NEW CONSTRUCTION
 - INDICATES EXISTING STRUCTURE
 - INDICATES REMOVAL EXISTING CONCRETE BARRIER AND OVERHANG
 - INDICATES NEW OVERHANG & CONCRETE BARRIER TYPE 86H OR TEXAS DOT TYPE C412
- CFRP = Carbon Fiber Reinforced Polymer



PLAN
1" = 20'-0"

ALT 1a & 1b

DESIGNED BY Rene Coria	DATE 02/21/2020
DRAWN BY Mohammad Sharif	DATE 02/21/2020
CHECKED BY Michael Pope	DATE 02/21/2020
APPROVED Michael Pope	DATE 02/21/2020

STRUCTURE DESIGN DESIGN BRANCH 18	PLANNING STUDY	
	GARRAPATA Cr BRIDGE	
	UNIT: 3603	BRIDGE No.: 44-0018
	PROJECT EA: 05-1H800	PROJECT No. & PHASE: 0516000163

Appendix B – CNDDDB Species List



Selected Elements by Common Name

California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
ashy storm-petrel <i>Oceanodroma homochroa</i>	ABNDC04030	None	None	G2	S2	SC
California screw moss <i>Tortula californica</i>	NBMUS7L090	None	None	G2G3	S2S3	1B.2
foothill yellow-legged frog <i>Rana boylei</i>	AAABH01050	None	Candidate Threatened	G3	S3	SC
Hutchinson's larkspur <i>Delphinium hutchinsoniae</i>	PDRAN0B0V0	None	None	G2	S2	1B.2
Jolon clarkia <i>Clarkia jolonensis</i>	PDONA050L0	None	None	G2	S2	1B.2
Little Sur manzanita <i>Arctostaphylos edmundsii</i>	PDERI04260	None	None	G2	S2	1B.2
monarch - California overwintering population <i>Danaus plexippus pop. 1</i>	IILEPP2012	None	None	G4T2T3	S2S3	Control Scri
Monterey pine <i>Pinus radiata</i>	PGPIN040V0	None	None	G1	S1	1B.1
Monterey Pine Forest <i>Monterey Pine Forest</i>	CTT83130CA	None	None	G1	S1.1	
pine rose <i>Rosa pinetorum</i>	PDROS1J0W0	None	None	G2	S2	1B.2
Pinnacles buckwheat <i>Eriogonum nortonii</i>	PDPGN08470	None	None	G2	S2	1B.3
sand-loving wallflower <i>Erysimum ammophilum</i>	PDBRA16010	None	None	G2	S2	1B.2
Smith's blue butterfly <i>Euphilotes enoptes smithi</i>	IILEPG2026	Endangered	None	G5T1T2	S1S2	
steelhead - south-central California coast DPS <i>Oncorhynchus mykiss irideus pop. 9</i>	AFCHA0209H	Threatened	None	G5T2Q	S2	SC
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G3G4	S2	SC

Record Count: 15

Appendix C – USFWS Species List



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Ventura Fish And Wildlife Office
2493 Portola Road, Suite B
Ventura, CA 93003-7726
Phone: (805) 644-1766 Fax: (805) 644-3958

In Reply Refer To:
Consultation Code: 08EVEN00-2020-SLI-0596
Event Code: 08EVEN00-2020-E-01272
Project Name: 05-1H800

August 25, 2020

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve conflicts with respect to threatened or endangered species or their critical habitat prior to a

written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment(s):

- Official Species List
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Ventura Fish And Wildlife Office

2493 Portola Road, Suite B

Ventura, CA 93003-7726

(805) 644-1766

Project Summary

Consultation Code: 08EVEN00-2020-SLI-0596

Event Code: 08EVEN00-2020-E-01272

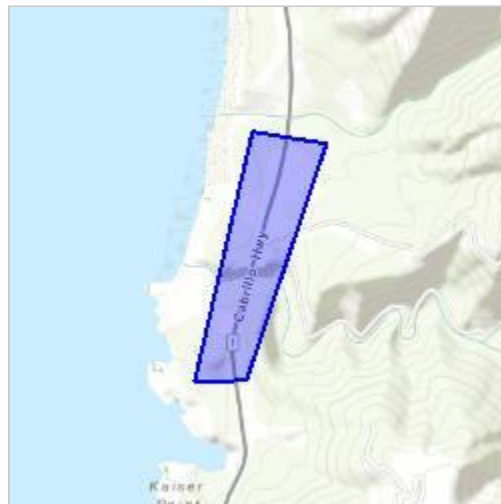
Project Name: 05-1H800

Project Type: TRANSPORTATION

Project Description: Garrapata bridge rail replacement

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/36.41784914756472N121.91356273671462W>



Counties: Monterey, CA

Endangered Species Act Species

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Southern Sea Otter <i>Enhydra lutris nereis</i> No critical habitat has been designated for this species. <i>This species is also protected by the Marine Mammal Protection Act, and may have additional consultation requirements.</i> Species profile: https://ecos.fws.gov/ecp/species/8560	Threatened

Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern <i>Sterna antillarum browni</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Marbled Murrelet <i>Brachyramphus marmoratus</i> Population: U.S.A. (CA, OR, WA) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover <i>Charadrius nivosus nivosus</i> Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog <i>Rana draytonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Smith's Blue Butterfly <i>Euphilotes enoptes smithi</i> There is proposed critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4418	Endangered

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Clover Lupine <i>Lupinus tidadromii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4459	Endangered
Marsh Sandwort <i>Arenaria paludicola</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2229	Endangered
Yadon's Piperia <i>Piperia yadonii</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4205	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix D – NMFS Species List

From: [Domingos, Andrew@DOT](mailto:Domingos.Andrew@DOT)
To: nmfwcrca.specieslist@noaa.gov
Subject: CALTRANS: 05-1H800 Tier 2 Garrapata Bridge Rail Project
Date: Tuesday, August 25, 2020 2:52:00 PM

Hello,

Please see my species list below:

Andrew Domingos | Associate Biologist | Caltrans District 5 | Central Coast Biology Branch | 50 Higuera Street, San Luis Obispo, CA 93401 | 805-549-3086 | andrew.domingos@dot.ca.gov

Quad Name	Soberanes Point
Quad Number	36121-D8
ESA Anadromous Fish	
SONCC Coho ESU (T) -	
CCC Coho ESU (E) -	
CC Chinook Salmon ESU (T) -	
CVSR Chinook Salmon ESU (T) -	
SRWR Chinook Salmon ESU (E) -	
NC Steelhead DPS (T) -	
CCC Steelhead DPS (T) -	
SCCC Steelhead DPS (T) -	X
SC Steelhead DPS (E) -	
CCV Steelhead DPS (T) -	
Eulachon (T) -	
sDPS Green Sturgeon (T) -	X
ESA Anadromous Fish Critical Habitat	
SONCC Coho Critical Habitat -	
CCC Coho Critical Habitat -	
CC Chinook Salmon Critical Habitat -	

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) - X

Range White Abalone (E) -

ESA Marine Invertebrates

Black Abalone Critical Habitat - X

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X

Olive Ridley Sea Turtle (T/E) - X

Leatherback Sea Turtle (E) - X

North Pacific Loggerhead Sea Turtle (E) - X

ESA Whales

Blue Whale (E) - X

Fin Whale (E) - X

Humpback Whale (E) - X

Southern Resident Killer Whale (E) - X

North Pacific Right Whale (E) - X

Sei Whale (E) - X

Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH - X

Coastal Pelagics EFH - X

Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office

562-980-4000

MMPA Cetaceans - X

MMPA Pinnipeds - X

From: [NMFSWCRCA Specieslist - NOAA Service Account](#)
To: [Domingos, Andrew@DOT](mailto:Domingos.Andrew@DOT)
Subject: Re: CALTRANS: 05-1H800 Tier 2 Garrapata Bridge Rail Project
Date: Tuesday, August 25, 2020 2:52:34 PM

EXTERNAL EMAIL. Links/attachments may not be safe.

Receipt of this message confirms that NMFS has received your email to nmfswcrca.specieslist@noaa.gov. If you are a federal agency (or representative) and have followed the steps outlined on the California Species List Tools web page (http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html), you have generated an official Endangered Species Act species list.

Messages sent to this email address are not responded to directly. For project specific questions, please contact your local NMFS office.

Northern California/Klamath (Arcata) 707-822-7201

North-Central Coast (Santa Rosa) 707-387-0737

Southern California (Long Beach) 562-980-4000

California Central Valley (Sacramento) 916-930-3600

Appendix E – Species Observed in the BSA

Garrapata Species List

Plant Species Observed

Scientific Name ¹	Common Name ¹	Origin / Status ¹
<i>Achillea millefolium</i>	common yarrow	native
<i>Artemisia californica</i>	California sagebrush	native
<i>Artemisia douglasiana</i>	California mugwort	native
<i>Astragalus nuttallii</i> var. <i>virgatus</i>	Ocean bluff milk vetch	native
<i>Avena barbata</i>	slender wild oat	exotic / Cal-IPC moderate
<i>Baccharis pilularis</i>	coyote brush	native
<i>Brassica nigra</i>	Black mustard	exotic / Cal-IPC moderate
<i>Briza maxima</i>	big quaking grass	non-native; Cal-IPC limited
<i>Calystegia macrostegia</i> ssp. <i>cyclostegia</i>	coast morning glory	native
<i>Carpobrotus edulis</i>	hottentot fig	non-native / Cal IPC high
<i>Castilleja latifolia</i>	Monterey indian paintbrush	native / CNPS 4.3
<i>Ceanothus thrysiflorus</i> var. <i>griseus</i>	Carmel ceanothus	native
<i>Claytonia perfoliata</i>	miner's lettuce	native
<i>Conium maculatum</i>	poison hemlock	exotic / Cal-IPC moderate
<i>Delairea odorata</i>	Cape ivy	non-native / Cal IPC high
<i>Dudleya</i> sp.	dudleya	native
<i>Echium candicans</i>	pride of madeira	non-native; Cal-IPC limited
<i>Erigeron canadensis</i>	Canadian horseweed	native
<i>Erigeron glaucus</i>	seaside daisy	native
<i>Eriogonum latifolium</i>	coast buckwheat	native
<i>Eriogonum parviflorum</i>	sea cliff buckwheat	native
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden yarrow	native
<i>Eriophyllum staechadifolium</i>	Lizard tail	native
<i>Erodium botrys</i>	long beaked filaree	non-native
<i>Eucalyptus globulus</i>	blue gum	non-native / Cal-IPC moderate
<i>Euphorbia peplus</i>	petty spurge	non-native
<i>Festuca bromoides</i>	brome fescue	non-native
<i>Frangula californica</i>	California coffeeberry	native
<i>Festuca perennis</i>	Italian ryegrass	exotic / Cal-IPC moderate
<i>Festuca myuros</i>	rattail fescue	exotic / Cal-IPC moderate
<i>Galium porrigens</i>	climbing bedstraw	native
<i>Geranium molle</i>	dove's foot geranium	exotic
<i>Heracleum maximum</i>	common cow parsnip	native
<i>Hesperocyparis macrocarpa</i>	Monterey cypress	native, naturalized
<i>Iris douglasiana</i>	Douglas Iris	native
<i>Lupinus arboreus</i>	Yellow bush lupine	native / Cal-IPC moderate in NW CA

Scientific Name ¹	Common Name ¹	Origin / Status ¹
<i>Lysimachia arvensis</i>	scarlet pimpernel	non-native
<i>Mimulus aurantiacus</i> var. <i>aurantiacus</i>	sticky monkeyflower	native
<i>Oxalis pes-caprae</i>	Bermuda butercup	non-native / Cal IPC moderate
<i>Plantago coronopus</i>	cutleaf plantain	non-native
<i>Plantago lanceolata</i>	English plantain	non-native; Cal-IPC limited
<i>Polypodium californicum</i>	California polypody	native
<i>Polystichum munitum</i>	western sword fern	native
<i>Potentilla</i> sp. (probably <i>anserine</i>)		native
<i>Pseudognaphalium luteoalbum</i>	Jersey cudweed	non-native
<i>Pteridium aquilinum</i>	western brackenfern	native
<i>Rubus ursinus</i>	California blackberry	native
<i>Rumex</i> sp.		
<i>Salix</i> sp.	willow	native
<i>Scrophularia californica</i>	California figwort	native
<i>Solanum douglasii</i>	Douglas' nightshade	native
<i>Sonchus asper</i> ssp. <i>asper</i>	prickly sow thistle	exotic
<i>Stachys bullata</i>	California hedge nettle	native
<i>Stellaria</i> sp.	chickweed	non-native
<i>Tetragonia tetragonioides</i>	New Zealand spinach	non-native / Cal IPC moderate
<i>Toxicodendron diversilobum</i>	poison oak	native
<i>Trifolium</i> sp.	clover	
<i>Urtica dioica</i>	stinging nettle	native
<i>Vinca major</i>	bigleaf periwinkle	non-native / Cal IPC moderate

1. Scientific and common names and origin/status follow The Calflora Database (2017).

Animal Species Observed

Scientific Name	Common Name	Origin / Status
<i>Neotoma macrotis luciana</i>	Monterey big-eared woodrat	CSC
<i>Danaus plexippus</i>	Monarch butterfly	CSC
<i>Bombus</i> spp.	Unknown bee species	
<i>Calypte anna</i>	Annas hummingbird	
<i>Bubo virginianus</i>	Great horned owl	

Appendix F – Photos

Photograph 1: View from under Garrapata Creek bridge



Photograph 2: View looking down the slope where the proposed access road will be cleared



Photograph 3: Smith's blue butterfly surveys, south end of bridge where most of the temporary impacts will occur.



Photograph 4: Monterey cypress proposed for removal on south end of the bridge



Photograph 5: Monterey big-eared woodrat found deceased under south abutment of the bridge.



Photograph 6: Bees present during our Smith's blue butterfly surveys within the BSA.



Photograph 7: Iceplant mat vegetation cover under south end of the bridge.



Photograph 8: Proposed staging area on south end of the bridge.

