PUBLIC DRAFT
INITIAL STUDY

for the

SPACE FOR MEANINGFUL OUTDOOR RECREATION AND EDUCATION PROJECT

Lead Agency:

State of California
DEPARTMENT OF PARKS AND RECREATION
Monterey District
Contacts: Daniel Shaw and Marcos Ortega
Monterey District

Prepared by:

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November 2024

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BACKGROUND INFORMATION

Project Title:	Space for Meaningful Outdoor Recreation and Education Project
Project Location(s):	Andrew Molera State Park, Monterey County, California
Name of Property Owner:	California Department of Parks and Recreation
Name of Project Proponent:	Ventana Wildlife Society
Assessor's Parcel Number(s):	159-031-002-000
Acreage of Parcel:	2 Acres (Project Site); 4,800 acres (Andrew Molera State Park)
General Plan Designation:	Wetlands & Coastal Strand
Zoning District:	Resource Conservation (RC-D(CZ))
Lead Agency:	California Department of Parks and Recreation
Prepared By:	Denise Duffy and Associates, Inc.
Date Prepared:	November 2024
Contact Person(s):	Daniel Shaw; C/O Marcos Ortega
Contact Information:	(831) 643 – 6326, Daniel.Shaw@parks.ca.gov and Marcos.Ortega@parks.ca.us

List of Abbreviations

Acronym/Abbreviation	Definition
3CE	Central Coast Community Energy
AB	Assembly Bill
Albion	Albion Environmental, Inc.
AMBAG	Association of Monterey Bay Area Governments
AMSP or the Park	Andrew Molera State Park
AQMP	Air Quality Management Plan
API	Area of Impact
BAU	Business as Usual
Big Sur Coast LUP	Land Use Plan for the Big Sur Coast
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalFire	California Department of Forestry and Fire
CalGreen	California Green Building Standards Code
CARB	California Air Resources Board
CBC	California Building Code
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CIP	Coastal Implementation Plan
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
County	Monterey County
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRLF	California Red-Legged Frog
CRPR	California Rare Plant Ranks
dB	Decibels
dBA	A-Weighted Sound Level
DBH	Diameter-at-Brest-Height
DOT	United States Department of Transportation
DTSC	California Department of Toxic Substances Control

Acronym/Abbreviation	Definition
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
CalEPA	California Environmental Protection Agency
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Areas
Esselen Tribe	Esselen Tribe of Monterey County
FEMA	Federal Emergency Management Agency
FYLF	Foothill Yellow-Legged Frog
GHG	Greenhouse Gas Emissions
Hexagon	Hexagon Transportation Consultants
IS/MND	Initial Study Negative Declaration
MBARD	Monterey Bay Air Resources District
MBTA	Migratory Bird Treaty Act
MHT	Molera Horseback Tours
$MTOCO_2e$	Metric Tons of Carbon Dioxide Equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCAB	North Central Coast Air Basin
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NWIC	Northwest Information Center
Pacific Crest	Pacific Crest Engineering, Inc.
PG&E	Pacific Gas and Electric
Porter-Cologne	Porter-Cologne Water Quality Control Act
Project or Proposed Project	Space for Meaningful Outdoor Recreation and Education Project
RCRA	Resources Conservation and Recovery Act
RPS	Renewables Portfolio Standard
Rumsen Tribe	Rumsen Am:a Tur:ataj Ohlone
RWD	Reports of Waste Discharge
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SMORE	Space for Meaningful Outdoor Recreation and Education
SPRP	Spill Prevention and Response Plan
SR	State Route
State Board or SWRCB	State Water Resources Control Board
State Parks or Parks	California Department of Parks and Recreation

Acronym/Abbreviation	Definition
TDM Plan	Big Sur Sustainable Transportation Demand Management Plan
USFWS	United States Fish and Wildlife
USGS	United States Geological Survey
VMT	Vehicle Miles Traveled
VWS	Ventana Wildlife Society
Waterway Management Plan	Big Sur River Protected Waterway Management Plan
Waters of the U.S.	Waters of the United States
WDRs	Waste Discharge Requirements
ZanderWestbrook	ZanderWestbrook Design

Chapter 1: INTRODUCTION AND PROJECT DESCRIPTION

1.1 INTRODUCTION

The California Department of Parks and Recreation ("State Parks" or "Parks") prepared this Initial Study/Mitigated Negative Declaration ("IS/MND") to evaluate the potential environmental effects associated with the Space for Meaningful Outdoor Recreation and Education ("SMORE") Project ("Project" or "Proposed Project"), located in Monterey County, California ("County"). State Parks prepared this document in accordance with the California Environmental Quality Act ("CEQA"), Public Resources Code Section 21000 et. seq., and the State CEQA Guidelines, California Code of Regulations (CCR) Section 15000 et. seq.

An Initial Study is an informational document prepared by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063 (a)). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report ("EIR") must be prepared, in accordance with CEQA Guidelines Section 15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less than significant level, a Mitigated Negative Declaration may be prepared instead of an EIR (CEQA Guidelines Section 15070(b)). The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements under CEQA Guidelines Section 15071.

State Parks is acting as the Lead Agency pursuant to CEQA Guidelines Section 15050(a). As the Lead Agency, State Parks prepared this IS/MND pursuant to CEQA Guidelines Section 15063, Section 15070, and Section 15152. State Parks will circulate this IS/MND for agency and public review during a 30-day public review period, as required pursuant to CEQA Guidelines Section 15073. State Parks will consider all comments raising a substantive environmental issue under CEQA as part of the deliberative process in accordance with CEQA Guidelines Section 15074.

State Parks prepared the following section consistent with the requirements of CEQA Guidelines Section 15124 to the extent that it applies to the Proposed Project. This section contains a detailed description of 1) the Project location, 2) Project description, 3) State Park standard project requirements, and 4) required approval and permits.

1.2 PROJECT LOCATION

1.2.1 REGIONAL LOCATION

The Proposed Project is located in Andrew Molera State Park ("AMSP" or "the Park"), in northern Big Sur in unincorporated Monterey County, California (see **Figure 1, Regional Map**). AMSP lies approximately 28 miles south of the City of Monterey and is adjacent to the Pacific Ocean. The Park is on the western slope of the Santa Lucia Mountain Range, one of California's most rugged landscapes. Los Padres National Forest, including the Ventana Wilderness, is east of AMSP. A combination of National Forest land and mostly undeveloped private property borders the Park to the north and south. State Route ("SR") 1, which bisects AMSP, serves as the only access to the Park. The Big Sur River meanders through the Park along the west side of SR 1 before the river reaches the Pacific Ocean at the northwest corner of the Park.

The Proposed Project site ("Project site" or "site") lies in the lower middle section of AMSP and comprises approximately two (2) acres of the 4,800-acre Park (see **Figure 2, Project Site**).

1.2.2 HISTORIC AND CURRENT USE

The Park was historically owned by the Molera and Cooper family, who used the land for ranching. State Parks acquired the property in 1968 from The Nature Conservancy who purchased the land from the prior owners in 1965 (Online Archive of California, n.d.). AMSP is relatively underdeveloped and offers approximately 20 miles of recreation trails that serves approximately 55,000 visitors annually (The Nature Conservancy, 2024). The Park offers a hike-in campground located ¼ mile north of the main parking lot. The campground is tent only, and contains 22 standard tent sites, and two (2) hike-and-bike campsites. Each campsite has a fire pit, picnic table, and food storage container. Amenities include potable water and two restrooms with flush toilets at the parking lot, and two (2) restrooms with vault toilets at the campgrounds (CDPR, 2024; Google Earth, 2024). Two (2) existing portable restrooms are also located at the Proposed Project site.

In 1996, the Proposed Project site became a dedicated outfitting location for the Molera Horseback Tours ("MHT"), an equestrian tour company that operated in the Park since the 1970's. MHT operated seasonally from April to October of each year, providing horseback tours for visitors of the Park. MHT employed 10 persons and provided onsite housing for two (2) to four (4) employees. Due to the rustic nature of the Park, housing was provided by on-site trailers. The Project site provided space to house up to 35 horses and served hundreds of visitors each season. In 2018, State Parks terminated MHT's contract and infrastructure within the Project site (e.g., corrals, horse pins) were removed (personal communication, State Parks, 2023).

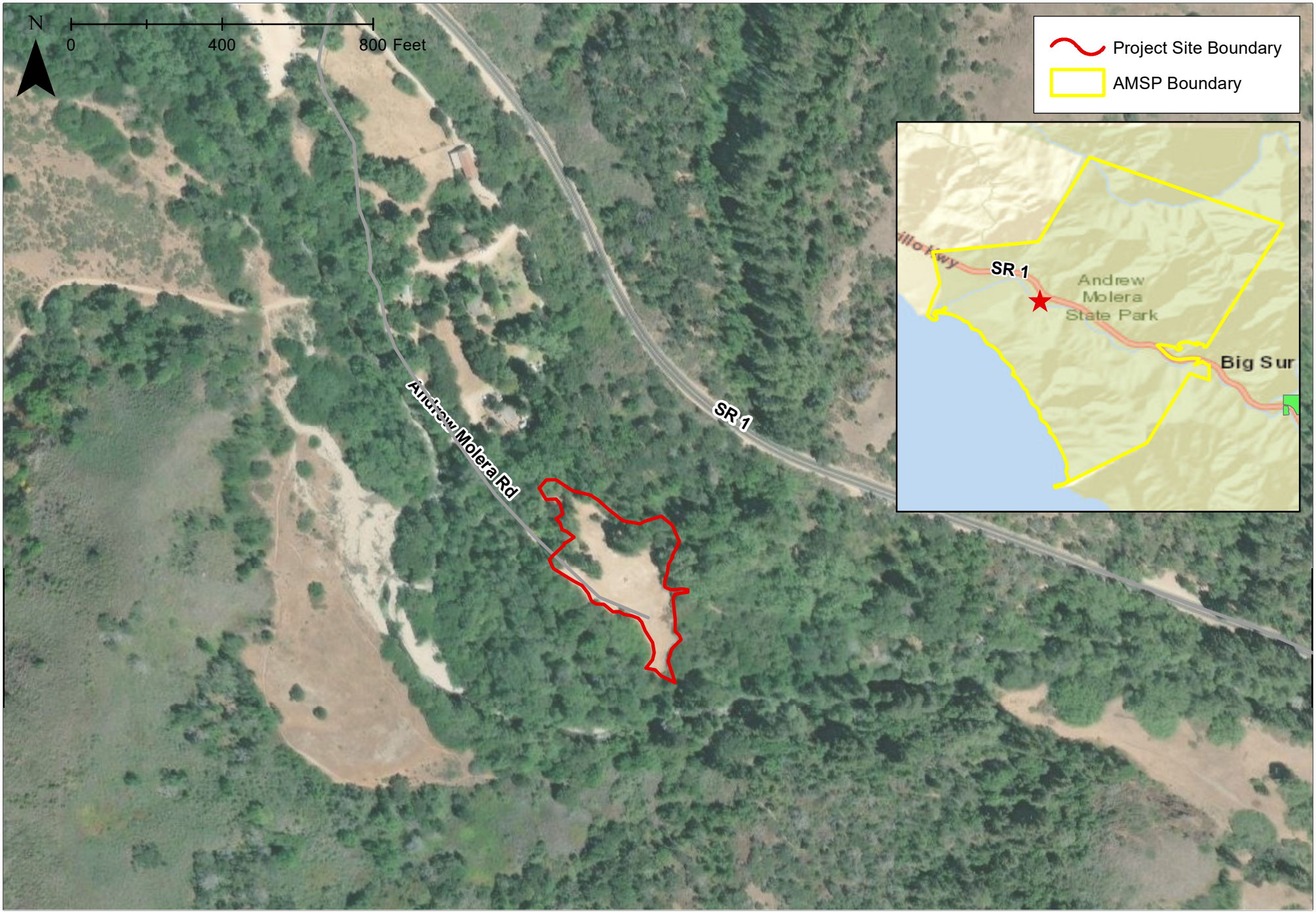
Regional Map

Date
1/29/2024

Scale
1 in = 4,000 ft

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
1



Project Site

Date
1/29/2024

Scale
1 in = 300 ft

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
2

Path: E:\GIS\GIS_Projects\2023-09 Ventana Wildlife Society SMORE Project\Final Products\Project Site.mxd

Since the closure of MHT, the Ventana Wildlife Society ("VWS"), a local 501(c)(3) non-profit, has partnered with State Parks to use the Project site for educational youth and family campouts. The VWS has utilized the Project site for outdoor education and recreational programs that serve central coast families who face accessibility, transportation, and/or economic barriers to accessing Big Sur. Currently, VWS conducts up to 30 campouts each year with approximately 30 campers and five (5) VWS staff. VWS transports campers from the Monterey Peninsula in two (2) 15-passenger vans and two (2) support vehicles.

When the Proposed Project site is not in use by VWS, State Parks utilizes the site for maintenance equipment storage, tribal gatherings, educational events, and as an emergency spike camp for wildland firefighters.

1.2.3 EXISTING AND SURROUNDING LAND USES

AMSP has limited visitor-serving and park operations facilities (i.e., parking lot, one [1] permanent hike-in campground, restroom facilities). Existing facilities are primarily located in the mid-south portion of the Park adjacent to the Big Sur River. The Park is open year-round and accommodates hikers, bikers, campers, and beach goers. The 20 miles of trails offer visitors access to mountain-top overlooks, quiet meadows, the Big Sur River, and redwood forests.

Land uses and development activities within AMSP are governed by the Land Use Plan for the Big Sur Coast segment of the County's Local Coastal Program ("Big Sur Coast LUP"), one of the County planning areas, and the AMSP General Plan. The Project site's land use designation under the Big Sur Coast LUP is *Resource Conservation* (see **Figure 3, Land Use Designations**). This designation allows for low-intensity day-use recreational and educational uses, and environmental campsites compatible with the natural resources of the area. The AMSP General Plan identifies the following existing primary land uses within the Park:

- Visitor day use
- Visitor overnight
- Concession operations
- Park operations
- Open space

The Park is bordered by National Forest land, including portions of the Ventana Wilderness. Some private, primarily undeveloped land borders the Park on its southern and northern edge, with the Pacific Ocean along the western boundary of the Park.

Land Use Designations

Date
1/29/2024

Scale
1 in = 1,305 ft

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
3

Path: E:\GIS\GIS_Projects\2023-09 Ventana Wildlife Society S'MORE Project\Final Products\Land Use.mxd

The Proposed Project site is currently vacant, although it was developed in connection with the prior use. An unpaved (i.e., dirt) road connects the site to the main AMSP parking lot and SR 1. The Project site contains portable restrooms and water spigots. Areas adjacent to the Project site consist of coast live oak woodland and cottonwood sycamore riparian forest. The Big Sur River borders the Project site to the south and southwest. SR 1 is located to the east and northeast. The Bobcat Trail is accessible at the southeast corner of the Project site, and trail connections are accessible to the north.

1.3 PROJECT DESCRIPTION

The Proposed Project consists of the construction and operation of a permanent camping facility and associated infrastructure designed to support existing organized educational youth and family campouts facilitated by VWS. These facilities would facilitate future expansion of VWS campouts to accommodate 50 campers plus ten (10) staff (60 total people) and up to 60 campouts per year. VWS would transport campers in four (4) fifteen-passenger vans, and one (1) support vehicles. The Project would also support future special events or programs permitted by State Parks.[1] **Figure 4, Site Plan**, shows the anticipated location of proposed improvements, which include:

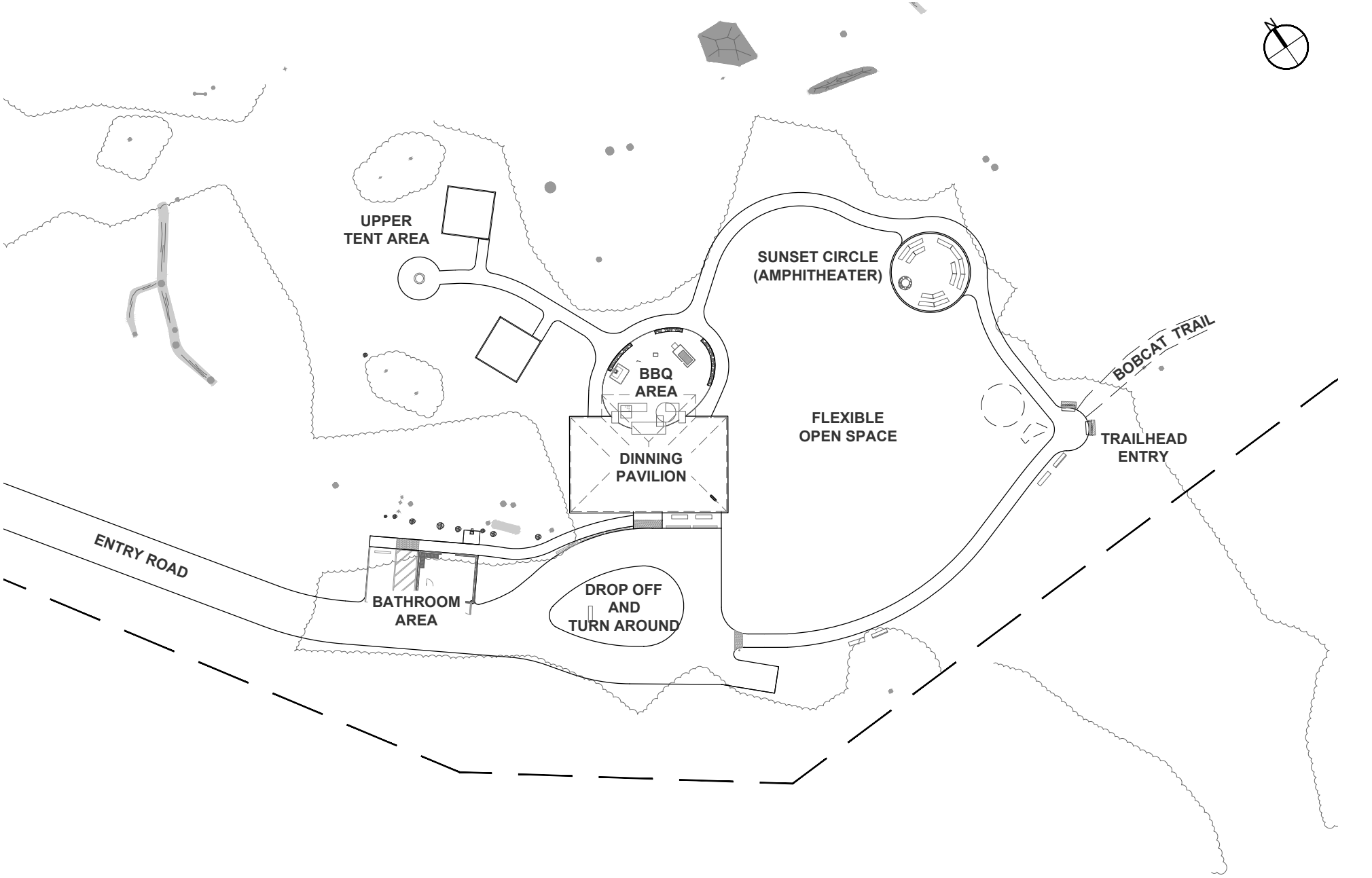
- Two (2) designated tent camp areas that can accommodate a total of sixty (60) people;
- An amphitheater;
- Fire rings;
- A rustic kitchen/dining pavilion with BBQ(s)/Grills and picnic tables;
- Two (2) portable restroom facilities;
- ADA accessible internal decomposed granite pathways; and,
- A designated parking area comprised of one (1) ADA-accessible van parking space.

The Proposed Project also includes a graywater catchment system that would include a dry well for on-site water capture and storage. In addition, the Project also includes bear resistant trash receptacles, for wildlife safe solid waste disposal. The Project site would be restored and landscaped to enhance habitat value. Specifically, the Proposed Project would restore approximately 4,851 square ft of previously disturbed habitat on site with native planting. See **Section 1.3.8** for more information.

The following discussion provides a more detailed description of key Project elements, including site access, grading requirements, and other physical elements of the Project that have the potential to affect the environment.

[1] State Parks is considering implementing a FamCamp at AMSP. FamCamp was established in 1994 to provide underserved communities the opportunity to experience the outdoors. FamCamp provides campsites and equipment at selected CA State Parks. Learn more about FamCamp here: https://www.parks.ca.gov/?page_id=24915. Additional uses of the Project site may include special events which are separately reviewed and permitted by State Parks.

Source: Zander Design



Site Plan	Date 10/09/2024	Denise Duffy & Associates, Inc. Planning and Environmental Consulting	Figure 4
	Scale N/A		

1.3.1 ACCESS AND CIRCULATION

Regional access to the Project site would be provided exclusively from SR 1 via an existing paved road that connects the AMSP main parking lot to SR 1. From the parking lot, an existing unpaved (i.e., dirt) road would provide drop-off and pick-up access to and from the Project site. The main AMSP parking lot would provide long-term parking. Vehicles would drop campers off at the Project site, but return to the main AMSP parking lot. One ADA-accessible van parking spot would remain available at the site as illustrated in **Figure 4, Site Plan**.

1.3.2 WATER SUPPLY

AMSP's existing water distribution system would serve the Proposed Project. The Proposed Project would be provided potable water through the existing AMSP water distribution system. The existing system consists of a 25,000-gallon water storage tank. The water tank is served by an existing well at the rate of 75 gallons per minute (personal communication, State Parks, 2023). The existing well is located in AMSP on the east side of SR 1, and approximately a quarter mile east from the Proposed Project site. Potable water is distributed through a series of water lines and spigots to the Project site.

1.3.3 SANITARY SEWER AND WASTEWATER

The Proposed Project would utilize two (2) existing portable restrooms onsite. A sanitary pump truck currently services the existing portable toilet facilities in AMSP. The portable restrooms and pump services would continue to serve the Proposed Project (personal communication, State Parks, 2023). No showers are available onsite.

Additionally, the Project would construct a new graywater catchment system to capture wastewater from the existing water spigots and kitchen/dining pavilion sink. The proposed on-site graywater system would include a drain and drywell for each spigot.[2] Water from the spigot would flow from the drain below the spigot to the drywell through a ¾-inch PVC supply line. Water runoff from spigots would enter the drain which would lead to the dry well through ¾-inch PVC supply lines. The drywell serves as a holding reservoir and slow release system. The proposed system design was provided by State Parks staff and is currently in-use at nearby State Park facilities.

1.3.4 STORMWATER AND DRAINAGE

Due to existing site topography, the Project would require stormwater and drainage improvements to ensure proper drainage (see **Section 1.3.6 Construction and Grading**, below). The Proposed Project would result in 47,504 square feet of pervious cover (including decomposed granite pathways and entry drive/turnaround area), and 3,386 square feet of impervious cover (i.e., concrete and building cover). Overall, the site drainage patterns will mimic the existing runoff patterns - no concentrated flows will leave the Project area. Runoff from new impervious surfaces and areas with decreased permeability (e.g., amphitheater, dining pavilion) would follow the

[2] For more information regarding the drywell, please visit https://www.ndspro.com/PDFs/Brochures/Flo-Well-Dry-Well-FWAS24-Brochure.pdf.

natural grade of the Project site. Stormwater drainage would flow east to west, and north to south. The southernmost, and seasonal camping area, would be graded to ensure this area drains west to southwest.

In addition, the rustic kitchen/dining pavilion would consist of rain water gutters. The water from these gutters would drain away from the buildings and percolate in the nearby vegetated surfaces.

1.3.5 SOLID WASTE AND RECYCLING

Waste at the Project site is currently collected and disposed of at the existing trash and recycling dumpsters in the main AMSP parking lot. Solid waste and recycling is collected and transported by ReGen Monterey (previously known as Monterey Regional Waste Management District) to the Monterey Peninsula Landfill. The Proposed Project would improve waste collection with animal safe receptacles. After each campout, VWS staff will pick-up trash and ensure the site is left clean and ready for next use. Collection and disposal of waste would remain the same.

1.3.6 CONSTRUCTION AND GRADING

Construction of the Proposed Project would generally involve small tractors, backhoes, compactors, dump trucks, etc. Most of the equipment would be brought to the site at the beginning of work and remain until the completion of construction. As necessary, trucks would bring materials to the site. Deliveries would likely take place over a short period of time (e.g., less than a month). As noted on **Figure 5a. Construction Management Plan**, the estimated number of construction workers on site at any one time would be approximately 5 – 15 workers. The start of construction depends on the Project approval date, seasonal factors, and the contractor's schedule. However, once approved, construction is expected to last approximately one (1) year. Construction activities would be limited to the hours between 7AM – 7PM, Monday through Saturday. No construction activities would occur on Sundays or holidays. Local site access would be provided by SR 1.

Approximately 729.5 cubic yards (cy) of cut and 429 cy of fill is anticipated (see **Figure 5b, Grading Plan**). Approximately 180 cy would be stockpiled within the broader AMSP.

1.3.7 TREE AND VEGETATION REMOVAL

The Proposed Project site contains several native trees; however, the Proposed Project would not require removal of these trees. Similarly, the Proposed Project site is surrounded by dense vegetation which would not be disturbed in connection with construction of the Proposed Project. The Proposed Project site is characterized as ruderal (see **Section 4.3 Biological Resources**), the Proposed Project site is devoid of vegetation or dominated by non-native and/or invasive weed species. All trees and vegetation within the Project site, or in proximity to areas planned for disturbance will be maintained and protected.

Source: ZanderWestbrook Design August, 2024.

CONSTRUCTION MANAGEMENT PLAN

CONSTRUCTION ACTIVITY:

CONSTRUCTION DURATION	12 MONTHS, BEGINNING UPON PERMIT ISSUANCE
CONSTRUCTION HOURS	MONDAY - SATURDAY, 7 AM - 7 PM NO CONSTRUCTION ON SUNDAYS OR HOLIDAYS
CONSTRUCTION WORKERS	5 - 15
CONSTRUCTION VEHICLES	4 REGULAR PICK-UP TRUCKS
ESTIMATED NUMBER OF TRUCK TRIPS THAT WILL BE GENERATED	50 - 100 TRUCK TRIPS
STAGING AREA FOR TRUCKS	2,077 SQ.FT.
PARKING AREA FOR TRUCKS AND WORKERS	2,422 SQ.FT.
CONSTRUCTION GRADING	CUT = 729.5 CY FILL = 429.4 CY

CONSTRUCTION SITE PLAN:

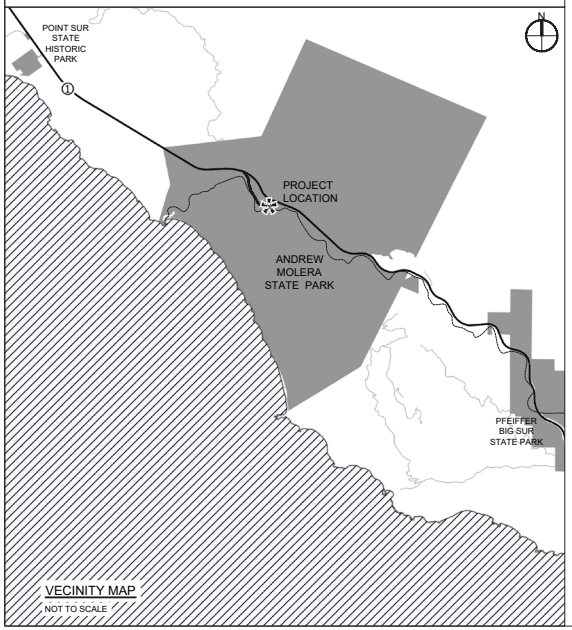
1. TEMPORARY VEHICULAR PARKING AND/OR MATERIALS STAGING
2. TEMPORARY CONSTRUCTION MATERIALS STAGING AND STOCKPILE AREA
3. TEMPORARY PORTA POTTY
4. TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
5. PROTECTED BOBCAT TRAIL TO REMAIN OPEN DURING CONSTRUCTION

CONSTRUCTION COORDINATION:

CONTRACTOR SHALL PROVIDE A CONSTRUCTION COORDINATOR THAT CAN BE CONTACTED DURING CONSTRUCTION SHOULD QUESTIONS ARISE DURING CONSTRUCTION (IN CASE OF BOTH REGULAR INQUIRIES AND EMERGENCIES). THEIR CONTACT INFORMATION (INCLUDING THEIR ADDRESS AND 24-HOUR PHONE NUMBER) SHALL BE CONSPICUOUSLY POSTED AT THE JOB SITE IN A MANNER THAT THE CONTACT INFORMATION IS READILY VISIBLE FROM PUBLIC VIEWING AREAS. THE POSTING SHALL INDICATE THAT THE CONSTRUCTION COORDINATOR SHOULD BE CONTACTED TO ANSWER ANY QUESTIONS THAT ARISE DURING CONSTRUCTION (IN CASE BOTH REGULAR INQUIRIES AND EMERGENCIES). THE CONSTRUCTION COORDINATOR SHALL RECORD THE NAME, PHONE NUMBER, AND NATURE OF COMPLAINTS AND TAKE REMEDIAL ACTIONS IF NECESSARY, WITHIN 24 HOURS OF RECEIPT OF THE COMPLAINT INQUIRY.

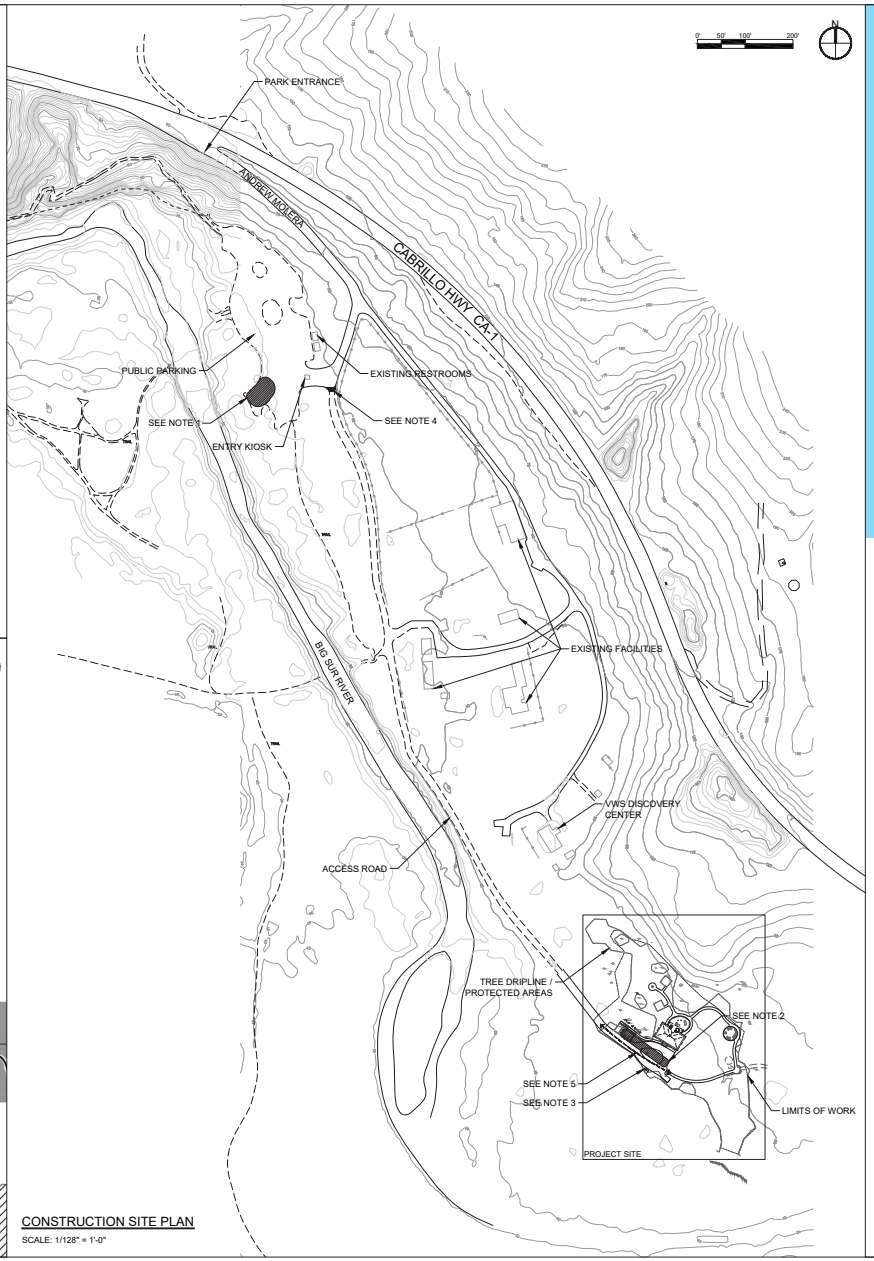
PROJECT DATA:

PROJECT ADDRESS:	ANDREW MOLERA STATE PARK, BIG SUR CALIFORNIA
PRIMARY CONTRACTOR:	
OWNER:	CALIFORNIA STATE PARKS
SCOPE OF WORK:	CONSTRUCTION OF A 1,700 SQ. FT.PICNIC PAVILION AND CAMPGROUND AREA
A.P.N.:	159-031-002-000
ACREAGE OF PROPOSED PROJECT SITE:	2-ACRES
GENERAL PLAN DESIGNATION:	WETLANDS AND COASTAL SAND
ZONING DISTRICT:	RESOURCE CONSERVATION (RC-d(CZ))
LEAD AGENCY:	CALIFORNIA DEPARTMENT OF PARKS AND RECREATION
CONTACT PERSON:	DANIEL SHAW



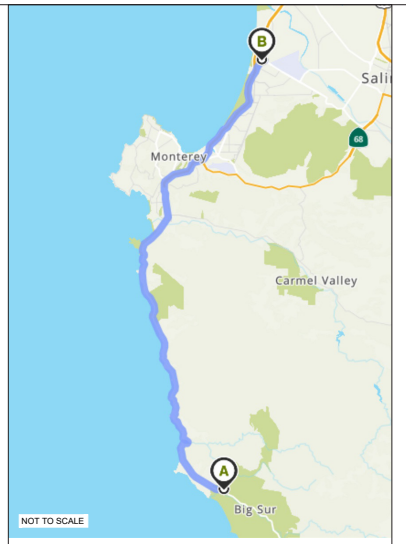
VECINITY MAP

NOT TO SCALE



CONSTRUCTION SITE PLAN

SCALE: 1/128" = 1'-0"



Head toward Coast Rd on Andrew Molera. Go for 105 ft.

Then 0.02 miles

Turn left onto Cabrillo Hwy (CA-1). Go for 26.7 mi.

Then 26.7 miles

Continue on CA-1 N (Cabrillo Hwy) toward CA-1/Santa Cruz/San Francisco. Go for 7.1 mi.

Then 7.1 miles

Take exit 409 toward Del Monte Blvd. Go for 0.3 mi.

Then 0.3 miles

Continue on Del Monte Blvd. Go for 0.7 mi.

Then 0.7 miles

Turn right onto Reservation Rd (CR-G17 S). Go for 0.1 mi.

Then 0.1 miles

Make a U-Turn onto Reservation Rd (CR-G17 N). Go for 0.1 mi.

Then 0.1 miles

Turn left onto Del Monte Blvd. Go for 407 ft.

Then 0.08 miles

Monterey Regional Waste Management District (Regen Monterey - Monterey Regional Waste Management District
Del Monte Blvd, Marina, CA 93933

CONSTRUCTION WASTE HAULING ROUTE

NOT TO SCALE

Zander Westbrook Design
2527 Newbury St, Ste B
Berkeley, CA 94703
510-343-7789
www.zanderwestbrook.com

NOT FOR CONSTRUCTION
90% DESIGN SET

CONSTRUCTION MANAGEMENT PLAN
SPACE FOR MEANINGFUL OUTDOOR RECREATION AND EDUCATION
VENTANA WILDLIFE SOCIETY
ANDREW MOLERA STATE PARK, BIG SUR, CALIFORNIA

No.	Date	Revision

SHEET

OF 32

SCALE: AS NOTED
DATE: 09/06/2024
DRAWN BY:
CHECKED BY:

Construction Management Plan

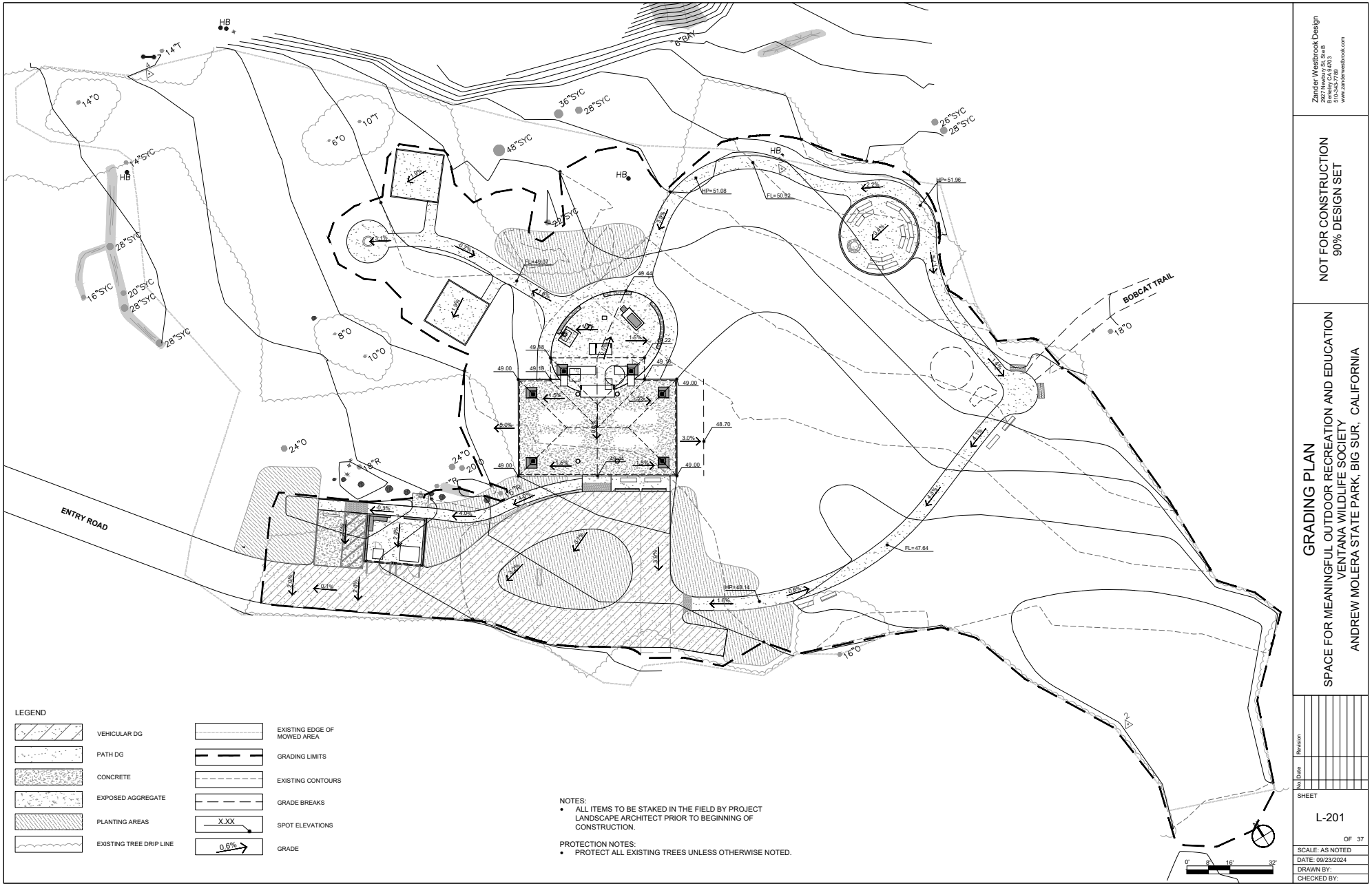
Date
11/14/2024

Scale
N/A

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
5a

Source: ZanderWestbrook Design August, 2024.



Grading Plan

Date
11/14/2024

Scale
N/A

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
5b

1.3.8 RESTORATION

The Proposed Project includes native restoration to enhance and restore areas temporarily disturbed during construction. Specifically, the Proposed Project would restore approximately 4,851 square ft of previously disturbed habitat on site; see **Figure 6a** and **Figure 6b, Landscape and Plant Plan**. Restoration would minimize temporary Project impacts and provide enhanced wildlife habitat. Restoration would utilize native trees and shrubs.

Fuel Management

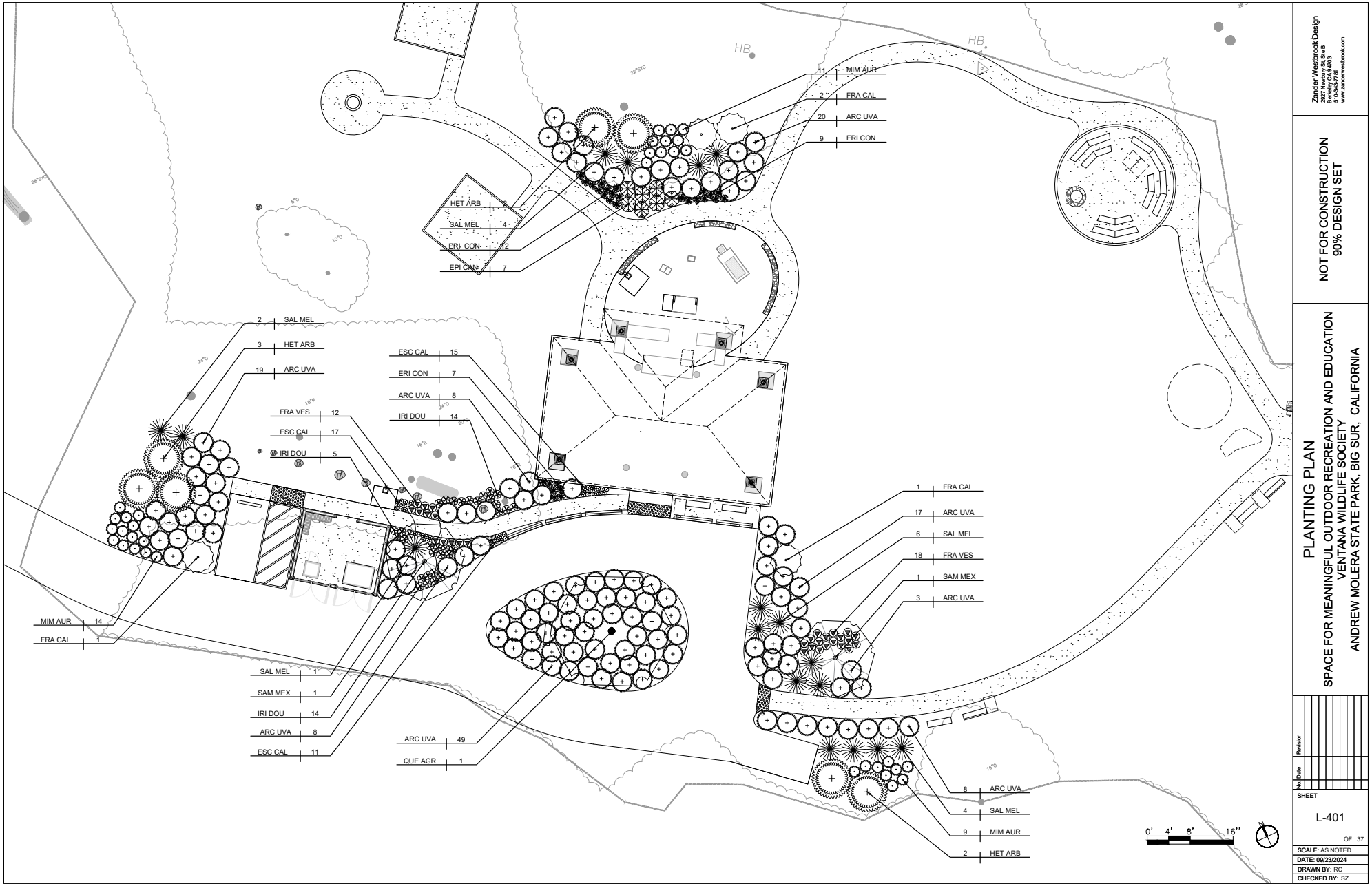
The Proposed Project site is located in a high fire hazard area. State Park currently conducts routine mowing of the site for fuel management purposes, and would maintain ongoing fuel management efforts during operation of the Proposed Project. As illustrated in **Figure 7 Fuel Management Plan**, as designed, improvements associated with the Proposed Project would have 30 – 100 feet of defensible space. Defensible space is routinely mowed by State Parks. State Parks would continue to mow the Proposed Project site.

1.3.9 OPERATION

The Proposed Project would consist of 60 campouts annually and serve 50 campers and 10 VWS Staff (60 people total). Campers would be transported to and from the Project site in four (4) 15-passenger vans owned and operated by VWS. A single support vehicles would transport camp supplies and equipment to and from the Project Site. Campouts are usually one night at a time (as opposed to multiple nights consecutively). Campers arrive between 9am and 10am and depart by noon the following day.

The Proposed Project is intended to create a designated place to facilitate existing youth and family camp programs provided by VWS and State Parks. These camp programs would specifically serve those who would otherwise not utilize the Park due to accessibility barriers (e.g., lack of transportation, economic factors, etc.). While the Proposed Project's camp facilities would be solely utilized by VWS and State Parks (i.e., not available for public camp use), the area would remain accessible for day-use purposes when the site is not in use by VWS or State Parks. State Parks implements a number of programs to promote public access within park units, including AMSP, to ensure that parks remain available to everyone. No changes to the existing Park entry program are proposed as part of the Proposed Project.

Source: ZanderWestbrook Design August, 2024.



Landscape Plan

Date
11/14/2024

Scale
N/A

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
6a

Source: ZanderWestbrook Design August, 2024.

PLANTING SCHEDULE

IMAGE	SYMBOL	SCIENTIFIC NAME/ COMMON NAME	SIZE	SPACING	HEIGHT	SPREAD	QUANTITY
NATIVE TREES							
	SAM MEX	*SAMBUCUS MEXICANA* BLUE ELDERBERRY	*15 GAL*		*30 FT*	*30 FT*	*2*
	QUE AGR	*QUERCUS AGRIFOLIA* COAST LIVE OAK	*24" BOX*		*60 FT*	*60 FT*	*1*
NATIVE GROUND COVER							
	ARC UVA	*ARCTOSTAPHLOS UVA URSI* MANZANITA BEARBERRY	*1 GAL*		*1 FT*	*5 FT*	*132*
	SAL MEL	*SALVIA MELLIEFERA* CREEPING BLACK SAGE	*1 GAL*		*1 FT*	*6 FT*	*17*
NATIVE SHRUBS							
	ERI CON	*ERIOPHYLLUM CONFERTIFLORUM* GOLDEN YARROW	*1 GAL*		*3 FT*	*2 FT*	*28*
	EPI CAN	*EPIOBIUM CANUM* *CALIFORNIA FUCHSIA*	*1 GAL*		*1 FT*	*4 FT*	*7*
	ESC CAL MAR	*ESCHSCHOLIZA CALIFORNICA MARTIMA* COASTAL POPPY	*1 GAL*		*1 FT*	*1 FT*	*43*
	FRA VES	*FRAGARIA VESCA* *WOODLAND STRAWBERRY*	*1 GAL*		*1 FT*	*1 FT*	*30*
	FRA CAL	*FRANGULA CALIFORNICA* *CALIFORNICA COFFEEBERRY*	*1 GAL*		*6 FT*	*10 FT*	*4*

IMAGE	SYMBOL	SCIENTIFIC NAME/ COMMON NAME	SIZE	SPACING	HEIGHT	SPREAD	QUANTITY
NATIVE SHRUBS							
	HET ARB	*HETEROMELES ARBUTIFOLIA* TOYON	*1 GAL*		*10 FT*	*8 FT*	*7*
	IRI DOU	*IRIS DOUGLASIANA* DOUGLAS IRIS	*1 GAL*		*2 FT*	*2 FT*	*33*
	MIM AUR	*MIMULUS AURIANTICUS* STICKY MONKEY FLOWER	*1 GAL*		*3 FT*	*3FT*	*34*

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Berkeley, CA 94703
510-542-7748
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PLANTING PLAN
SPACE FOR MEANINGFUL OUTDOOR RECREATION AND EDUCATION
VENTANA WILDLIFE SOCIETY
ANDREW MOLERA STATE PARK, BIG SUR, CALIFORNIA

No	Date	Revision

SHEET
L-402
OF 32

SCALE: AS NOTED
DATE: 09/23/2024
DRAWN BY: RC
CHECKED BY: SZ

Landscape and Plant Plan

Date
11/14/2024

Scale
N/A

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
6b

Source: ZanderWestbrook Design August, 2024.

Fuel Management Plan

Date
11/14/2024

Scale
N/A

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Planning and Environmental Consulting

Figure
7

1.4 STATE PARKS – STANDARD PROJECT REQUIREMENTS

In addition to the project-specific mitigation measures identified in this IS/MND, State Parks also implements standard project design measures (referred to as "Standard Project Requirements") as part of all projects. These measures are intended to ensure that State Parks' projects include measures as part of project design to reduce potential adverse environmental effects. State Parks includes these measures as part of all projects (to the extent applicable to a project). **Table 1.4-1** identifies State Parks' Standard Project Requirements applicable to the Proposed Project. These general requirements are tailored to each individual project based on the individual needs and circumstances of the project. State Parks would implement the requirements identified in **Table 1.4-1** as part of the Proposed Project. It is important to note that these measures do not constitute mitigation measures for the purposes of CEQA. Rather, these measures are project design features included as part of the Proposed Project. The mitigation measures identified in this IS/MND would ensure that all impacts would be less than significant. The following measures are additive and are intended to highlight State Parks' efforts to proactively ensure that potential environmental impacts are addressed through project design.

Table 1.4-1
California Department of Parks and Recreation
Standard Project Requirements

Environmental Topic	Requirement
Aesthetics	▪ Projects will be designed to incorporate appropriate park scenic & aesthetic values including the choices for: specific building sites, scope & scale; building and fencing materials and colors; use of compatible aesthetic treatments on pathways, retaining walls or other ancillary structures; location of and materials used in parking areas, campsites, and picnic areas; development of appropriate landscaping. The park scenic and aesthetic values will also consider views into the park from neighboring properties. ▪ DPR will store all project-related materials outside of the viewshed. ▪ The Contractor will equip any permanent structure with outdoor light shields that concentrate the illumination downward to reduce direct and reflected light pollution. The direct source of the lighting (bulb, lens, filament, tube, etc.) will not be visible off site and the lighting will be installed as low as possible on poles and/or structures to minimize light pollution of the night sky. The candle power of the illumination at ground level will not exceed what is required by any safety or security regulations of any government agency with regulatory oversight.

Environmental Topic	Requirement
Air Quality - Dust Control	▪ During dry, dusty conditions, all active construction areas will be lightly sprayed with water, a dust suppressant, to reduce dust without causing runoff. ▪ All trucks or light equipment hauling soil, sand, or other loose materials on public roads will be covered or required to maintain at least two feet of freeboard. ▪ All gasoline-powered equipment will be maintained according to manufacturer's specifications, and in compliance with all State and federal requirements. ▪ Paved streets adjacent to the Park will be swept at the end of each day, or as required, to remove excessive accumulations of silt and/or mud which could have resulted from project-related activities. ▪ Excavation and grading activities will be suspended when sustained winds exceed 15 miles per hour (mph), instantaneous gusts exceed 25 mph, or when dust occurs from project-related activities where visible emissions (dust) cannot be controlled by watering or conventional dust abatement controls.
Biological Resources - Tree Protection	▪ Any trenching within a “structural root zone” will be completed by hand; no roots two inches or larger in diameter will be cut or damaged. ▪ No ground-disturbing activities will be allowed within five (5) times the diameter-at-breast-height (“dbh”) of trees that are to be retained, unless approved in advance by a DPR-approved biologist, forester, or certified arborist.
Biological Resources - Invasive Species	▪ All construction equipment shall arrive free and clear of any dirt or seeds to avoid introduction of invasive plants to the project area. ▪ All project activities that could spread non-native, invasive species to new locations will be subject to Best Management Practices developed by the Cal-IPC and available online at http://www.cal-ipc.org/ip/prevention/index.php.
Biological Resources - Wildlife	▪ To prevent trapping of wildlife, all holes and trenches will be covered at the close of each working day with plywood or similar materials, or will include escape ramps constructed of earth fill or wooden planks; all pipes will be capped. ▪ A DPR-approved biologist, or other staff trained by a DPR-approved biologist will inspect trenches and pipes for wildlife at the beginning of each workday. If a trapped animal is discovered, they will be released in suitable habitat at least 100 feet from the project area.

Environmental Topic	Requirement
Biological Resources - Nesting Raptors and Other Migratory Birds	▪ Contractor shall schedule construction activities between February 1 and August 31 (nesting season) only under the following conditions: o If nesting raptors are observed during DPR pre-construction breeding season surveys, the Contractor shall not work within the 200-foot buffer zone of the active nest until after the young have fledged and there is no evidence of a second attempt at nesting, as determined by a DPR-approved biologist; or o If active migratory bird nests are located during DPR surveys, the Contractor shall not work within a minimum 50-foot radius buffer zone of the nest tree until the nest is vacated, juveniles have fledged, and there is no evidence of a second nesting attempt as determined by a DPR biologist.
Cultural Resources - General Cultural Standard Requirements	▪ Prior to the start of construction, a DPR-approved cultural resources specialist will consult with the contractor and project manager to identify all resources that must be protected. ▪ At the discretion of the DPR-approved cultural resources specialist, mechanized vehicles on cultural resource sites will be restricted to a short-term use of rubber tire tractors only. All such vehicles must enter and exit resource(s) via the same route of travel and are strictly prohibited from turning on the surface of site(s). ▪ Prior to the start of construction, a DPR-approved cultural resources specialist will train construction personnel in cultural resource identification and protection procedures. ▪ A DPR-approved cultural resources specialist will photo-document all aspects of the project before, during, and after construction and the photos will be added to historical records (archives) for the park. ▪ Prior to the start of project and to the extent not already completed, a DPR-approved cultural resources specialist will map and record all cultural features within the proposed Area of Potential Effects (APE) to a level appropriate to the Secretary of Interior Standards.

Environmental Topic	Requirement
Cultural Resources - Archaeologist's Standard Requirements	▪ Prior to the start of construction, a DPR-approved cultural resources specialist will flag and/or fence all cultural resources not directly affected by the current project. ▪ Archaeological data recovery will accomplish all project-related earth-moving within the boundaries of the site, and a DPR-approved archaeologist will be present to monitor all construction activity. ▪ If ground disturbing activities uncover unanticipated cultural resources (including, but not limited, to dark soil containing shellfish, bone, flaked stone, ground stone, or deposits of historic ash), the Contractor will temporarily halt or divert work within the immediate vicinity of the find until a DPR-approved cultural resources specialist evaluates the find and determines the appropriate treatment and disposition of the cultural resource. ▪ The Contractor will notify the DPR Northern Service Center or District Cultural Resource Specialist a minimum of three weeks prior to the start of ground–disturbing work to schedule archaeological monitoring unless other arrangements are made in advance.
Geology and Soils - Standard Geology and Soils	▪ No track-mounted or heavy-wheeled vehicles will be driven through areas during the rainy season or when soils are saturated to avoid compaction and/or damage to soil structure.
Hazards and Hazardous Materials - Standard Hazards 1: Spill Prevention	▪ Prior to the start of on-site construction activities, the Contractor will inspect all equipment for leaks and regularly inspect thereafter until equipment is removed from the project site. All contaminated water, sludge, spill residue, or other hazardous compounds will be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination. ▪ Prior to the start of on-site construction activities, the Project Engineer or contractor will prepare a Spill Prevention and Response Plan (SPRP) as part of the Storm Water Pollution Prevention Plan (SWPPP) for DPR approval to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. This plan will include (but not be limited to); o a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment will occur; o a list of items required in a spill kit on-site that will be maintained throughout the life of the project; o procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the restoration process; o and identification of lawfully permitted or authorized disposal destinations outside of the project site. ▪ The contractor will set up decontamination areas for vehicles and equipment at Park entry/exit points. The decontamination areas will be designed to completely contain all wash water generated from washing vehicles and equipment. Best Management Practices (BMPs) will be installed, as necessary, to prevent the dispersal of wash water beyond the boundaries of the decontamination area, including over-spray.

Environmental Topic	Requirement
Hazards and Hazardous Materials - Fire Safety	▪ Prior to the start of construction, the Project Manager or Contractor will develop a Fire Safety Plan for DPR approval. The plan will include the emergency calling procedures for both the California Department of Forestry and Fire Protection (CDF) and local fire department(s). ▪ All heavy equipment will be required to include spark arrestors or turbo chargers (which eliminate sparks in exhaust) and have fire extinguishers on-site. ▪ Construction crews will park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, construction crews will park heavy equipment over a non-combustible surface to reduce the chance of fire. ▪ DPR personnel will have a State Park radio at the Park, which allows direct contact with CalFire and a centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire. ▪ Prior to the start of on-site construction activities, the Contractor will clean and repair (other than emergency repairs) all equipment outside the project site boundaries. ▪ Under dry conditions, a filled water truck and/or fire engine crew will be onsite during activities with the potential to start a fire. The Contractor will designate and/or locate staging and stockpile areas within the existing maintenance yard area or existing roads and campsites to prevent leakage of oil, hydraulic fluids, etc.
Hydrology/Water Quality - Water Quality	▪ Prior to the start of construction involving ground-disturbing activities, the Project Engineer or Contractor will prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) for DPR approval that identifies temporary Best Management Practices (BMPs) (e.g., tarping of any stockpiled materials or soil; use of silt fences, straw bale barriers, fiber rolls, etc.) and permanent (e.g., structural containment, preserving or planting of vegetation) for use in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, repaving, or other ground-disturbing activities. The SWPPP will include BMPs for hazardous waste and contaminated soils management and a Spill Prevention and Control Plan (SPCP), as appropriate. ▪ All heavy equipment parking, refueling, and service will be conducted within designated areas outside of the 100-year floodplain to avoid water course contamination. ▪ The project will comply with all applicable water quality standards. ▪ All construction activities will be suspended during heavy precipitation events (i.e., at least 1/2-inch of precipitation in a 24-hour period) or when heavy precipitation events are forecast. ▪ If construction activities extend into the rainy season or if an un-seasonal storm is anticipated, the Contractor will properly winterize the site by covering (tarping) any stockpiled materials or soils and by constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiles and graded areas. ▪ The Contractor will install appropriate energy dissipators at water discharge points, as appropriate

Environmental Topic	Requirement
Noise - Noise Reduction	▪ Temporary or permanent noise barriers such as berms or walls will be used, as appropriate, to reduce noise levels. ▪ Internal combustion engines used for project implementation will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for Project-related activities will utilize the best available noise control techniques (e.g., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever necessary. ▪ The Contractor will locate stationary noise sources and staging areas as far from potential sensitive noise receptors, as possible. If they must be located near potential sensitive noise receptors, stationary noise sources will be muffled or shielded, and/or enclosed within temporary sheds. ▪ Construction activities will generally be limited to the daylight hours, Monday – Friday. If work during weekends or holidays is required, no work will occur on those days before 8:00 a.m. or after 5:00 p.m. ▪ Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction will utilize the best available noise control techniques (e.g., engine enclosures, acoustically-attenuating shields, or shrouds, intake silencers, ducts, etc.) whenever necessary.

1.5 REQUIRED PERMITS AND APPROVALS

This IS/MND is an informational document for both agency decision-makers and the public. State Parks is the Lead Agency responsible for certification of this IS/MND. The Project would be subject to other laws and applicable agency reviews, including, but not limited to, the federal and state Endangered Species Acts, and California Department of Fish and Game Code. Below is a general list of federal, state, and local agencies that may have jurisdiction over the Project and may issue permits in connection with site development. This list is not considered exhaustive and additional agencies and/or jurisdictions may have permitting authority:

- California Department of Fish and Wildlife – Streambed Alteration Agreement
- Monterey County – Coastal Development Permit
- Monterey County Environmental Health Bureau
- Central Coast Regional Water Quality Control Board – General Permit/Notice of Intent
- Central Coast Regional Water Quality Control Board – Wastewater Discharge Requirements

Chapter 2: ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project as discussed within the Initial Study checklist analysis on the following pages.

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

Environmental Factors Not Affected

As part of the scoping and environmental analysis conducted for the Proposed Project, the following environmental resources were considered. The potential for adverse impacts to these resources were not identified. Consequently, there is no further discussion regarding these resources in this document.

Agricultural and Forest Resources: The California Department of Conservation ("CDC") Division of Land Resource Protection and the Farmland Mapping and Monitoring Program maps California's agricultural resources. The Proposed Project site is designated as "Other Land" and therefore would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (CDC, 2023a). The Proposed Project is not zoned for agricultural use and is not under Williamson Act contract. (CDC, 2023a and CDC 2023b). Therefore, the Project would not impact agricultural resources. Similarly, The Proposed Project would not result in the loss or conversion of forest land for non-forest land use. For these reasons, the Project would not impact agriculture and forestry resources.

Mineral Resources: Mineral resources are determined in accordance with the Surface Mining and Reclamation Act ("SMARA") of 1975, and the California Geological Survey which maps regional significance of mineral resources. There are no known mineral resources on the Project site. Additionally, the Project site is not designated as a mineral resource recovery site (CGS, 2023). As a result, the Proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. Furthermore, the Project is consistent with the zoning designation of the Project site and would not result in the

removal of mineral deposits. Therefore, the Proposed Project would not result in the loss of availability of a locally important mineral resource recovery site and would not result in any impacts to mineral resources.

Population and Housing: The Project would not induce substantial population growth, either directly or indirectly, nor would it displace a substantial number of existing housing units. The Project would involve constructing and operating a permanent camping facility and associated infrastructure (i.e., rustic kitchen and dining pavilion) to facilitate existing VWS educational campouts at AMSP. As such, the Project would not displace people or housing. The Proposed Project would facilitate expansion of VWS campouts (see **Section 4.12, Recreation** for additional detail); however, the Project would not include population-inducing infrastructure such as new water facilities, wastewater infrastructure, or roads. Furthermore, the Project would not alter the existing use of the site and would not require additional employees to maintain the site. Therefore, the Project would not impact population or housing.

Public Services: The Proposed Project would not result in any adverse impacts resulting in the need for new, or physically altered, government facilities to maintain acceptable service ratios, response times, or other performance objectives for any public services (i.e., fire protection, police protection, schools, parks, or other public facilities). The Project site is currently served by California Department of Forestry and Fire ("CalFire") and Big Sur Fire for fire and emergency services protection services. The Monterey County Sheriff's Department provides police protection services in Big Sur; however, State Parks is responsible for law enforcement and emergency medical response services within AMSP. The Proposed Project consists of the construction of permanent camping facilities and associated infrastructure to facilitate existing VWS education campouts at AMSP. As discussed in **Chapter 1. Project Description**, VWS would increase the number of campouts and attendees, but this increase would not exceed service levels or generate the need for new or physically altered facilities to maintain service ratios. No impact to public services would occur from the Project.

Utilities and Service Systems: The Proposed Project would not result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas or telecommunication facilities, the construction of which could cause significant environmental effects. The Project would utilize the existing water supply system that serves AMSP, including the Project site, to provide potable water to the site and would include a new graywater system to collect, store, and reuse gray water at the site (see **Section 1.3.2 Water Supply** for additional information). The Project would utilize two (2) existing portable restroom facilities that are maintained by a sanitary pump truck that currently services the existing AMSP restroom facilities. Similarly, solid waste generated during construction and operation would not exceed the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals. Therefore, the Project would not result in impacts to utilities and service systems.

Chapter 3: DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Daniel Shaw — 7 November, 2024

Signature — Date

Daniel Shaw, Monterey Deputy District Superintendent

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Chapter 4: INITIAL STUDY ENVIRONMENTAL CHECKLIST

The following chapter assesses the environmental consequences associated with the Proposed Project. Mitigation, where appropriate, are identified to address potential impacts.

EVALUATION OF ENVIRONMENTAL IMPACTS:

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2. All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level mitigation measures.

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a) Earlier Analysis Used. Identify and state where they are available for review.
    b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures, which were

incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

4.1 AESTHETICS

4.1.1 ENVIRONMENTAL SETTING

The Proposed Project is located within AMSP in northern Big Sur (see **Figure 1. Regional Map** and **Figure 2. Project Site**), located on the western slope of the Santa Lucia Mountains. The Proposed Project site is located within the mid-southern portion of AMSP, adjacent to the Park's main parking lot and existing visitor-serving facilities (e.g., restrooms), and adjacent to VWS's Discovery Center. The Project site has been historically disturbed in connection with historical ranching activities and the MHT (see **Section 1.2.2, Historic and Current Use**). VWS currently uses the site for educational programs as well as by State Parks for equipment storage, tribal gatherings, educational programs, and spike camps. The Proposed Project site consists of ruderal vegetation and is bound by a moderate to dense canopy of native trees including coast live oak, California bay laurel, and western sycamore bounding the site.

Due to vegetation cover, topography, and distance from affected viewers (e.g., vehicle traffic on SR 1), the Project site is not visible from SR 1. The site is only visible from within the boundaries of AMSP; and even within the Park, views of the site are limited due to dense vegetation cover. Views from the Project site consist primarily of vegetation and the existing unpaved access road. Please see **Figure 8a** and **Figure 8b, Site Photos.**

4.1.2 REGULATORY SETTING

4.1.2.1 State

California State Scenic Highway Program

The State Legislature created the California State Scenic Highway program in 1963. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The program includes a list of highways that are either designated or eligible for designation as a scenic highway. Portions of SR 1 along the California coastline are either designated as a State Scenic Highway or eligible for State Scenic Highway's designation. The section of SR 1 adjacent to the AMSP is an officially designated scenic highway. This section of SR 1 follows the California coastline from the Carmel River south to the San Luis Obispo County line and offers dramatic views of the rugged central California coast as the Santa Lucia Mountains rise abruptly from the Pacific Ocean.

1. East edge of Project site, looking north.

2. East edge of Project site, looking northwest.

3. East edge of Project site, looking southwest. Image shows location of proposed amphitheater.

4. East edge of Project site, looking west.

Site Photos	Date 10/11/2023	Denise Duffy & Associates, Inc. Planning and Environmental Consulting	Figure 8a
	Scale N/A		

5. North edge of Project site, looking southwest.

6. Northwest edge of Project site, looking southwest.

7. South edge of Project site, looking north.

8. South edge of Project site, looking northeast.

Site Photos	Date 10/11/2023 Scale N/A	Denise Duffy & Associates, Inc. Planning and Environmental Consulting	Figure 8b

California Coastal Act

The State Legislature enacted the California Coastal Act (Coastal Act) in 1976 to provide long-term protection of the state's 1,100-mile coastline for the benefit of current and future generations. The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. California's coastal zone generally extends 1,000 yards inland from the mean high tide line. In significant coastal estuarine habitat and recreational areas, it extends inland to the first major ridgeline or five miles from the mean high tide line, whichever is less. In developed urban areas, the boundary is generally less than 1,000 yards. Development activities, which the Coastal Act broadly defines include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters.

The Coastal Act includes specific policies (see Division 20 of the Public Resources Code) that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The following portion of the Coastal Act is pertinent to scenic and visual resources.

Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alternation of natural landforms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

4.1.2.2 Local

1982 Monterey County General Plan/Big Sur Coast LUP

The 1982 Monterey County General Plan and the Big Sur Coast LUP contain numerous policies related to the preservation and protection of scenic resources. These policies are intended to preserve and enhance the County's scenic character, minimize visual impacts on scenic resources, and ensure that future development activities are consistent with the visual character of the area. The County's basic policy is to prohibit public or private development visible from SR 1 and major public viewing areas.

AMSP General Plan

A primary management goal of the AMSP General Plan is to protect and restore the scenic qualities associated with the rugged Big Sur Coast-wild rivers, riparian habitat, and redwood groves. The General Plan requires that any new development within the Park be in accordance with the allowable use intensities for various use areas within the Park and that additional Park

access associated with future growth be predominantly by foot to maintain the primitive quality of the area. The scenic qualities of its wilderness character should be the primary view of the Park by passing motorists along SR 1; additional parking and road access should by designed with as little visual intrusion as possible (CDPR, 1976).Furthermore, the AMSP General Plan identifies the Project site as a location for public use (e.g., group camp or picnic areas).

4.1.3 THRESHOLDS OF SIGNIFICANCE

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

4.1.4 IMPACT ANALYSIS

a) *Have a substantial adverse effect on a scenic vista?*

The Proposed Project would not have a substantial adverse effect on a scenic vista. For the purposes of this analysis, views of the Pacific Ocean and the Santa Lucia Mountains represent scenic vistas. In addition, due to the importance of oak woodland and redwood forests as part of the visual integrity of the SR 1 corridor, these vegetation communities are also considered a scenic vista for the purpose of this analysis. Obstruction of views of any of these resources would constitute a potentially significant impact.

Construction

The Proposed Project consists of the construction and operation of permanent camping facilities and associated infrastructure on the Project site. Project construction could result in temporary aesthetic-related impacts for day-users; construction would require grading, staging of construction equipment and materials, and construction of vertical components (e.g., amphitheater, rustic kitchen, and dining pavilion), which would temporarily alter the visual character of the site that may be visible to hikers using nearby recreation trails. However, the

Project site is periodically used for short-term equipment storage by State Parks (e.g., maintenance equipment, spoils) and construction impacts would be temporary. Moreover, the site is also periodically used as part of existing VWS operations. Temporary construction-related impacts would not obstruct views of a scenic resource and/or otherwise result in an adverse impact to a scenic resource. Additionally, due to existing topography and vegetation, construction activities would not be visible from scenic vistas or from SR 1.

Operation

Project operation would not obstruct and/or otherwise significantly impact views of an existing scenic vista. The vertical components of the Proposed Project include an amphitheater, rustic kitchen, and dining pavilion. Site design would minimize aesthetic-related impacts by using materials that blend with the natural surroundings and are visually compatible with existing facilities at AMSP. Specifically, the Proposed Project would use redwood, stonework facing, and earthtones for proposed structures. Additionally, the Project would include landscaping with native trees and other native vegetation, which would enhance the scenic qualities of the site. As noted above, existing topography and vegetation obstruct views of the Project from SR 1 and substantially restrict views of the site from within the Park. The Proposed Project would be intermittently visible to park visitors using nearby recreation trails; however, potential views of the Project from the surrounding area would be limited in duration and the Project has been designed to be visually compatible with the surrounding area. As a result, the Project would not substantially impact a scenic vista. For these reasons, the Proposed Project would result in a less than significant impact related to scenic vistas.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The Proposed Project would not damage a scenic resource; including but not limited to trees, rock outcroppings, or historic buildings within a state scenic highway. AMSP is located adjacent to a portion of SR 1, which is a designated state scenic highway; however, the Project site itself lies within the middle to southern portion of the Park and, due to topography and vegetation, is not visible from SR 1. Scenic resources visible from SR 1 include the Pacific Ocean, the Santa Lucia Mountains, and riparian woodland, which are typical along this stretch of the SR 1 corridor (CDPR, 1976 and Monterey County, 1996).

The Proposed Project would result in the introduction of new physical elements on a site that is previously disturbed and historically developed in connection with prior recreational use beginning in the 1970's. The introduction of new features would not be visible from SR 1 or impact views of scenic resources as perceived from SR 1 (see Response 4.1.4(a) above). As a result, the Project would have no impact on views from within a state scenic highway. This represents a less than significant impact.

c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area would the project conflict with applicable zoning and other regulations governing scenic quality?*

The Project would not adversely impact the existing visual character of the site and its surroundings through the introduction of new physical elements on a currently undeveloped site. Construction of the Project could temporarily impact the aesthetics of the Project site from equipment staging. Additionally, the introduction of the proposed vertical structures and associated improvements would permanently alter the site's existing visual character. However, the site was previously developed with infrastructure associated with the MHT and the site is actively used by VWS and State Parks as part of existing operations. Furthermore, the AMSP General Plan identified the Project site as having average visitor sensitivity to visual quality and no distinctive visual features (AMSP, 1976). The Project would include implementation of State Parks Standard Project Requirements to minimize construction and operational aesthetics-related impacts. Standard requirements include storing Project materials outside of the viewshed, designing projects with materials and colors that are compatible with the surrounding use, and equipping permanent structures with non-intrusive lighting.

The Project site is surrounded by native trees and is not generally visible from areas outside of AMSP (see **Figure 8. Site Photos**). VWS and State Parks designed the Project to be visually compatible with the site's existing natural character, historic use, and adjacent Park uses. The proposed site design and layout would ensure that the Project would not substantially degrade the site's existing visual character or quality and surroundings (see Responses 4.1.4(a) and 4.1.4(b) above). State Parks designed the Proposed Project to minimize potential aesthetic-related effects and identified a site design that is visually compatible with existing recreational uses within AMSP.

In summary, the Project would permanently alter the site's existing visual character by introducing limited new facilities on the site, including pathways and vertical structures (i.e., amphitheater, rustic kitchen and dining pavilion, and signage). As a result, the Project would alter the appearance of the Project site. However, visual effects associated with the Proposed Project would generally be consistent with existing recreational uses within AMSP and planned development included in the AMSP General Plan. Furthermore, the Project materials and other design features (e.g., landscaping, etc.) are consistent with the policies described in Section 3.2.3 of the Big Sur LUP. For these reasons, the Proposed Project would result in a less than significant impact.

d) *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The Proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The Project site is primarily undeveloped, but has been previously disturbed and historically contained infrastructure associated with previous

use (i.e., MHT). There are no existing sources of lighting or glare on-site, and no lighting is proposed. SR 1 traffic may provide a varying amount of glare and light in the Park, particularly at night; although existing sources of lighting near the site are generally limited, if at all. The Project would not create new sources of lighting and glare that would adversely affect day or nighttime views as lighting is not proposed within the Project structures. Lighting generated by VWS camps would not be obtrusive. Furthermore, existing topography and vegetation would obstruct the extent of potential impacts within the Park. The Project site is not located in an area that is visible from areas outside of AMSP. For these reasons, the Project would result in a less than significant impact.

4.2 AIR QUALITY

4.2.1 ENVIRONMENTAL SETTING

The Proposed Project is located within the North Central Coast Air Basin ("NCCAB"), one of 14 statewide basins designated by the California Air Resources Board ("CARB"). This basin includes Monterey, Santa Cruz, and San Benito Counties, and is regulated by the Monterey Bay Air Resources District ("MBARD").

The U.S. EPA administers the National Ambient Air Quality Standards ("NAAQS") under the Federal Clean Air Act. The U.S. EPA sets the NAAQS and determines if areas meet those standards. Violations of ambient air quality standards are based on air pollutant monitoring data and evaluated for each air pollutant. Areas that do not violate ambient air quality standards are considered to have attained the standard. The NCCAB is in attainment for all NAAQS and for all California Ambient Air Quality Standards ("CAAQS") except O_3 and PM_{10}. The primary sources of O_3 and PM_{10} in the NCAAB are from automobile engine combustion. To address the exceedance of these CAAQS, the MBARD has developed and implemented several plans, including the 2005 Particulate Matter Plan, the 2007 Federal Maintenance Plan, and the 2012-2015 Air Quality Management Plan. The NCCAB Attainment Status to National and California Ambient Air Quality can be found in **Table 4.2-1, NCCAB Attainment Status Designations**.

Plans to attain these standards already accommodate the future growth projections available at the time these plans were prepared. Any development project capable of generating air pollutant emissions exceeding regionally established criteria is considered significant for purposes of CEQA, whether or not such emissions have been accounted for in regional air planning. Furthermore, any project that would directly cause or substantially contribute to a localized violation of an air quality standard would generate substantial air pollution impacts. The same is true for a project that generates a substantial increase in health risks from toxic air contaminants or introduces future occupants to a site exposed to substantial health risks associated with such contaminants.

Sensitive receptors are more susceptible to the effects of air pollution than the general population. Land uses that are considered sensitive receptors include residences, schools, and health care facilities. The nearest sensitive receptor to the Proposed Project is a residence at the El Sur

Ranch, located over 1.5 miles northwest; however, for the purposes of this analysis, recreational users within AMSP may also be considered sensitive receptors.

Table 4.2-1
Attainment Status for the NCCAB

Pollutants	State Designation	Federal Designation
Ozone (O_3)	Nonattainment – Transitional	Attainment
Inhalable Particulates (PM_{10})	Nonattainment	Attainment
Fine Particulates ($PM_{2.5}$)	Attainment	Attainment
Carbon Monoxide (CO)	Monterey Co. – Attainment	Attainment
Carbon Monoxide (CO)	San Benito Co. – Unclassified	Attainment
Carbon Monoxide (CO)	Santa Cruz Co. – Unclassified	Attainment
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead	Attainment	Attainment

Source: Monterey Bay Air Resources District, 2017. 2012 – 2015 Air Quality Management Plan

4.2.1.1 Climate and Topography

Climatological conditions, an area's topography, and the quantity and type of pollutants released commonly determine ambient air quality. The NCCAB covers an area of 5,159 square miles along the central coast. The northwest sector of the NCCAB is dominated by the Santa Cruz Mountains. The Diablo Range marks the northeastern boundary. The Santa Clara Valley extends into the northeastern tip of the basin. Farther south, the Santa Clara Valley becomes the San Benito Valley, which runs northwest-southeast, with the Gabilan Range as its western boundary. To the west of the Gabilan Range is the Salinas Valley, which extends from Salinas at the northwest end to south of King City. The coastal Santa Lucia Range defines the western side of the valley.

Climate, or the average weather condition, affects air quality in several ways. Wind patterns can remove or add air pollutants emitted by stationery or mobile sources. Inversion, a condition where warm air traps cooler air underneath it, can hold pollutants near the ground by limiting upward mixing (dilution). Communities with cold climates may burn wood or other fuels for residential heating, whereas areas with hot climates may have higher emissions or some pollutants from automobiles. Topography also plays a part in air pollution conditions, as valleys often trap emissions by limiting lateral dispersal.

A semi-permanent high-pressure cell in the eastern Pacific, the Pacific High, is the basic controlling factor in the climate of the NCCAB. In the summer, the high-pressure cell is dominant and causes persistent west and northwest winds over the entire coast. Air descends in the Pacific High, forming a stable temperature inversion of hot air over a cool coastal layer of air. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. The warmer air aloft acts as a lid to inhibit vertical air movement. During the winter, the Pacific High migrates southward and has less influence on the NCCAB. Air frequently flows in a southeasterly direction out of the Salinas and San Benito Valleys, especially during night and

morning hours. The general absence of deep, persistent inversions and the occasional storm systems usually result in good air quality for the basin as a whole in winter and early spring.

4.2.2 REGULATORY SETTING

4.2.2.1 Federal

The CAA of 1970, as amended, establishes air quality standards for several pollutants NAAQS are established for six (6) "criteria" air pollutants: carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur oxides (SO_x), and lead. Pursuant to the California Clean Air Act, the State of California has also established ambient air quality standards, the CAAQS. These standards are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. **Table 4.2-2, Overview of Key Pollutants** identifies the characteristics, health effects, and typical sources of the six (6) federal air pollutants.

In addition to major pollutants, the U.S. regulates Hazardous Air Pollutants. One means by which the U.S. Environmental Protection Agency ("EPA") addresses Hazardous Air Pollutant exposure is through the National Emission Standards for Hazardous Air Pollutants[3], which include source-specific regulations that limit allowable emissions of such pollutants.

Table 4.2-2
Overview of Key Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone (O_3)	A highly reactive photochemical pollutant created by the action of sunshine on ozone precursors (primarily reactive hydrocarbons and oxides of nitrogen). Often called photochemical smog. Highest concentrations of ozone are found downwind of urban areas.	Respiratory function impairment.	Sources of ozone precursors (nitrogen oxides and reactive hydrocarbons) are combustion sources, such as factories and automobiles and evaporation of solvents and fuels.
Carbon Monoxide (CO)	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels. CO concentrations are highest in the winter, when radiation inversions over large areas can limit vertical dispersion.	Impairment of oxygen transport in the bloodstream. Aggravation of cardiovascular disease. Fatigue, headache, confusion, dizziness. Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.

[3] The National Emission Standards for Hazardous Air Pollutants are promulgated under Title 40 of the Code of Federal Regulations, Parts 61 & 63.

Pollutant	Characteristics	Health Effects	Major Sources
Nitrogen Dioxide (NO_2)	Nitrogen dioxide is a reddish-brown gas that discolors the air, which formed during combustion. Nitrogen dioxide levels in California have decreased in recent years due to improved automobile emissions. Ambient standards are typically not exceeded in North Central Coast Air Basin.	Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, industrial processes, and fossil-fuel powered plants. Also formed via atmospheric reactions.
Sulfur Dioxide (SO_2)	Sulfur dioxide is a colorless gas with a pungent, irritating odor. Ambient standards for sulfur dioxide are rarely exceeded in the North Central Coast Air Basin.	Aggravation of chronic obstruction lung disease. Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
PM_{10} & $PM_{2.5}$	Solid and liquid particles of dust, soot, aerosols, and other matter that are small enough to remain suspended in the air for a long period of time. PM10 is particulate matter with diameter less than 10 microns. PM2.5 is particulate matter with diameter less than 2.5 microns. PM2.5 has been found to be more harmful to humans.	Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories, and unpaved roads. Also, formed secondarily by photochemical processes of combustion emissions. PM2.5 is primarily a secondary pollutant.

4.2.2.2 State

CARB coordinates and oversees both state and federal air pollution control programs in California. As part of this responsibility, CARB monitors existing air quality, establishes state air quality standards, and limits allowable emissions from vehicular sources. Local air pollution control agencies provide regulatory authority within established air basins, which control stationery-source and most categories of area-source emissions and develop regional air quality plans. The Project is located within the jurisdiction of MBARD.

California has established its own set of ambient air quality standards for the seven (7) pollutants with federal standards. In addition, California has standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles. The standards for the criteria pollutants are presented in **Table 4.2-3, Federal and State Ambient Air Quality Standards**. The "primary" standards have been established to protect the public health. The "secondary" standards are intended to protect the nation's welfare and account for air pollutant effects on soils, water, visibility, materials, vegetation, and other aspects of general welfare.

Table 4.2-3
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard [a,c]	Primary [c,d] Federal Standard [b]	Secondary [c,e] Federal Standard [b]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	- -	- -

Pollutant	Averaging Time	California Standard [a,c]	Primary [c,d] Federal Standard [b]	Secondary [c,e] Federal Standard [b]
Ozone (O_3)	8-Hour	0.07 ppm (137 µg/m^3)	0.075 ppm (147 ug/m^3)	0.075 ppm (147 µg/m^3)
Carbon Monoxide (CO)	1-Hour	20 ppm (23mg/m^3)	35.0 ppm (40mg/m^3)	- -
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10mg/m^3)	9.0 ppm (10mg/m^3)	- -
Nitrogen Dioxide (NO_2)	1-Hour	0.18 ppm (339 µg/m^3)	- -	- -
Nitrogen Dioxide (NO_2)	Annual [f]	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	0.053 ppm (100 µg/m^3)
Sulfur Dioxide (SO_2)	1-Hour	0.25 ppm (655 µg/m^3)	- -	- -
Sulfur Dioxide (SO_2)	3-Hour	- -	- -	0.5 ppm (1,300 µg/m^3)
Sulfur Dioxide (SO_2)	24-Hour	0.04 ppm (105 µg/m^3)	0.14 ppm (365 µg/m^3)	- -
Sulfur Dioxide (SO_2)	Annual [f]	- -	0.030 ppm (80 µg/m^3)	- -
PM_{10}	24-Hour	50 µg/m^3	150 µg/m^3	150 µg/m^3
PM_{10}	Annual[f]	20 µg/m^3	- -	- -
$PM_{2.5}$	24-Hour	no separate state standard	35 µg/m^3	35 µg/m^3
$PM_{2.5}$	Annual [f]	12 µg/m^3	15 µg/m^3	15 µg/m^3
Lead[f]	Calendar quarter	- -	1.5 µg/m^3	1.5 µg/m^3
Lead[f]	30-day	1.5 µg/m^3	- -	- -
Lead[f]	3-Month[h]	- -	0.15 µg/m^3	0.15 µg/m^3
Sulfate	24-Hour	25 µg/m^3	- -	- -
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	- -	- -
Vinyl Chloride[g]	24-Hour	0.010 ppm (26 µg/m^3)	- -	- -
Visibility Reducing Particles	8-hours (10 am - 6 pm)	In sufficient amounts to reduce prevailing visibility to < 10 miles when relative humidity is < 70% w/ equivalent instrument method	- -	- -

ppm = Parts per Million by volume (or micromoles of pollutant per mole of gas)
µg/m^3 = Micrograms per Cubic Meter
(a) Standards for ozone, carbon monoxide, sulfur dioxide (1 and 24-hour), nitrogen dioxide, suspended particulate matter – PM_{10} and $PM_{2.5}$, and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
(b) National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight-hour concentration in a year, averaged over three (3) years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98% of the daily concentrations, averaged over three (3) years, are equal to or less than the standard. Contact U.S. Environmental Protection Agency for further clarification and current federal policies.
(c) Concentrations expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to match reference temperature and pressure.
(d) National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
(e) National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
(f) Annual Arithmetic Mean
(g) The California Air Resources Board has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse heal effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
(h) National lead standard, rolling 3-month average: final rule signed October 15, 2008.
Source: California Air Resources Board. 2008. Ambient Air Quality Standards. https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards.

The state also regulates Toxic Air Contaminants separately from those pollutants with California Ambient Air Quality Standards, primarily through the Tanner Air Toxics Act (Assembly Bill 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Assembly Bill 2588). Within California, the Office of Environmental Health Hazard Assessment works with CARB to address health risk issues associated with toxic air contaminants. The Office of Environmental Health Hazard Assessment establishes Reference Exposure Levels as indicators of potential adverse health effects. In addition, in 2007 CARB approved a new regulation to reduce emissions from existing off-road diesel vehicles in California in construction, mining, and other industries. The regulation requires vehicle fleets to either meet a set of fleet average targets for NO_x and particulate matter or to turn over and apply exhaust retrofits to a certain percent of the fleets' horsepower per year.

4.2.2.3 Local

Monterey Bay Air Resources District

The MBARD regulates air quality in the NCCAB and is responsible for attainment planning related to criteria air pollutants, district rule development, and enforcement. It also reviews air quality analyses prepared for CEQA assessments and has published the CEQA Air Quality Guidelines document for use in the evaluation of air quality impacts. At the local level, the MBARD is responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. Air quality is also managed through land use and development planning practices. The MBARD has adopted emission thresholds to determine the level of significance of a project's emissions. MBARD adopted the 2012-2015 Air Quality Management Plan ("AQMP") in 2017. NCCAB Attainment Status to National and California Ambient Air Quality are presented in **Table 4.2-1, NCCAB Attainment Status Designations**.

4.2.3 THRESHOLDS OF SIGNIFICANCE

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
b)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	■	☐
c)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

4.2.4 IMPACT ANALYSIS

a) *Conflict with or obstruct implementation of the applicable air quality plan?*

CEQA Guidelines Section 15125(b) requires that a project be evaluated for consistency with applicable regional plans, including the AQMP. The most recent AQMP update was approved in March 2017. This plan addresses attainment of the State ozone standard and federal air quality standard. The AQMP accommodates growth by projecting growth in emissions based on population forecasts prepared by the Association of Monterey Bay Area Governments ("AMBAG") and other indicators. Consistency determinations are issued for commercial, industrial, residential, and infrastructure-related projects that have the potential to induce population growth. A project is considered inconsistent with the AQMP if it has not been accommodated in the forecast projections considered in the AQMP. The Project consists of constructing and operating a permanent camping facility and associated infrastructure to support existing educational campouts facilitated by VWS. As such, the Project would not cause and/or otherwise induce population growth and conflict with and/or otherwise obstruct the implementation of MBARD's AQMP. As a result, the Proposed Project would have no impact on clean air planning.

b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

The Proposed Project would not result in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. MBARD has set air quality thresholds of significance for the evaluation of projects. **Table 4.2-4** illustrates the thresholds of significance used to determine if a project would have a significant air quality effect on the environment during construction.

Table 4.2-4
Thresholds of Significance Construction Emissions

Pollutant	Threshold of Significance (lbs./day)
Nitrogen Oxides (NO_x)	137
Reactive Organic Gases (ROG)	137
Respirable Particular Matter (PM_{10})	82
Fine Particulate Matter ($PM_{2.5}$)	55
Carbon Monoxide (CO)	550

Source: MBARD, 2016. Guidelines for Implementing the California Environmental Quality Act.

In addition to these thresholds, MBARD has also determined that a significant short-term construction-generated impact would occur if more than 2.2 acres of major earthmoving (i.e., excavation) per day were to occur. Activities associated with this threshold include excavation and grading. For projects that require minimal earthmoving activities, MBARD has determined that a significant short-term construction generated impact would occur if more than 8.1 acres per day of earthmoving were to occur (MBARD, 2008).

Table 4.2-5 illustrates the thresholds of significance used to determine if a project would have a significant air quality effect on the environment during operation.

Table 4.2-5
Thresholds of Significance Operational Emissions

Pollutant	Threshold of Significance (lbs./day)
Nitrogen Oxides (NO_x)	137
Reactive Organic Gases (ROG)	137
Respirable Particular Matter (PM_{10})	82
Fine Particulate Matter ($PM_{2.5}$)	55
Carbon Monoxide (CO)	550

Source: MBARD, 2016. Guidelines for Implementing the California Environmental Quality Act.

Construction

The Proposed Project site is relatively flat; therefore, the Project would require minor grading to ensure adequate drainage. The Project would require approximately 729 cy of cut, 429 cy of fill, and 180 cy would be exported offsite. Construction would involve the use of construction equipment such as small tractors, backhoes, and pickup trucks. According to MBARD's criteria for determining construction impacts, a project would result in a potentially significant impact if it would result in 8.1 acres of minimal earthmoving per day or 2.2 acres per day with major grading and excavation. Construction of the Proposed Project would not exceed MBARD's significance criteria as the Proposed Project would result in minimal ground-disturbing activities. Specifically, the Proposed Project would disturb approximately 1.2 acres. Grading would, therefore, be below the MBARD significance threshold of 8.1 acres of minimal earthmoving or 2.2 acres of major grading and excavation per day. As a result, construction of the Proposed Project would not result in a significant construction-related air quality effect.

Additionally, State Parks' Standard Project Requirements relating to dust suppression would be implemented during construction to minimize potential construction-related air quality effects. These requirements include: 1) watering active construction areas; 2) prohibiting grading activities during periods of high wind (over 15 mph); 3) covering trucks hauling soil; and 4) maintaining all gasoline-powered equipment. Since the Proposed Project is under the threshold for construction air quality impacts and would include standard requirements for minimizing air quality impacts, construction of the Project would result in a less than significant impact.

Operational

The Proposed Project could result in operational emissions due to increases in traffic. However, the Proposed Project would not significantly increase traffic beyond existing levels currently associated with existing operations. The Project would facilitate expansion of the VWS campout program; this expansion would represent a minimal increase in use of the site. Project-generated traffic would not significantly affect existing levels of service, such that an adverse air quality impact would occur. The Project site currently accommodates 30 VWS campouts each year comprising approximately 35 individuals. VWS plans to expand their program to include 60 campouts per year, which would accommodate 60 individuals. Operational traffic associated with

the Proposed Project is anticipated to result in a minimal increase in vehicle trips (see **Section 4.13, Transportation** for additional information) and would not result in a substantial increase in operational air quality emissions such that the Project would cause an adverse operational air quality impact.

The Project could also result in air quality impacts associated with campfire use. Smoke generated during campfire use would result in additional PM_{10} emissions. Due to the relatively minor nature of campfire use, a quantitative analysis of air quality effects was not performed. In addition, recreational or warming fires are exempt from MBARD smoke management requirements and "no-burn" day regulations, pursuant to MBARD Rule 438 (see MBARD Rule 438 Section 1.3.2 and Section 1.3.3). Potential operational impacts due to campfire use would, therefore, be less than significant.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

The Project would not expose sensitive receptors to substantial pollutant concentrations. The nearest sensitive receptor is a State Park staff residence located less than ¼ mile north of the Project site. Additionally, for the purpose of evaluating air quality impacts efficiently, recreational users are included as sensitive receptors. As such, both the residence and recreational users within the Park could be exposed to potential short-term, limited air quality effects. The Project would result in air quality emissions during construction; however, construction-related emissions would be temporary and minor in nature. Project construction would require minimal grading (approximately 1,160 CY of cut and fill). Additionally, potential construction-related emissions would be minimized through the implementation of State Parks Standard Project Requirements (see discussion 4.2.5(b) above). Similarly, operational emissions would be relatively minor in nature because they would be limited to campfires ,vehicle travel associated with Project use (see **Section 4.13, Transportation** for additional information regarding vehicle trips), and site maintenance. As a result, no sensitive receptor or recreational user would be exposed to a substantial pollutant concentration. Therefore, construction and operation of the Project would result in a less than significant impact to sensitive receptors.

d) *Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The Project could generate intermittent odors from construction associated with diesel exhaust that may be noticeable at times to nearby AMSP users. However, given the temporary nature of construction, these potential intermittent odors are not anticipated to result in significant odor impacts nor affect a substantial number of people. Any odors generated during construction activities would cease upon completion. The Project would also generate operational campfire odors that could be noticeable to AMSP users; however, campfire odors would be consistent with the existing campground use and would not be considered offensive to Park visitors. For these reasons, the Project would result in a less than significant impact.

4.3 BIOLOGICAL RESOURCES

4.3.1 ENVIRONMENTAL SETTING

Located on the western slope of the Santa Lucia Mountains, the Big Sur River meanders through AMSP, and runs adjacent to the Proposed Project site. The Project site was historically disturbed in association with ranching, MHT, and is currently used for recreation and educational programs facilitated by VWS and State Parks, and spike camp use as needed (see **Section 1.2.2, Historic and Current Use**). The Proposed Project site consists of ruderal vegetation and is bounded by a moderate to dense canopy of native trees and understory vegetation. Common wildlife species in the Park include bobcats, black-tail deer, gray squirrels, raccoons, skunks, and birds.

4.3.2 SURVEY METHODOLOGY

DD&A conducted a survey of the Project site on April 26, 2023. Survey methods included walking the Project site and adjacent areas, together referred to as the evaluation area. Survey methods also included use of aerial maps and GPS to identify general habitat types and potential sensitive habitat types. DD&A also conducted focused surveys for special-status plant species and conducted reconnaissance-level wildlife habitat surveys to identify any special-status wildlife species or suitable habitat for such species within the site.

The Project site was surveyed for botanical resources following the applicable guidelines outlined in the U.S. Fish and Wildlife Service ("USFWS") *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (USFWS, 2000), the California Department of Fish and Wildlife ("CDFW") *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018), and the California Native Plant Society ("CNPS") *Botanical Survey Guidelines* (CNPS, 2001). The survey also included an assessment of potentially jurisdictional wetlands and waters within the Project site in accordance with the requirements set forth in *The Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual* (Wetland Training Institute, 1995) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (U.S. Army Corps of Engineers ["ACOE"], 2008). General and sensitive habitat types were mapped during the survey effort using a combination of GPS and hand drawing on aerial maps, which were later digitized using ArcGIS software.

DD&A, in coordination with State Parks, used data collected during the surveys to assess the environmental conditions of the Project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts to biological resources.

4.3.2.1 Special-Status Species

Special-status species are those plants and animals that have been formally listed or proposed for listing as endangered or threatened, or are candidates for such listing, under the federal Endangered Species Act ("ESA") or the California Endangered Species Act ("CESA"). Listed

species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Guidelines Section 15380 are also considered special-status species. Animals on the CDFW's list of "species of special concern" (most of which are species whose breeding populations in California may face extirpation if current population trends continue) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA. To note, CDFW includes some animal species that are not assigned any of the other status designations in the California Natural Diversity Database ("CNDDB") "Special Animals" list; however, these species have no legal or protection status and are not analyzed in this IS/MND.

Plants listed as rare under the California Native Plant Protection Act ("CNPPA") or included in CNPS California Rare Plant Ranks ("CRPR"; formerly known as CNPS Lists) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067 of the CESA and in accordance with CEQA Guidelines Section 15380.[4] In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2020) be fully considered during the preparation of environmental documents under CEQA. CNPS CRPR 4 species (plants of limited distribution) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA. While other species (i.e., CRPR 3 or 4 species) are sometimes found in database searches or within the literature, these do not meet the definitions of Section 2062 and Section 2067 of CESA and are not analyzed in this IS/MND.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected in California under Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." In addition, protected species under Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

State Parks obtained current agency status information from the USFWS and CDFW for species that are listed, proposed for listing, or are candidates for listing as Threatened or Endangered under ESA or CESA, or are CDFW species of special concern (USFWS, 2019 and CDFW, 2019). State Parks reviewed CNDDB reports for special-status species occurrences in the U.S.

[4] CNPS initially created five (5) CRPR to categorize degrees of concern; however, to better define and categorize rarity in California's flora, the CNPS Rare Plant Program and Rare Plant Program Committee have developed the new CRPR 2A and CRPR 2B.

Geological Survey ("USGS") quadrangle containing the Project site (Big Sur) and the seven (7) surrounding quadrangles (Partington Ridge, Pfeiffer Point, Point Sur, Ventana Cones, Carmel Valley, Mt. Carmel, and Soberanes Point). Special-status plant and wildlife species known to occur or with the potential to occur within the Project vicinity, along with their legal status, habitat requirements, and likelihood to occur within the Project site, are included in the Special Status Species Table in **Appendix A, Biological Report**.

4.3.2.2 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, wildlife corridors, and unusual or regionally restricted habitat types. Vegetation communities considered sensitive include those listed on CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2020), those that are occupied by species listed under the ESA or are critical habitat in accordance with ESA, and those that are defined as Environmentally Sensitive Habitat Areas ("ESHA") under the Coastal Act. Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act ["CWA"] and Executive Order ["EO"] 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

4.3.3 EXISTING CONDITIONS

4.3.3.1 Habitat Types

Two (2) habitat types, ruderal/disturbed and Arroyo willow riparian forest, occur within the Project site (**Figure 9, Habitat Types**). The following discussion provides an overview of each habitat type.

Ruderal/Disturbed

Ruderal areas are those areas that have been developed or have been subject to historic and ongoing disturbance by human activities and are devoid of vegetation or dominated by non-native and/or invasive weed species. Most of the evaluation consists of ruderal habitat which had been mowed prior to the April 2023 survey. This area, including a picnic table and a segment of Bobcat Trail, is regularly utilized by AMSP users for recreation. Where vegetation was present, dominant species observed included invasive herbaceous plants and grasses such as burclover (*Medicago* sp.), stork's bill (*Erodium cicutarium*), plantain (*Plantago* spp.), common dandelion (*Taraxacum officinale*), and annual grasses. Some trees, including coast live oaks (*Quercus agrifolia*), western sycamores (*Platanus racemosa*), one (1) coast redwood (*Sequoia sempervirens*), and one (1) walnut (*Juglans* sp.), are also present within ruderal areas. Approximately 1.4 acres of ruderal/disturbed habitat occur within the evaluation area (see **Figure 9. Habitat Types**).

Habitat Types	Date 4/1/2024 Scale IN = 70 FT	**Denise Duffy & Associates, Inc.** Planning and Environmental Consulting	Figure 9

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Ruderal/disturbed areas are considered to have low biological value as they are generally denuded of vegetation or are dominated by non-native plant species and consist of relatively low-quality habitat from a wildlife perspective. However, some common wildlife species that do well in urbanized areas, including European starling (*Sturnus vulgaris*), western fence lizard (*Sceloporus occidentalis*), ground squirrel (*Otospermophilus beecheyi*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), American crow (*Corvus brachyrhynchos*), western scrub jay (*Aphelocoma californica*), and rock pigeon (*Columba livia*), may be found foraging within these areas. No special-status plant species were identified within ruderal/disturbed areas during April 2023 biological surveys (see Special-Status Species Table in **Appendix A, Biological Report**).

Arroyo Willow Riparian Forest

Riparian areas are those plant communities supporting woody vegetation found along rivers, creeks, streams, and canyon bottom drainages. They can range from a dense thicket of shrubs to a closed canopy of large mature trees. Riparian habitat, associated with the adjacent Big Sur River, occurs along the margins of the evaluation area. The canopy is dominated by arroyo willow (*Salix lasiolepis*) and the understory is dominated by poison hemlock (*Conium maculatum*) and thistle (*Cirsium* sp.). Approximately 2.1 acres of riparian habitat occur within the evaluation area (see **Figure 9. Habitat Types**). Riparian areas provide habitat for many wildlife species, particularly birds and herpetofauna. Special-status wildlife species that may be present within the riparian areas within the project site include Monterey dusky-footed woodrat (*Neotoma macrotis Luciana*; "MDFW"), California red-legged frog ("CRLF"), foothill yellow-legged frog ("FYLF"), and nesting raptors and other protected avian species. No special-status plant species were identified within riparian areas during April 2023 surveys (see Special-Status Species Table in **Appendix A, Biological Report**).

4.3.3.2 Sensitive Habitats

Riparian Habitat

The rich soils and presence of water that make riparian ecosystems so diverse also function as productive land for agriculture and are desirable locations of development. As a result, much of the historic riparian habitat within California has been lost to agricultural conversion, urbanization, and flood control activities. To combat this habitat loss, CDFW supports a policy of minimizing the destruction or degradation of riparian habitat. Riparian areas are subject to the jurisdiction of CDFW under Section 1602 of the Fish and Game Code. Additionally, the arroyo willow floristic alliance occurring within riparian habitat in the evaluation area is identified as sensitive on CDFW's California Natural Communities List (CDFW, 2023). Riparian areas within the evaluation area may also be considered ESHA subject to the jurisdiction of the CCC under the Big Sur Coast LUP.

Project activities are expected to avoid, but directly abut approximately 2.1 acres of riparian habitat occurring along the margins of the evaluation area (see **Figure 10, Sensitive Habitats**). Regulatory information and considerations for riparian habitat are included in **4.3.5, Regulatory Setting**.

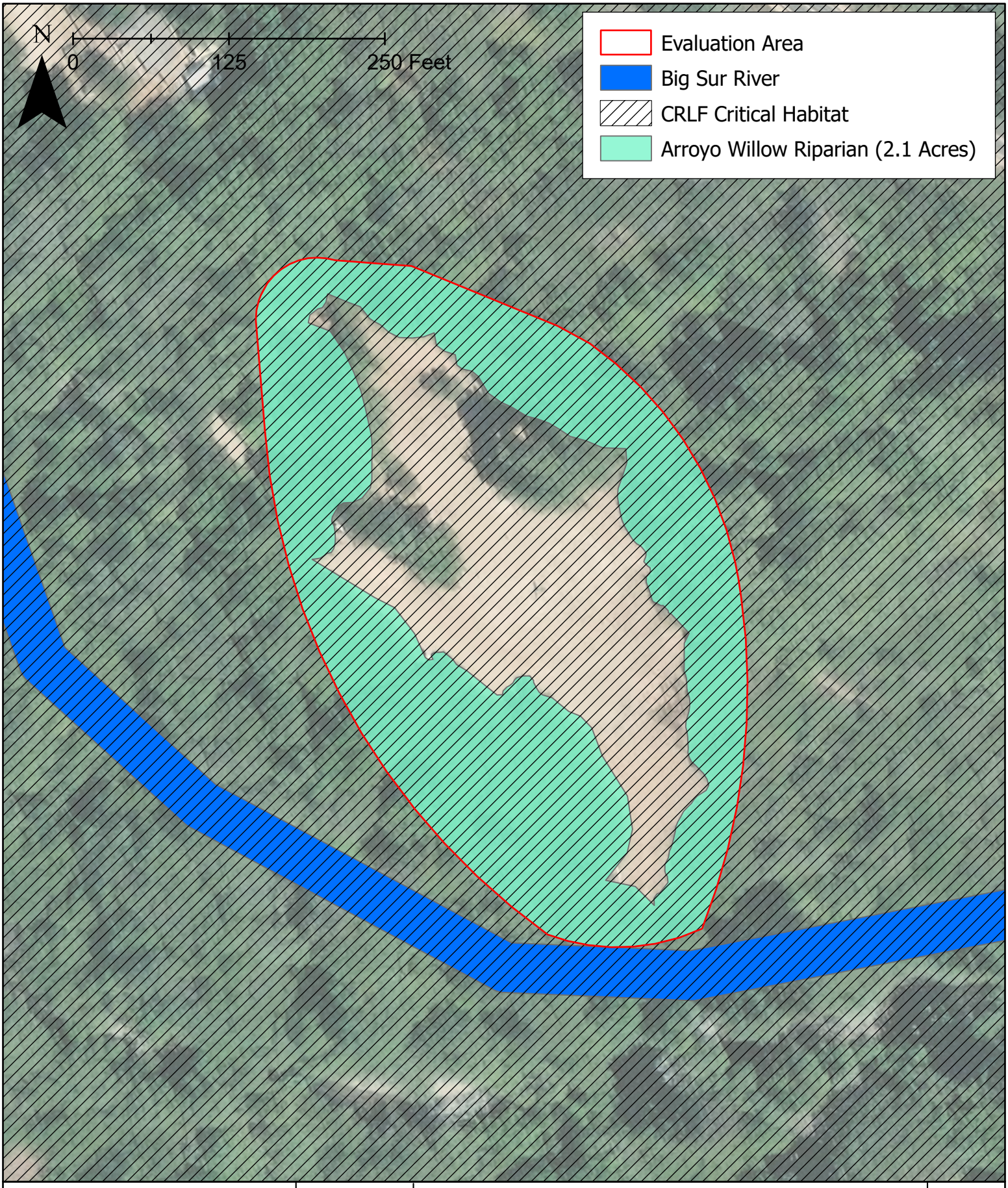
Critical Habitat

The USFWS designates critical habitat for ESA-listed species in habitat areas occupied by those species which have features that are essential to the conservation of the species. The entire evaluation area lies within Critical Habitat Mapping Unit MNT-3 for the CRLF, which the Service designated on April 13, 2006 (71 FR 19244-19346) and revised on March 17, 2010 (75 FR 12816-12959). The primary physical and biological features of CRLF critical habitat are aquatic breeding habitat, non-breeding aquatic habitat, upland habitat, and dispersal habitat. No aquatic resources are present within the evaluation area; the site provides only potential dispersal and upland habitat for CRLF. Approximately 3.5 acres of critical dispersal habitat for CRLF (the entire evaluation area) and 3.5 acres of critical upland habitat for CRLF (riparian habitat within 300 feet of the Big Sur River) is present within the evaluation area (see **Figure 10, Sensitive Habitats**).

Critical habitat for south-central California Coast (S-CCC) steelhead (*Oncorhynchus mykiss iredeus*) is designated adjacent to the evaluation area within the Big Sur River. The lateral extent of critical habitat for steelhead is the stream channel's width, defined by the ACOE in 33 CFR 329.11 as the ordinary high-water mark. In areas for which ordinary high water has not been defined pursuant to 33 CFR 329.11, the width of the stream channel is defined by its bank full elevation. As the evaluation area is located outside of ordinary high water, critical habitat for S-CCC steelhead is not present within the site.

Environmentally Sensitive Habitat Areas (ESHA)

The Big Sur Coast LUP considers habitats for special-status species and other areas of rare or unique biological value, such as sensitive habitats identified by CDFW, as ESHA under the Coastal Act. CRLF critical habitat, S-CCC critical habitat, and riparian areas adjacent to the Project site may be considered ESHA. Therefore, the Project site may be considered ESHA under the jurisdiction of the County under the Big Sur Coast LUP.



Sensitive Habitats

Date
4/1/2024

Scale
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Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
10

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Wetlands and Other Waters

DD&A observed a small wet area with flowing water (bisecting Bobcat Trail) at the eastern margin of the evaluation area during the April 2023 biological survey; however, no wetland vegetation was observed in this area. Based on conversations with State Parks and ZanderWestbrook Design ("ZanderWestbrook"), the wet crossing is a new, ephemeral feature associated with severe winter storms or, potentially, a clogged culvert that redirected flow to the area. Based on aerial review of the site, the wet crossing appears to have been used as a turnaround and informal parking area in previous years (Sofia Zander, per. comm., 2023). The wet crossing is not identified in the National Hydrography Dataset (USGS, 2022) nor on the USFWS wetland mapper (Service, 2024). The crossing is ephemeral and does not meet the definition of waters of the U.S. as identified in CFR 328.3(a)(8), and, therefore, is not subject to the jurisdiction of the ACOE. The crossing, which has not been documented during normal rain years, does not meet the definition of waters of the state as identified in the State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB, 2021) and, therefore, is also not subject to the jurisdiction of the RWQCB. As a result, the wet crossing is not considered a sensitive habitat.

The Big Sur River is considered jurisdictional waters of the U.S. and state, and potential wetlands of the U.S. and/or state may be present directly adjacent to the river below the ordinary high-water mark. As the evaluation area is located outside of ordinary high water, potentially jurisdictional wetlands and other waters associated with the Big Sur River are not present within the site.

4.3.3.3 Special-Status Wildlife Species

Published occurrence data within the project area and surrounding USGS quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the project site (see **Section 4.3.3, Survey Methodology** and **Appendix A, Biological Report**). Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the site. The special-status species that are known to occur or have been determined to have a moderate or high potential to occur within or immediately adjacent to the project site are discussed below. Based on the species-specific reasons presented in **Appendix A, Biological Report**, all other species are assumed unlikely to occur or have a low potential to occur within the project site, are therefore unlikely to be impacted by the Project and are not discussed further[5].

Monterey Dusky-Footed Woodrat

The MDFW is a CDFW species of special concern. This is a subspecies of the dusky-footed woodrat (*Neotoma macrotis*), which is common to oak woodlands and other forest types throughout California. Dusky-footed woodrats are frequently found in forest habitats with moderate canopy cover and a moderate to dense understory, including riparian forests; however, they may also be found in chaparral communities. Relatively large nests are constructed of grass,

[5] CRLF has a low potential to occur within the Project site; however, it is included in this discussion due to the presence of critical habitat for this species within the site.

leaves, sticks, and feathers and are built in protected spots, such as rocky outcrops or dense brambles of blackberry and/or poison oak. Typical food sources for this species include leaves, flowers, nuts, berries, and truffles. MDFW may be a significant food source for small- to medium-sized predators. Populations of this species may be limited by the availability of nest material. Within suitable habitat, nests are often found in close proximity to each other.

Suitable habitat for MDFW is present within riparian habitat in the evaluation area. The CNDDB does not report any occurrences of this species within the quadrangles reviewed; however, this species is known to occur in the region. Nests of this species were not observed in the evaluation area during the April 2023 biological survey, but this species has the potential to move into the site prior to construction. Therefore, MDFW has a moderate potential to occur within the Project site.

California Red-Legged Frog

CRLF is a federally Threatened species and a CDFW species of special concern. It was listed as a federally Threatened species on June 24, 1996 (61 FR 25813-25833), and its critical habitat was designated on April 13, 2006 (71 FR 19244-19346) and revised on March 17, 2010 (75 FR 12816-12959). The CRLF is the largest native frog in California (44-131 mm snout-vent length) and was historically widely distributed in the central and southern portions of the state (Jennings and Hayes, 1994). Adults generally inhabit aquatic habitats with riparian vegetation, overhanging banks, or plunge pools for cover, especially during the breeding season (Jennings and Hayes, 1988). They may take refuge in small mammal burrows, leaf litter, or other moist areas during periods of inactivity or to avoid desiccation (Rathbun, et al., 1993; Jennings and Hayes, 1994). Radio telemetry data indicates that adults engage in straight-line breeding season movements irrespective of riparian corridors or topography and they may move up to two (2) miles between non-breeding and breeding sites (Bulger et. al., 2003).

The CNDDB reports 42 occurrences of CRLF within the quadrangles reviewed, the nearest of which is located approximately 3.1 miles from the evaluation area within Swiss Canyon Creek, just north of AMSP. State Parks and CDFW biologists have also observed this species within AMSP within the Big Sur River (Daniel Shaw, personal communication, November 4, 2024). No suitable breeding habitat for this species is present within the evaluation area; however, potentially suitable breeding habitat is present within the adjacent Big Sur River. Additionally, potentially suitable upland habitat is present in the evaluation area in riparian habitat within 300 feet of the river, and the entire evaluation area may provide dispersal habitat therefore, this species has a high potential to occur within the evaluation area.

Foothill Yellow-Legged Frog

Foothill yellow-legged frog (*Rana boylii*, FYLF), specifically the Pacific Southwest Region sub-population found in the Coast Range from Monterey County to Los Angeles County, was listed as a state Endangered species in 2019 (CDFW, 2019) and a federally Endangered species on September 28, 2023 (88 FR 59698-59727), due to its rapidly decreasing range and population numbers. Historically, FYLF was found throughout Pacific drainages and streams from Oregon to

southern California in mountain and foothill river systems. Adults generally inhabit partly shaded, shallow streams and riffles with rocky substrate in a variety of habitats including hardwood, pine, and riparian forests, as well as scrub, chaparral and wet meadows (Jennings and Hayes, 1988). Adults are rarely found far from permanent water bodies but may utilize upland habitat during winter's peak flows in seeps, puddles, submerged root wads, and large boulders or debris at high water (van Wagner 1996; Rombough 2006).

No suitable breeding habitat for this species is present within the evaluation area; however, potentially suitable breeding habitat is present within the adjacent Big Sur River and suitable upland habitat is present within riparian habitat in the evaluation area. The CNDDB reports 15 occurrences of FYLF within the quadrangles reviewed, the nearest reported in the Big Sur River riparian corridor approximately 1.1 miles upstream of the evaluation area. This occurrence and others in the area are historical; however, the current distribution and population data of the species is limited, so any suitable habitat within their historical range is considered to have the possibility of the species being present. Therefore, FYLF has a moderate potential to occur within or adjacent to the evaluation area in riparian habitat.

Southwestern Pond Turtle

Southwestern pond turtle (*Actinemys pallida,* SWPT) is a candidate species for listing under the federal ESA and a CDFW species of special concern. Previously referred to collectively as western pond turtle, recent research concluded that two subspecies of pond turtle (*Actinemys marmorata marmorata* and *A. m. pallida*) are two separate full species, northwestern (*Actinemys marmorata*) and southwestern (*A. pallida*) pond turtles. SWPT are common to uncommon in permanent and nearly permanent aquatic resources in a wide variety of habitats along the California coast from Castroville to Baja California in Mexico, including the Salinas Valley to Soledad, the foothills west of the Central Valley to Lancaster, and the southern California mountain ranges. Elevation range extends from near sea level to 2,041 meters (6.696 feet); however, they are mostly found below 1,371 meters (4,980 feet) (Stebbins, 2003). SWPT require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. SWPT remain active year-round and may move several times during the course of overwintering. The time spent in the terrestrial habitat appears highly variable; in the southern part of their range SWPT may remain in these sites for only a month or two. In pond and lake habitats, however, some SWPT remain in the pond during the winter (Holland, 1994). Additionally, during the spring or early summer, females move overland for up to 100 meters (325 feet) to find suitable sites for egg-laying. Nests are typically excavated in compact, dry soils in areas characterized by sparse vegetation, usually short grasses or forbs (Holland, 1994). Three to 11 eggs are laid from March to August depending on local conditions (Ernst and Barbour, 1972).

The CNDDB reports 11 occurrences of SWPT within the quadrangles reviewed, the nearest of which overlaps the evaluation area. In addition, CDFW biologists have observed SWPT in the Big Sur River at a location 175 feet from the evaluation area, which is within the 325-foot upland dispersal buffer in which SWPT may nest (Daniel Shaw, personal communication, November 4, 2024). State Parks biologists have also observed this species within AMSP approximately 950

feet from the evaluation area within the Big Sur River (State Parks Senior Environmental Scientist, Jeff Frey, personal communication, November 4, 2024). At its closest point, the evaluation area is located 20 feet from the Big Sur River and contains suitable nesting habitat for SWPT; therefore, this species has a high potential to occur within the evaluation area.

Nesting Raptors and Other Protected Avian Species

Raptors, their nests, and other nesting birds are protected under California Fish and Game Code and the Migratory Bird Treaty Act ("MBTA"). While the life histories of these species vary, overlapping nesting and foraging similarities allow for their concurrent discussion. Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest habitats, as well as open grasslands, are used most frequently for nesting. Breeding occurs February through September, with peak activity May through July. Prey for these species include small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Various species of raptors and nesting birds, such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), turkey vulture (*Cathartes aura*), and songbirds, have a potential to nest within any of the large trees present within and adjacent to the evaluation area.

4.3.3.4 Special-Status Plant Species

No special-status plant species were identified within the evaluation area during the April 2023 survey and due to lack of suitable habitat, none are expected to occur (**Appendix A, Biological Report**).

Protected Trees

Several mature trees, including coast live oak, coast redwood, western sycamore, American elderberry (*Sambucus canadensis*), and California bay laurel (*Umbellularia californica*), are located within the evaluation area. These trees are protected under the Big Sur Coast LUP.

4.3.4 REGULATORY SETTING

4.3.4.1 Federal

Federal Endangered Species Act

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The ESA is administered by the USFWS or National Oceanic and Atmospheric Administration Marine Fisheries Service ("NMFS"). In general, the NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under USFWS jurisdiction.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.” In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Clean Water Act

The ACOE and EPA regulate discharge of dredged and fill material into “Waters of the United States” (“waters of the U.S.”) under Section 404 of the CWA. In 2020, the ACOE and EPA published the Navigable Waters Protection Rule, which became effective on June 22, 2020, and revised the definition of Waters of the U.S. to include four categories of waters: territorial seas and navigable waters; perennial and intermittent tributaries to those waters; certain lakes, ponds, and impoundments; and wetlands adjacent to jurisdictional waters. The rule also details 12 categories of exclusions (i.e., features that are not waters of the U.S.), such as features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems. Discharge into waters of the U.S. requires a Section 404 permit from the ACOE.

Under Section 401 of the CWA, any applicant receiving a Section 404 permit from the ACOE must also obtain a Section 401 Water Quality Certification from the Regional Water Quality Control Board (“RWQCB”). A Section 401 Water Quality Certification is issued when a project is demonstrated to comply with state water quality standards and other aquatic resource protection requirements.

4.3.4.2 State

California Endangered Species Act

The CESA was enacted in 1984. The California Code of Regulations (Title 14, Section 670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. “Take” is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch,

capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize “take” of any state listed species.

California Native Plant Protection Act

The CNPPA of 1977 directed CDFW to carry out the legislature’s intent to “preserve, protect and enhance rare and Endangered plants in the State.” The CNPPA prohibits importing rare and Endangered plants into California, taking rare and Endangered plants, and selling rare and Endangered plants. The CESA and CNPPA authorized the Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (Sections 2050-2098, Fish and Game Code). Plants listed as rare under the CNPPA are not protected under CESA; however, these plants may not be taken or possessed at any time, and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research.

California Fish and Game Code

Birds. Section 3503 of the Fish and Game Code states that it is “unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal Migratory Bird Treaty Act. Section 3800 prohibits take of nongame birds.

Fully Protected Species. The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (Section 5515), mammals (Section 4700), amphibians and reptiles (Section 5050), and birds (Section 3511). Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Species of Special Concern. As noted above, the CDFW also maintains a list of wildlife “species of special concern.” Although these species have no legal status, the CDFW recommends considering these species during the analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

Lake or Streambed Alteration. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW’s

jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 ("Porter-Cologne") is California's statutory authority for the protection of water quality and applies to surface waters, wetlands, and groundwater, and to both point and nonpoint sources. Under the Porter-Cologne, the State Water Resources Control Board ("State Board") has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level. The project site is located within Central Coast RWQCB (Region 3). Porter-Cologne incorporates many federal CWA provisions, such as delegation to the State Board and RWQCBs of the National Pollutant Discharge Elimination System ("NPDES") permitting program.

Under Porter-Cologne, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the people's use and enjoyment. Regional authority for planning, permitting, and enforcement is delegate to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne sets forth the obligations of the State Board and RWQCBs to adopt and periodically update water quality control plans (basin plans). The act also requires waste dischargers to notify the RWQCBs of such activities through filing of Reports of Waste Discharge ("RWD") and authorizes the State Board and RWQCBs to issue and enforce waste discharge requirements ("WDRs"), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWD requirements and WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects, when implemented according to prescribed terms and conditions.

The term "Waters of the State" is defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope but has special responsibility for wetlands, riparian areas, and headwaters, including isolated wetlands, and waters that may not be regulated by the ACOE under Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne.

California Coastal Act

The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone (see also **Section 4.1, Aesthetics**). Development activities within the coastal zone generally require a CDP from either the Coastal Commission or the local government if a LCP has been certified. A CDP is required in addition to any other permit required from resource agencies.

The Coastal Commission or the local government may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as ESHA. Section 30107.5 of the Coastal Act defines an "environmentally sensitive area" as any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Development is restricted within the coastal zone and prohibited within designated ESHA, unless the development is coastal dependent and does not have a significant effect on the resources. Section 30240 of the Coastal Act states that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." This section also states that "development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas."

4.3.4.3 Local

Big Sur Coast Land Use Plan

The Project site lies within the coastal zone and is regulated by the Big Sur Coast LUP, which is the certified LCP for the region. The Big Sur Coast LUP identifies ESHA within its boundaries as Areas of Special Biological Significance identified by the State Water Resources Control Board; rare and endangered species habitat; all coastal wetlands and lagoons; all marine wildlife haul-out, breeding and nesting area; education, research and wildlife reserves, including all tideland portions of the California Sea Otter State Fish and Game Refuge; nearshore reefs; tidepools; sea caves; islets and offshore rocks; kelp beds; indigenous dune plant habitats; Monarch butterfly mass overwintering sites; and wilderness and primitive areas.

The Big Sur Coast LUP and the County's Coastal Implementation Plan ("CIP") regulate the removal of trees within the Big Sur Coast LUP. Except as exempted by the Big Sur Coast LUP, a CDP is required to remove native trees within the Big Sur Coast LUP. Further, in accordance with the Big Sur Coast LUP and the CIP, a Forest Management Plan is required to remove, damage, or relocate trees within the Big Sur Coast LUP. The Proposed Project would not remove any trees on or adjacent to the Project site.

Big Sur River Protected Waterway Management Plan

The County prepared the Big Sur River Protected Waterway Management Plan ("Waterway Management Plan") in 1986 as a supplement to the Big Sur Coast LUP. The Waterway Management Plan contains numerous requirements for public and private entities with property adjacent to the river or within its watershed. Specifically, it identifies standards concerning water rights, optimization of water yields within the watershed, leach field locations, and distances of trails and campsites from the edge of the Big Sur River. It also restricts incompatible development in the floodplain. The Waterway Management Plan calls for restoration of native vegetation along

the riverbank for ecological and visual reasons and for the use of prescribed burns to reduce fuel loads.

AMSP General Plan

The primary biological resources in the AMSP include the Big Sur River, tidal lagoon, beach area, inland flats, and coastal uplands (AMSP, 1976). The AMSP General Plan includes management guidelines to protect and enhance ecological resources within the Park. Specific guidelines relevant to biological resources include planting native species in use areas to minimize erosion and enhance native habitat; implementing an interpretive signage program to educate Park visitors of the ecological importance of the Big Sur River and associated lagoon; and constricting visitor activities to established use areas and recreational trails.

4.3.5 THRESHOLDS OF SIGNIFICANCE

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

4.3.6 IMPACT ANALYSIS

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

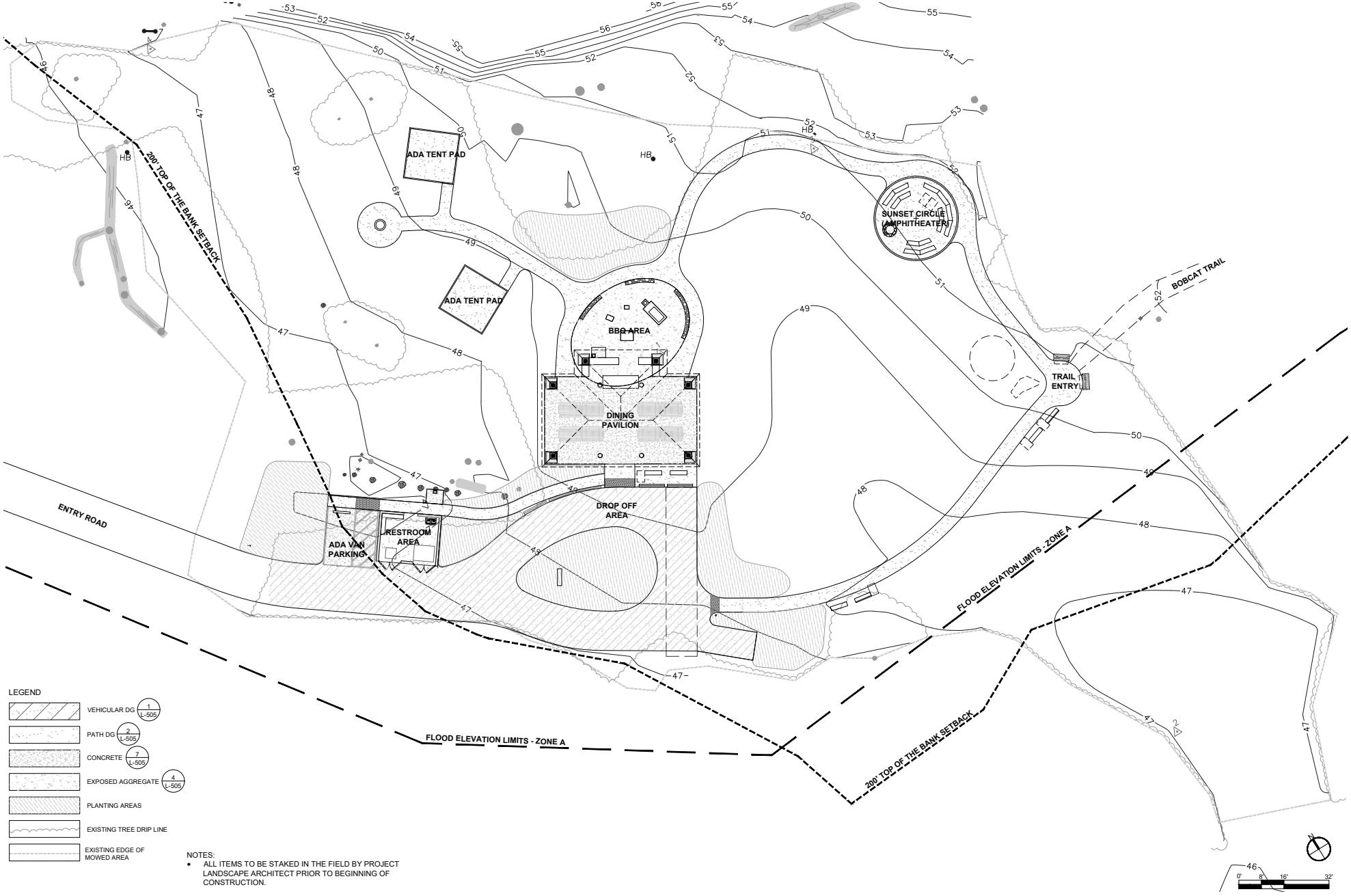
The Proposed Project could potentially have a substantial adverse effect either directly or indirectly through habitat modifications on a species identified as a candidate, sensitive, or special-status species. Several special-status species, including CRLF, FYLF, SWPT, MDFW and raptors and other nesting bird species are known or have the potential to occur within and immediately adjacent to the Project site. If present within the Project site, construction, and operation of the Project could result in direct and/or indirect impacts to these species.

Potential Impacts to CRLF and FYLF

The evaluation area is within the known range of CRLF (federally Threatened) and FYLF (state and federally Endangered), which are known to occur in the Big Sur River. Riparian habitat within and adjacent to the evaluation area provides suitable upland habitat for both species, and ruderal habitat within the evaluation area provides adequate dispersal habitat for CRLF. However, no direct impacts to riparian habitat are proposed. Moreover, most development would occur more than 200 feet from the top of the bank, see **Figure 11, Top of Bank Setbacks**. As illustrated in **Figure 11. Top of Bank Setbacks**, the parking space (i.e., ADA parking van space) and lower (seasonal) camping area would be within the 200-foot setback from the top of the bank. However, neither of these areas contain riparian vegetation and both areas have been, and continue to be, routinely used by VWS and State Parks for decades.

The Project would avoid indirect impacts to riparian habitat with implementation of **Mitigation Measures 4.3-1 – 4.3-7**. The Proposed Project site is routinely used by VWS and State Parks and therefore, is not likely to be used as upland habitat for CRLF or FYLF. Additionally, dispersal habitat is abundant and migrating CRLF are widely distributed across the landscape in terms of space and time. Therefore, the potential for CRLF to occur within ruderal habitat during construction is low and the potential for take of this species is unlikely. While impacts to CRLF are unlikely, implementation of **Mitigation Measures 4.3-8 – 4.3-13** would further ensure avoidance of this species during construction and would reduce the need for take authorization from the USFWS and/or CDFW.

Source: Waterways Consulting, Inc. August 2024.



Top of Bank Setbacks

Date
11/14/2024

Scale
N/A

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
11

Potential Impacts to Southwestern Pond Turtles

The Proposed Project site is located within 20 feet of the Big Sur River. Southwestern pond turtles ("SWPT") have been observed within this resource on several occasions by CDFW and State Parks staff. Ruderal habitat within the evaluation area and adjacent to the Big Sur River riparian habitat may provide nesting habitat for this species. Construction activities within the project site, including vegetation removal and grading, may result in direct mortality of individuals, if present at the time of construction. This would be considered a significant impact but would be reduced to a less-than-significant level with implementation of **Mitigation Measures 4.3-1 – 4.3-7** and **Mitigation Measure 4.3-14**.

Potential Impacts to Other Special-Status Species

The Project could result in short-term, temporary direct and indirect impacts to MDFW and protected bird species (e.g., wildlife harassment or mortality, nest abandonment, habitat loss) associated with construction activities (e.g., soil compaction, noise, dust, hazardous material spills, and introduction and spread of non-native, invasive species). Riparian understory adjacent to the Proposed Project site provides nesting and foraging habitat for MDFW. Additionally, riparian tree canopy provides nesting habitat for raptors and other protected birds. No direct impacts to riparian habitat are proposed and the Project would avoid indirect impacts to this riparian habitat through implementation of State Parks Standard Project Requirements, which include tree and nesting bird protection and invasive species control measures. While impacts to riparian habitat would be avoided and minimized, implementation of **Mitigation Measures 4.3-1 – 4.3-7 and Mitigation Measures 4.3-15** would ensure that impacts to MDFW and avian species related to disturbance of riparian habitat would be less than significant. Project construction could also result in potential impacts to bird species nesting in trees within and adjacent to the Project site (e.g., noise disturbance, nest abandonment). This would constitute a potentially significant impact, which would be reduced to less than significant with implementation of **Mitigation Measure 4.3-16**, below.

Project operation could result in impacts to MDFW and protected bird species due to increased recreational use of the Project site. Potential operational impacts could include wildlife harassment or mortality, nest abandonment, and habitat loss due to increased night lighting, noise, and the introduction and spread of non-native species. However, the Project is not anticipated to substantially increase recreational use beyond existing conditions; Project facilities would be accessible to day-use Park visitors, but overnight camping would be limited to ongoing organized VWS campouts. Additionally, the Project would be consistent with the AMSP General Plan and surrounding uses within the Park. Furthermore, the site is previously disturbed in connection with historical use and is currently used for VWS and State Parks campouts, other activities and day-use recreation; therefore, Project operation is not expected to result in substantial biological impacts.

Mitigation Measures

4.3-1 The project applicant shall retain a qualified biologist to prepare and conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist shall meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and a review of the project boundaries; 2) how a biological monitor shall examine the area and agree upon a method which shall ensure the safety of the monitor during such activities; 3) the special-status species and sensitive habitats that are known or may be present within and directly adjacent to the site; 4) the specific mitigation measures that shall be incorporated into the construction effort; 5) the general provisions and protections afforded by the regulatory agencies; and 6) the proper procedures if a special-status species is encountered within the project site during construction.

4.3-2 Prior to construction, exclusionary fencing shall be placed to preclude construction vehicles and personnel from impacting riparian habitat and the Big Sur River. A biological monitor shall supervise the installation of exclusionary fencing and monitor at least once per week until construction is complete to ensure that the protective exclusionary fencing remains intact.

4.3-3 Construction shall take place only under dry conditions (i.e., when the evaluation area has not received more than ¼ inch of precipitation within the last 24 hours).

4.3-4 Stationary equipment such as motors, generators, and welders located within 100 feet of riparian habitat shall be stored overnight at a designated staging area and shall be positioned over drip pans.

4.3-5 Any hazardous or toxic materials deleterious to life that could be washed into adjacent sensitive habitats shall be contained in watertight containers.

4.3-6 Refueling of equipment shall take place within designated staging areas or at least 100 feet from riparian habitats.

4.3-7 All construction debris and associated materials stored in staging area shall be removed from the work site upon completion of the project.

4.3-8 A qualified biologist shall survey the Project site and immediately adjacent areas 48 hours before and the morning of the onset of work activities for the presence of CRLF and FYLF. If any life stage of CRLF or FYLF is observed, construction activities shall not commence until the Service and/or CDFW are consulted, and appropriate actions are taken to allow project activities to continue.

4.3-9 During ground-disturbing activities, a qualified biologist shall survey the Project site daily before the onset of work activities for the presence of CRLF and FYLF. The qualified

biologist shall remain onsite until all ground disturbing activities are completed. If any life stage of CRLF or FYLF is found and these individuals are likely to be killed or injured by work activities, the qualified biologist shall be contacted, and work shall stop in that area until the CRLF and/or FYLF has moved on its own out of the work area. If the CRLF and/or FYLF do not move out of the work area of their own accord the Service and/or CDFW shall be contacted prior to relocation. Construction activities shall not resume until the Service and/or CDFW are consulted, and appropriate actions are taken to allow project activities to continue.

4.3-10 After ground-disturbing activities are complete, or earlier if determined appropriate by the qualified biologist, the qualified biologist shall designate a construction monitor to oversee on-site compliance with all avoidance and minimization measures. The qualified biologist shall ensure that this construction monitor receives training in the identification of CRLF and FYLF. The construction monitor or the qualified biologist is authorized to stop work if the avoidance and/or minimization measures are not being followed.

4.3-11 To prevent inadvertent entrapment of CRLF or FYLF during Project construction, all excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day with plywood or similar materials. Before such holes or trenches are filled, they shall be inspected for trapped animals.

4.3-12 Only tightly woven fiber netting or similar material may be used for erosion control at the evaluation area. Coconut coir matting is an acceptable erosion control material. No plastic mono-filament mating shall be used for erosion control, as this material may ensnare wildlife, including CRLF and FYLF.

4.3-13 Because dusk and dawn are often the times when CRLF and FYLF are most actively foraging and dispersing, all construction activities should cease one half hour before sunset and should not begin prior to one half hour after sunrise.

4.3-14 A qualified biologist shall conduct a pre-construction survey for SWPT and their nests within the project site no more than three days prior to construction. If a SWPT nest is found, it will be monitored and avoided until the eggs hatch. All SWPTs discovered within the project site immediately prior to or during project activities shall be allowed to move out of the area of their own volition. If this is not feasible, they shall be captured by a qualified biologist and relocated out of harm's way to the nearest suitable habitat at least 100 feet upstream or downstream from the project site where the individual was found.

4.3-15 To avoid or minimize impacts to MDFW, the project applicant will retain a qualified biologist to conduct pre-construction surveys in suitable habitat proposed for construction. Surveys for MDFW nests will be conducted within three days prior to construction within the project site. All MDFW nests identified will be flagged for avoidance. Nests that cannot be avoided will be manually deconstructed prior to land clearing activities to allow animals to escape harm. If a litter of young is found or suspected, nest material will be replaced, and the nest

will be left alone for two to three weeks before a re-check to verify that young are capable of independent survival before proceeding with nest dismantling.

4.3-16 Project activities that may affect protected nesting avian species (e.g., noise, vibrations) shall be scheduled after September 15 and before February 1 to avoid the breeding and nesting season. Alternatively, a qualified biologist shall conduct pre-construction surveys for nesting raptors and other protected avian species within 300 feet of Project activities if work occurs between February 1 and September 15. Pre-construction surveys shall be conducted no more than 14 days prior to the start of project activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through September). Because some bird species nest early in spring and others nest later in summer, and because some species breed multiple times in a season, surveys for nesting birds may be required to continue during project activities to address new arrivals. The necessity and timing of these continued surveys shall be determined by the qualified biologist.

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist shall notify the project applicant and an appropriate no-disturbance buffer shall be imposed within which no disturbance should take place (generally 300 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

The Proposed Project would not have substantial adverse effects to riparian habitat and/or other sensitive natural communities. Riparian habitat associated with the Big Sur River occurs adjacent to the Project site. Riparian habitat is considered a sensitive habitat under the jurisdiction of CDFW under Section 1602 of the California Fish and Game Code. The Big Sur River is considered jurisdictional waters of the U.S. and state subject to the jurisdiction of the ACOE and RWCQB under Sections 404 and 401 of the CWA, respectively, and potential wetlands of the U.S. and/or state subject may be present directly adjacent to the river below the ordinary high-water mark. These resources may also be considered ESHA under the Big Sur Coast LUP. The Project site is located outside of ordinary high water and the Project is being designed to avoid riparian habitat. Therefore, no direct impacts to riparian habitat or the Big Sur River would occur. Although unlikely, impacts to these resources may occur if construction activities occur outside of the proposed work limits or if construction activities result in erosion and sedimentation to adjacent habitats. Additionally, impacts to these resources could occur if an accident during construction were to result in the release of hazardous materials into the environment.

In addition, the Project site is adjacent to USFWS-designated critical habitat for S-CCC steelhead (i.e., the lateral extent of the Big Sur River), and the entire Project site lies within designated critical habitat for CRLF. The Big Sur Coast LUP considers all sensitive habitats and habitat for special-status species as ESHA under the Coastal Act. Therefore, for the purposes of this analysis, the entirety of the Project site may be considered sensitive habitat. The Project would result in modification of previously disturbed and developed ruderal grounds that fall within designated critical habitat boundaries for CRLF; however, suitable habitat will not be altered. In addition, critical habitat requirements do not apply to activities that are not conducted on federal land or that do not involve a federal agency. Therefore, this impact is less than significant, and no mitigation is required.

Implementation of State Parks Standard Project Requirements pertaining to erosion and hazardous materials (see **Sections 4.6, Geology and Soils** and **4.8, Hazards and Hazardous Materials** for additional detail) and **Mitigation Measures 4.3-1 – 4.3-7** would ensure any potential impacts to sensitive riparian habitat and waters of the U.S. and state located adjacent to the Project site would be less than significant.

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal filling, hydrological interruption, or other means?*

The Proposed Project site does not contain any federally protected wetlands. However, the Big Sur River is located adjacent to the Project site and is considered jurisdictional waters of the U.S. and state. Potentially adverse indirect impacts to jurisdictional waters may occur through erosion, sedimentation, and introduction of hazardous materials. Implementation of State Parks Standard Project Requirements (see **Sections 4.6, Geology and Soils** and **4.8, Hazards and Hazardous Materials**) and **Mitigation Measure 4.3-1 – 4.3-7** (see above), would reduce any potential impacts to jurisdictional waters of the U.S. and state (located off-site) to a less than significant level. Therefore, the Project would result in a less than significant impact with mitigation incorporated.

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

The Proposed Project would result in the construction of limited improvements to support on-going educational and environmental programs on-site. These improvements would not substantially interfere with the movement of any native wildlife species or established wildlife corridors. Access to the Proposed Project site would be provided through an existing road that connects to the main AMSP parking lot and SR 1. Therefore, the Project would not create substantial new barriers to wildlife movement. The Project site is also disturbed from historic development and the site is currently used in connection with VWS campouts, day-use recreation, and by State Parks for equipment storage (see **Section 1.2.2, Historic and Current Use** for additional detail). This represents a less than significant impact.

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Several mature trees, including coast live oak, coast redwood, western sycamore, California bay laurel, and elderberry are located within the evaluation area. These trees are protected under the Big Sur Coast LUP and their removal or damage would require a coastal development permit from the CCC. The AMSP General Plan also requires the preservation of all mature native trees. The Proposed Project does not include removal and/or trimming of any trees and is being designed to avoid impacts to trees within or adjacent to the Project site. However, grading around trees during Project construction could lead to damage or mortality if 30 percent or more of an individual tree's root base is damaged. To avoid and minimize damage to tree roots, State Parks would implement their Standard Project Requirements related to tree protection (see **Table 1.4 - 1**). Additionally, **Mitigation Measures 4.3-1 – 4.3-7**, above. **Mitigation Measures 4.3-17** and **4.3-18** would further ensure any impacts to trees would be avoided or minimized. Because the Project would not remove any trees and would implement standard requirements and mitigation measures to ensure avoidance and minimization of potential impacts, the Project would not conflict with any local policies or ordinances, such as a tree preservation policy or ordinance. Therefore, the Project would result in a less than significant impact.

Mitigation Measures

4.3-17 Trees within and directly adjacent to the Project site that have the potential to be impacted by construction-related activities, as determined by a qualified arborist or biologist, shall be protected from damage during construction with temporary fencing. Fencing shall consist of chain link, supported snowdrift or plastic mesh, or field fence. Fencing shall have cross bracing (typically 2x4 material) on both the top and lower edges of the fencing material to prevent sagging and provide lateral support. Fencing shall stand a minimum height of four feet above grade and be placed to the farthest extent possible from the base of the trees to protect driplines (typically 10-12 feet away from the base of a tree). Where access or space is limited, it is permissible to protect trees within the 10-12-foot distance with approval from a qualified arborist or biologist.

Tree fencing shall remain in place during the entire construction period. Torn or damaged roots shall be cleanly cut to sound wood wherever possible to minimize decay entry points. Any roots found that must be cut should be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment. No tree seals shall be used as the seal material only promotes decay.

4.3-18 Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall be prohibited adjacent to trees.

f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The Project is not located within an adopted Habitat Conservation Plan or Natural Community Conservation Plan area. The Project is adjacent to the Big Sur River; the Proposed Project would be consistent with the Water Management Plan and would include setbacks from the Big Sur River to comply with the Water Management Plan requirements. Therefore, no impact would occur as a result of the Proposed Project.

4.4 CULTURAL AND TRIBAL RESOURCES

4.4.1 ENVIRONMENTAL SETTING

4.4.1.1 Regional History

Radiocarbon and archaeological evidence indicate that human occupation of the California Coast began at least 10,000 years ago. Settlement of the coastal areas of Monterey County, however, did not begin until around 5,000 B.C. Prior to Euro-American contact, the area now known as Big Sur was inhabited by native speakers of the Costanoan, Esselen, and Salinan languages. The traditional way of life for the native inhabitants was largely destroyed in the 1770s with the arrival of Euro-Americans.

European contact began with the arrival of Spanish explorers in the 16th century. However, it was not until 1770 that the Portola expedition arrived in Monterey Bay and established the first mission and Royal Presidio. With the arrival of the Portola expedition and the establishment of the first mission, a period of intense Native American conversion to Catholicism began. After Mexico gained its independence from Spain in 1820, a period of secularization ensued, and the remaining Native American groups were employed as ranch hands and domestic servants. By 1840, the Mission was in a state of ruin, and many Native Americans returned to pre-Spanish food collecting and hunting practices. As the competition for land increased with the arrival of Anglo settlers, Native American communities began to disappear.

4.4.1.2 Project Site History

The Park was previously under ownership of the Molera and Cooper family, who used the land for cheese production and ranching including raising cattle and bison. The Project site is adjacent to the Historic Molera Ranch District and appears to have been used in association with ranching operations (Albion, 2024). State Parks acquired the property in 1968 from The Nature Conservancy who purchased the land from the prior owners in 1965 (OAC, n.d.). In 1996, the Project site became a dedicated outfitting for the MHT that had operated within the Park since the 1970's. MHT operated seasonally from April to October of each year and provided on-site housing (i.e., on-site trailers) for two (2) to four (4) employees. The Project site provided space to house up to 35 horses and served hundreds of visitors each season. In 2018, MHT's contract with State Parks was terminated and infrastructure within the Project site (e.g., corrals, horse pins) were

removed. Since the closure of MHT, VWS, a local 501(c)(3) non-profit, has partnered with State Parks to use the Project site for educational youth and family campouts.

4.4.2 SURVEY METHODOLOGY

The following section is based on a Phase I Cultural Resources Inventory prepared by Albion Environmental, Inc. ("Albion") in March 2024. The inventory consisted of background research and field reconnaissance of the Project's Area of Potential Impact ("API"). Background research included a comprehensive literature review and records search covering the Project site, including a records search from the Northwest Information Center ("NWIC"); a search of the Native American Heritage Commission ("NAHC") Sacred Lands File ("SLF"), and Native American consultation with the Rumsen Am:a Tur:ataj Ohlone ("Rumsen Tribe"), Esselen Tribe of Monterey County ("Esselen Tribe"), and the Indian Canyon Mutsun Band. The field reconnaissance consisted of a pedestrian survey of the API on May 3, 2023, to identify and record any previously unrecorded precontact or historic-era cultural resources.

4.4.3 REGULATORY SETTING

4.4.3.1 State

California Register of Historical Resources

The California Register of Historical Resources ("CRHR") is "an authoritative listing and guide to be used by state and local agencies, private groups and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC Section 5024.1[a]). The CRHR includes buildings, sites, structures, objects, and districts significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. The CRHR is maintained by California State Parks' Office of History Preservation (OHP).

California Public Resources Code

Several sections of the California PRC protect cultural resources located on public land. Under PRC Section 5097.5, no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site (including fossilized footprints), inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands. Violation of this section is a misdemeanor.

PRC Section 5097.98 states that if Native American human remains are identified within a project area, the landowner must work with the Native American Most Likely Descendant as identified by the NAHC to develop a plan for the treatment or disposition of the human remains and any items associated with Native American burials with appropriate dignity. These procedures are also

addressed in Section 15064.5 of the State CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

California Health and Safety Code

California Health and Safety Code Section 7050.5 regulates the treatment of human remains. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to his or her authority. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact the NAHC by telephone within 24 hours.

Assembly Bill 52

California Assembly Bill (AB) 52, in effect since July 2015, provides CEQA protections for tribal cultural resources. All lead agencies approving projects under CEQA are required, if formally requested by a culturally affiliated California Native American Tribe, to consult with such tribe regarding the potential impact of a project on tribal cultural resources before releasing an environmental document. Under California Public Resources Code Section 21074, tribal cultural resources include site features, places, cultural landscapes, sacred places, or objects that are of cultural value to a tribe and that are eligible for or listed on the California Register of Historical Resources (CRHR) or a local historic register, or that the lead agency has determined to be of significant tribal cultural value.

4.4.3.2 Local

Big Sur Coast LUP

A key policy of the County is to protect, maintain, and where feasible, enhance and restore the cultural heritage of the County and its man-made resources and traditions. The Big Sur LUP requires that new development protect significant historical buildings, landmarks, and districts, where appropriate. Big Sur's archaeological resources, including those areas considered to be archaeologically sensitive but not yet surveyed and mapped, must be maintained, and protected for their scientific and cultural heritage values. New land uses and development, both public and private, may be considered compatible with this objective only where they incorporate all site planning and design features necessary to avoid or mitigate impacts to archaeological resources.

AMSP General Plan

The AMSP General Plan contains management guidelines to protect cultural resources. Specifically, the General Plan encourages establishing a self-guiding trail and interpretive signage throughout the Park to educate Park users of the importance of existing historical and cultural resources within AMSP and the surrounding region.

4.4.4 THRESHOLDS OF SIGNIFICANCE

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to 15064.5?	☐	■	☐	☐
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	☐	■	☐	☐
c)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	■	☐	☐
d)	Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
d*i*)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	■	☐	☐
d*ii*)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section5024.1, the lead agency shall consider the significance of the resource to a California Native America Tribe.	☐	■	☐	☐

4.4.5 IMPACT ANALYSIS

a) *Cause a substantial adverse change in the significance of a historical resource pursuant to 15064.5?*

CEQA Guidelines Section 15064.5 describes a historical resources as: 1) any resource that is listed in, or determine to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources; 2) a resource included in a local register of

historical resources; and, 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant based on substantial evidence in light of the whole record. The fact that a resource is not listed or determined to be eligible for listing does not preclude a lead agency from determining that the resource may be a historical resource (CEQA Guidelines Section 15064.5(4)). A substantial change includes the physical demolition, destruction, relocation, or alteration of a resource or its immediate surroundings such that the significance would be materially impaired (CEQA Guidelines Section 15064.5(b)).

Albion did not identify historical features within the Project site during the field reconnaissance. Agricultural features were identified in 1929 and 1956 aerial photographs (i.e., potential fence or wall enclosures); however, field reconnaissance did not reveal any evidence of precolonial artifacts or archaeological resources at the Project site. The Project site is located adjacent to a historic district (i.e., the Molera Ranch District); however, Abion concluded these areas are not likely to be associated with eligible deposits and that Project activities would have a low potential to impact historic resources. While the potential for impacts to known historic resources is low, Albion further concluded that given the Project site's close proximity to the Molera Ranch District, previously unknown historic resources could be disturbed during ground disturbance. Albion, therefore, recommended having an archaeological monitor on-site during subsurface disturbance of the Project site. This represents a potentially significant impact that would be reduced to less than significant with implementation of **Mitigation Measure 4.4-1**, below.

Mitigation Measures

4.4-1 To minimize potential impacts to previously unknown or subsurface historical or archaeological resources, the Applicant shall retain a Native American monitor and qualified archaeologist to monitor all ground-disturbing Project activities. All work shall stop if a cultural resource is discovered during construction. A qualified professional will evaluate the resource to determine whether the finding is significant. If the finding is a historical resource or unique archaeological resource, avoidance measures or appropriate mitigation shall be implemented. Work will cease in the immediate vicinity of the find until mitigation can be implemented. In accordance with CEQA Guidelines Section 15064.5(f), work may continue in other parts of the project site during the implementation of potential resource mitigation (if necessary). State Parks will be responsible for reviewing and approving the mitigation plan in consultation with the qualified professional prior to the resumption of ground-disturbing activities.

b) *Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?*

Public Resources Code Section 21083.2 requires that lead agencies evaluate potential impacts to archaeological resources. Specifically, lead agencies must determine whether a project may have a significant effect or cause a substantial adverse change in the significance of an archaeological resource, pursuant to California Code Section 15064.5. No archaeological resources were identified within the Project site during the Cultural Resources Assessment and

Albion determined that archaeological sensitivity at the site is low given the site's soil characteristics; however, because two (2) archaeological sites were identified within 0.25 miles of the Project site, Albion concluded there is moderate potential to discover previously unknown archaeological resources beneath the ground surface during ground-disturbing activities. Such resources could be exposed and damaged during construction; therefore, this is a potentially significant impact that would be reduced to a less than significant level with the implementation of mitigation. Consulting Native American representatives recommended having Native American and archaeological monitors on-site during ground disturbance and participation of Project personnel in cultural sensitivity training prior to ground disturbance. These recommendations have been incorporated in **Mitigation Measures 4.4.-1** (above) and **4.4-2** (below).

Mitigation Measures

4.4-2 To minimize potential impacts to previously unknown or subsurface archaeological resources, a cultural resource sensitivity training led by a Native American monitor or a qualified archaeologist shall be conducted for all construction personnel prior to any ground-disturbing activities. The training shall include the regulatory contexts guiding the Project and governing the protection of cultural resources, guidance for identifying cultural resources, protocols to follow in case of inadvertent discoveries, and contact information for key Project personnel, the Lead Agency, and the Monterey County Sheriff-Coroner.

c) *Disturb any human remains, including those interred outside of formal cemeteries?*

No known human remains, including those interred outside of formal cemeteries, are known to occur within the Project site. Based on the results of the SLF search and consultation with the Rumsen Tribe, the Esselen Tribe, and the Indian Canyon Mutsun Band, the Project site is not a Sacred Lands site, and Native American remains are not known to occur within the Project site. Therefore, it is unlikely human remains are present within the Project site. While the likelihood of human remains (including those interred outside of a formal cemetery) within the Project site is low, it is possible that previously unknown human remains, including Native American remains, may be encountered during construction. This is a potentially significant impact that would be reduced to a less than significant level with the implementation of **Mitigation Measure 4.4-3**, below.

Mitigation Measures

4.4-3 To minimize potential impacts to unknown buried human remains to less than significant, State Parks will immediately halt work in the event of the discovery or recognition of any human remains. No further excavation or ground disturbing activities will occur at the site or nearby area suspected to overlie adjacent remains until the Monterey County coroner has been contacted in accordance with Section 7050.5 of the California Health and Safety Code. If the Coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four hours of the determination, as

required by California Health and Safety Code Section 7050.5(c) and PRC 5097. The NAHC shall identify the person or persons it believes to be most likely descended (MLD) from the deceased Native American (PRC Section 5097.98). The designated MLD then has 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains (AB 2641). If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the Public Resources Code). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a document with the county in which the property is located (AB 2641). Work will not resume in the immediate area of the discovery until such time the remains have been appropriately removed from the site.

d*i*) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*

Results of the NAHC SLF search were negative and consulting Native American representatives did not identify the Project site as a Sacred Lands site. No tribal cultural resources have been identified at the site to date; however, although unlikely, it is possible that unrecorded tribal cultural resources are present beneath the ground surface and that such resources could be exposed and damaged during construction of the Project. As a result, consulting Native American representatives recommended Native American and archaeological monitors remain on-site during any ground disturbance associated with the Project. This is a potentially significant impact that would be reduced to a less than significant level with the implementation of **Mitigation Measures 4.4-1 – 4.4-3**, described above.

d*ii*) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native America Tribe.*

See Response 4.4.5(d)(i), above. The NAHC SLF search and Native American consultation did not yield results for the Project site. The potential for discovery of tribal cultural resources within

the Project site is low. Although unlikely, it is possible that unrecorded tribal cultural resources are present beneath the ground surface and that such resources could be exposed and damaged during construction of the Project. This is a potentially significant impact that would be reduced to a less than significant level with the implementation of **Mitigation Measures 4.4-1 – 4.4-3**, above.

4.5 ENERGY

4.5.1 ENVIRONMENTAL SETTING

Pacific Gas and Electric ("PG&E") provides electricity and natural gas to AMSP. Beginning in 2018, all PG&E customers within Monterey, San Benito, and Santa Cruz Counties were automatically enrolled in Central Coast Community Energy ("3CE"). 3CE is a locally controlled public agency providing carbon-free electricity to residents and businesses. 3CE is a joint powers authority, and based on a local energy model called community choice energy. 3CE partners with PG&E, which continues to provide billing, power transmission and distribution, customer service, grid maintenance services, and natural gas services to Monterey County.

4.5.2 REGULATORY SETTING

4.5.2.1 State

California Renewable Energy Standards

In 2002, California established its Renewables Portfolio Standard ("RPS") Program, with the goal of increasing the percentage of renewable energy in the State's electricity mix to 20 percent of retail sales by 2010. In 2006, California's 20 percent by 2010 RPS goal was codified under Senate Bill ("SB") 107. Under the provisions of SB 107 (signed into law in 2006), investor-owned utilities were required to generate 20 percent of their retail electricity using qualified renewable energy technologies by the end of 2010. In 2008, Executive Order S-14-08 was signed into law and requires that retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. As described previously, PG&E's (the electricity provider to the Project site) 2015 electricity mix was 30 percent renewable.

In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 for retail sellers and publicly owned utilities requires them to procure 50 percent of the State's electricity from renewable sources by 2030.

California Building Codes

At the State level, the Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three (3) years. Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.

The California Green Building Standards Code ("CalGreen") establishes mandatory green building standards for all buildings in California. The code covers five (5) categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality.

4.5.3 THRESHOLDS OF SIGNIFICANCE

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	☐	☐	■	☐
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	■	☐

4.5.4 IMPACT ANALYSIS

a) *Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?*

The Proposed Project would not result in a potentially significant environmental effect due to the wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during Project construction or operation. The Project would result in the temporary use of energy during Project construction and minimal energy during operation. Energy use associated with the Project would not constitute an adverse effect under CEQA.

Construction

Construction-related Project impacts would be temporary. Construction would require energy for the procurement and transportation of materials and preparation of the project site (e.g., minor grading, materials hauling). Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these activities. The construction energy use has not been quantified; however, the Project would not cause inefficient, wasteful, or unnecessary consumption of energy because 1) the construction schedule and process is designed to be efficient to avoid excess monetary costs[6], and 2) energy use required to complete construction would be minor and all energy demand associated with construction would be temporary in nature.

[6] For example, equipment and fuel are not typically used wastefully during construction due to the added expenses associated with renting, maintaining, and fueling equipment.

Operation

The Proposed Project would generate energy demand during operation associated with vehicular traffic and on-going use and maintenance of the site. Potential energy associated with operation and maintenance of new permanent recreational facilities to improve outdoor access would not constitute the wasteful or inefficient use of energy. The Proposed Project is intended to increase outdoor accessibility by improving the space currently used by VWS and State Parks to facilitate youth and family educational campouts. The Proposed Project would not substantially increase the intensity of use at the site beyond existing levels and would therefore not result in a substantial increase in energy use related to vehicle traffic (see **Sections 4.2, Air Quality** and **4.13, Transportation** for additional information) or maintenance activities. For these reasons, the Project is not anticipated to significantly increase energy use or cause wasteful, inefficient, or unnecessary consumption of energy. Therefore, the Project would result in a less than significant impact related to construction and operational energy use.

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Construction and operation of the Proposed Project would have a less than significant impact related to energy usage and efficiency (see Response 4.5.5(a) above). Thus, the Project would comply with existing state energy standards and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.6 GEOLOGY AND SOILS

4.6.1 ENVIRONMENTAL SETTING

4.6.1.1 Regional Overview

Geologic structure in central California is primarily the result of tectonic events during the past 30 million years. It is widely believed that the numerous faults in this area are due to movements along the boundary between the Pacific and North American tectonic plates. The relative motion between these two tectonic plates is taken up largely along the northwest-trending San Andreas Fault system, which defines the regional boundary between the two plates. Changes in sea level and tectonic uplift resulted in a complicated depositional environment that produced the Monterey Bay region's complex geology. Faulting and folding deformed and displaced the geologic units in the region, and the granitic basement and overlying Tertiary deposits have been juxtaposed along many of the northwest/southeast-trending faults.

AMSP lies within the Coast Ranges Geomorphic Province, a discontinuous series of northwest-southeast trending mountain ranges, ridges, and intervening valleys characterized by complex folding and faulting. The Park is an area of 2,154 acres with major use areas within the Park confined to the flatlands adjacent to the Big Sur River. The Big Sur River runs for approximately 3.5 miles through the Park before emptying into the Pacific Ocean at the northwestern corner of AMSP. Repeated uplift in late geologic time has caused the river to leave a series of gravel covered benches or terraces at several levels near its current course. Present topography along

the Big Sur River is the result of repeated near-vertical uplift and erosion in late Quaternary time (County, 1986). The local surficial geology is described as Quaternary alluvium of the Holocene era (less than 11,000 years old) (Pacific Crest, 2023).

4.6.1.2 Site Characteristics

Seismicity and Fault Zones

The rugged terrain of the Big Sur coast is in part the result of seismic activity associated with movement of continental plates. The plates intersect at the San Andreas Fault, which parallels the coast some 40 miles inland. The series of faults paralleling the San Andreas account for the orientation of the ridges, valleys, and the shoreline. The two (2) principal faults in the Big Sur coast are the San Gregorio-Palo Colorado Fault and the Sur-Nacimiento Fault, which are both seismically active. **Table 4.6-1, Regional Faults** lists potentially active faults with potential to affect the Project. Potential seismic hazards include ground rupture, shaking, and failure.

Table 4.6-1
Regional Faults

Fault	Approximate Distance from Project Site (miles)	Direction from Project Site
San Gregorio	0.5	northeast
Pfeiffer Point	5.25	southwest
Monterey Bay-Tulacitos	14	northeast
Reliz	23	northeast
San Andreas	40	northeast

Source: Pacific Crest, 2023

Soils

The Natural Resources Conservation Service characterizes soils within the Project site as mostly *Fluvents, stony* with some *Corducci* and *Typic Xerofluvents* soils (NRCS, 2020). *Fluvents, stony* lands consist of nearly level to strongly sloping stony and cobbly areas on floodplains, in drainage ways, and on alluvial fans. These areas are subject to flooding, deposition, and scouring during high- or medium-intensity storms. Drainage is somewhat excessive, and permeability ranges from moderately rapid to very rapid. Runoff ranges from medium to very slow. The erosion hazard is moderate in some areas because of channeling and deposition (USDA, 1978 and NRCS, 2020). *Corducci* and *Typic Xerofluvents* soils form as stream terraces, alluvial fans, and floodplains. These soils consist of mixed alluvium derived from igneous and sedimentary rock. *Corducci* and *Typic Xerofluvents* are “somewhat excessively drained” and have “very low” runoff (NRCS, 2020).

4.6.2 SURVEY METHODOLOGY

A geotechnical report was prepared for the Project by Pacific Crest Engineering, Inc. (“Pacific Crest”) in October 2023 (see **Appendix B, Geotechnical Report**). Pacific Crest conducted a field investigation of the Project site on August 31st, 2023. The field investigation included the construction of five (5) 24-inch trenches and test borings. Test borings were evaluated in the

laboratory to examine engineering properties and determine the suitability of the Project site for development.

4.6.3 REGULATORY SETTING

4.6.3.1 Federal

Federal Clean Water Act

The Federal Clean Water Act (33 USC 1251-1376) regulates discharges into U.S. waters through an NPDES permit, administered through the SWRCB and the RWQCB. The State and Central Coast RWQCB oversee a statewide General Permit regarding management of stormwater runoff from construction sites over one (1) acre in size. The Central Coast RWQCB has authority to use planning, permitting, and enforcement to protect beneficial uses of water resources in the region. The Central Coast RWQCB uses its adopted Water Quality Control Plan for the Central Coast Region (2019), referred to as the Basin Plan, to implement policies and provisions for water quality management in the region. The Basin Plan identifies beneficial uses of major surface waters and their tributaries, in addition to water quality objectives and implementation plans to protect these beneficial uses.

The 1987 Amendments to the Federal Clean Water Act require that stormwater discharges to waters of the U.S. be regulated under the NPDES. The SWRCB issued a draft statewide General Permit in July 2010. The Central Coast RWQCB oversees the statewide General Permit regarding management of stormwater runoff from construction sites over one (1) acre in size. Provisions of the statewide General Permit indicate that discharges of material other than stormwater into waters of the U.S. are prohibited; stormwater discharges shall not cause or threaten to cause pollution, contamination, or nuisance; and that stormwater discharges not contain hazardous substances. The statewide General Permit also requires the implementation of BMPs to achieve compliance with water quality standards. A BMP is defined as any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces discharge of pollutants into bodies of water. Any project that will disturb over one (1) acre (including the Project) is required to file a "Notice of Intent" with the RWQCB with submittal of a SWPPP prior to Project construction.

4.6.3.2 State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate surface faulting's hazard to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called “earthquake fault zones,” around the surface traces of active faults and published maps showing these zones. Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults. Because many active faults are complex and consist of more than one branch, each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace.

Title 14 of the CCR, Section 3601(e), defines buildings intended for human occupancy as those that would be inhabited for more than 2,000 hours per year. The Project does not cross an Alquist-Priolo Earthquake Fault Zone. Therefore, these provisions of the Act do not apply to the Project.

Seismic Hazards Mapping Act

The purpose of the Seismic Hazards Mapping Act of 1990 (PRC Sections 2690–2699.6) is to reduce damage resulting from earthquakes. The Seismic Hazards Mapping Act addresses earthquake-related hazards, including strong groundshaking, liquefaction, and seismically induced landslides. The state is charged with identifying and mapping areas at risk of strong groundshaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped Seismic Hazard Zones. Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Coastal Act

The California Coastal Act (Public Resources Code, Section 30000 et seq.) requires that new development minimize risks to life and property in areas of high geologic, flood, and fire hazard, assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Public Resources Code, Section 30253).

4.6.3.3 Local

Big Sur Coast LUP

The Big Sur Coast LUP restricts development in areas of high geologic hazard. For any development proposed in high hazard areas, an environmental or geotechnical report is required prior to County review of the project. Soils and geologic reports are required for all new land divisions and for the construction of roads and structures, excluding minor structures not occupied by people, in areas of known or suspected geologic hazards. Areas requiring submission of such reports include the 100-year floodplain, landslide areas and other locations showing evidence of recent ground movement, earthquake fault zones, sites falling within the area of demonstration as provided in the Statewide Interpretive Guidelines for Blufftop Development (as amended February 4, 1981), and any other geologic high hazard area for which a geotechnical report is required.

4.6.4 THRESHOLDS OF SIGNIFICANCE

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

4.6.5 IMPACT ANALYSIS

a) *Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:*

i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone. No impact would occur. Potential effects associated with the rupture of known faults are discussed separately below; please refer to Response 4.6.5(a)(ii) for more information.

ii) *Strong seismic ground shaking?*

The Project site is in a seismically active region. No faults lie within the Project site (County of Monterey, 2014 and Pacific Crest, 2023); however, the Project is near several mapped faults that could result in impacts from strong seismic ground shaking (see **Table 4.6-1, Regional Faults**). Because no faults are known to intersect the Project site, the potential for ground rupture within the Project site is low; however, a major seismic event could cause severe ground shaking in the area (Pacific Crest, 2023). Pacific Crest determined that the Project site is suitable for the proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report (see **Appendix B. Geotechnical Report**), standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines, thereby minimizing potential impacts. For these reasons, the Project would result in a less than significant impact.

iii) *Seismic related ground failure, including liquefaction?*

The Project site is in an area of high liquefaction susceptibility (County of Monterey, 2018; Pacific Crest, 2023). Due to the relatively loose soils within the Project site and the Project's proximity to mapped faults, the Project could result in (or be exposed to) potential seismic-related hazards, including liquefaction. As described under Response 4.6.5(a)(ii), above, the geotechnical report determined that the Project site is suitable for the proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report, standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines (i.e., siting and designing development to conform to site topography and minimize grading), thereby minimizing potential liquefaction related hazards. This represents a less than significant impact.

iv) *Landslides?*

Landslides are common in Monterey County due to the combination of uplifting mountains, fractured and weak rocks, and periodic intense rainfall along the coast. The level of susceptibility of an area is dependent on the local geologic conditions. The Project site is in an area of low

landslide susceptibility (County of Monterey, 2018). Pacific Crest determined that because the Project is on relatively flat ground, the potential for landsliding at the site would be negligible (Pacific Crest, 2023). The geotechnical report also determined that the Project site is suitable for the proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report, standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines, thereby minimizing potential impacts (see Responses 4.6.5(a)(ii) and 4.6.5(a)(iii) above). This represents a less than significant impact.

b) *Result in substantial soil erosion or the loss of topsoil?*

Soils within the Project site have moderate to very low erosion potential. Construction of the Project could result in temporary increases in erosion due to grading activities. However, grading would be minor. The Project would also incorporate State Parks Standard Project Requirements, which include implementation of BMPs to minimize temporary increases in erosion during construction (e.g., silt fences, preserving and replanting of vegetation). Additionally, State Parks Standard Project Requirements require preparation of a SWPPP prior to construction, which would further ensure soil erosion during construction is minimized. Furthermore, construction-related erosion would be temporary in nature and would not substantially increase soil erosion at the Project site. The Proposed Project would result in 47,504 square feet of pervious cover (including decomposed granite pathways and entry drive/turnaround area) which could result in increased operational erosion. However, the Proposed Project has been designed to ensure runoff and therefore erosion is minimized. For instance, the Project site would be restored with native plants which would capture runoff and soil erosion during precipitation events. Improvements to the site would also capture and redirect runoff to minimize erosion (i.e., rain gutters). Furthermore, operation of the Proposed Project site would still be required to comply with State Parks Standard Project Requirements. Project operation would also not result in a permanent increase in erosion. Therefore, the Proposed Project would result in a less than significant erosion-related impact.

c) *Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?*

Soils within the Project site have a high liquefaction potential; however, Pacific Crest determined the potential for lateral spreading at the site is low. Additionally, Pacific Crest also determined the landslide potential at the Project site was negligible due to the flat topography. The geotechnical report determined that the Project site is suitable for the proposed development from a geotechnical and engineering standpoint. The Project would be constructed in accordance with the recommendations of the geotechnical report, standard engineering and seismic safety design techniques, and applicable Big Sur Coast LUP guidelines, thereby minimizing potential impacts (see Responses 4.6.5(a)(i-iv)). For these reasons, the Project would result in a less than significant impact.

d) *Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

Due to the high percentage of coarse-grained materials that underlie the Project site, expansive soils are not anticipated to pose a potential hazard. This represents a less than significant impact.

e) *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The Proposed Project does not include a septic system. The Proposed Project would utilize two (2) existing portable toilets which would be serviced by a sanitary pump truck which currently serves the existing AMSP restroom facilities. Therefore, no impact would occur.

f) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, and diagnostically or stratigraphically important, as well as those that add to an existing body of knowledge in specific areas, stratigraphically, taxonomically, or regionally. They include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals previously not represented in certain portions of the stratigraphy, and assemblages of fossils that might aid stratigraphic correlations—particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species. Most of the fossils found in Monterey County are of marine life forms and create a record of the region's geologic history of advancing and retreating sea levels. Paleontologists conducted a review of nearly 700 known fossil localities within the County in 2001; 12 fossil sites were identified as having outstanding scientific value. The Project site is not located on or near any of those fossil sites (Rosenberg and Clark, 2001). Therefore, the Project would not result in any impacts to a unique paleontological site or a unique geologic feature.

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 ENVIRONMENTAL SETTING

Various gases in the earth's atmosphere, classified as atmospheric greenhouse gases ("GHGs"), play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is retained, resulting in a warming of the atmosphere.

This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect, or climate change, are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). Human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for enhancing the greenhouse effect. Climate change is a cumulative effect from local, regional, and global GHG emission contributions. According to the EPA on a Global scale, CARB on a state scale, and BAAQMD on a County scale, the transportation sector is the largest emitter of GHG emissions, followed by electricity generation and the industrial sector.[7] [8] [9]

4.7.2 REGULATORY SETTING

4.7.2.1 Federal

The Federal Clean Air Act ("CAA"), first passed in 1970, is the overarching federal-level law that, as of 2007 via the U.S. Supreme court decision in Massachusetts v. EPA, enables the U.S. EPA to provide regulations of key GHG emissions sources (mobile emissions), established a mandatory emissions reporting program for large stationary emitters, and implementation of vehicle fuel efficiency standards.

4.7.2.2 State

Assembly Bill 32 – California Global Warming Solutions Act

Assembly Bill ("AB") 32, the Global Warming Solutions Act of 2006, codifies the State of California's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, the California Energy Commission ("CEC"), the California Public Utilities Commission ("CPUC"), and the Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.[10]

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State of California's main strategies to reduce GHGs from business as usual ("BAU") emissions projected in 2020 back down to 1990 levels. BAU is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other state agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

[7] EPA, https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks
[8] CARB, https://ww2.arb.ca.gov/ghg-inventory-data
[9] BAAQMD, https://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/Emission%20Inventory/BY2011_GHGSummary.ashx?la=en&la=en
[10] Note that AB 197 was adopted in September 2016 to provide more legislative oversight of CARB.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 MMT of CO_2e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector-or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO_2e. Two (2) GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO_2e. Thus, an estimated reduction of 80 MMT of CO_2e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

CARB prepared an updated Scoping Plan which was released in 2017. The 2017 Scoping Plan identifies ways for California to reach the statewide 2030 climate target and next steps for reaching the 2050 target goal.

Senate Bill 1368

SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 required the CPUC to establish a greenhouse gas emission performance standard. Therefore, on January 25, 2007, the CPUC adopted an interim GHG Emissions Performance Standard in an effort to help mitigate climate change. The Emissions Performance Standard is a facility-based emissions standard requiring that all new long-term commitments for baseload generation to serve California consumers be with power plants that have emissions no greater than a combined cycle gas turbine plant. That level is established at 1,100 pounds of CO_2 per megawatt-hour. "New long-term commitment" refers to new plant investments (new construction), new or renewal contracts with a term of five (5) years or more, or major investments by the utility in its existing baseload power plants. In addition, the CEC established a similar standard for local publicly owned utilities that cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. On July 29, 2007, the Office of Administrative Law disapproved the CEC's proposed Greenhouse Gases Emission Performance Standard rulemaking action and subsequently, the CEC revised the proposed regulations. SB 1368 further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the CPUC and CEC.

Senate Bill 350 – Clean Energy and Pollution Reduction Act

In September 2015, the California Legislature passed SB 350 (de Leon 2015), which increases the State's RPS for content of electrical generation from the 33 percent target for 2020 to a 50 percent renewables target by 2030.

Executive Order S-03-05

On June 1, 2005, Governor Schwarzenegger signed Executive Order S-03-05, the purpose of which was to implement requirements for the California Environmental Protection Agency ("CalEPA") to provide ongoing reporting on a biennial basis to the State Legislature and Governor's Office on how global warming is affecting the State. Required areas of impact reporting include public health, water supply, agriculture, coastline, and forestry. The CalEPA

secretary is required to prepare and report on ongoing and upcoming mitigation designed to counteract these impacts.

Executive Order B-30-15

On April 15, 2015, Governor Brown signed Executive Order B-30-15, the purpose of which is to establish a GHG reduction of 40 percent below 1990 levels by 2030. The Executive Order is intended to help the State work towards a further emissions reduction target of 80 percent below 1990 levels by the year 2050. The order directed state agencies to prepare for climate change impacts through prioritization of adaptation actions to reduce GHG emissions, preparation for uncertain climate impacts through implementation of flexible approaches, protection of vulnerable populations, and prioritization of natural infrastructure approaches.

Executive Order B-55-18 and SB 100 – 100 Percent Clean Energy Act of 2018

On September 10, 2018, Governor Brown signed both SB 100 – 100 Percent Clean Energy Act of 2018 and Executive Order B-55-18 to Achieve Carbon Neutrality. SB 100 sets California on course to achieving carbon-free emissions from the electric power production sector by 2045. SB100 also increases the required emissions reduction generated by retail sales to 60% by 2030, an increase in 10% compared to previous goals. B-55-18 establishes a new goal of achieving statewide "carbon neutrality as early as possible and no later than 2045, and to achieve and maintain net negative emissions thereafter".

California Building Code

The California Building Code ("CBC") contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the Building Standards Commission. In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

4.7.2.3 Local

MBARD has not adopted a threshold for construction related GHG emissions but recommends utilizing thresholds set by neighboring districts (e.g., Sacramento Metropolitan Air Quality Management District ["SMAQMD"]). SMAQMD adopted an updated threshold based on the 2030 target year in April 2020. According to SMAQMD, a Project would result in a significant GHG related impact if the Project would emit more than 1,100 metric tons of Carbon Dioxide equivalent-CO_2e ("MTOCO$_2$e") per year. Operation of a stationary source project would not have a significant GHG impact if the project emits less than 10,000 MTOCO$_2$e.

4.7.3 THRESHOLDS OF SIGNIFICANCE

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b)	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

4.7.4 IMPACT ANALYSIS

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

The Proposed Project is located in the NCCAB, where MBARD regulates air quality. According to the MBARD, if a project emits less than 1,100 $MTOCO_2e$ per year, its GHG emissions impact would be less than significant. Construction of the Project would require minimal ground disturbance (approximately 1.2 acres) and would be completed in less than one (1) year. Therefore, construction of the Project would emit less than 1,100 $MTOCO_2e$ per year. Potential effects from GHG generation during construction would be short-term and temporary. Additionally, the Project would be designed to include State Parks Standard Project Requirements, which include mandatory maintenance of gasoline-powered equipment to ensure compliance with manufacturer specifications and state and federal requirements (see **Table 1.4-1**). Implementation of this requirement would ensure GHG emissions are minimized during construction. For these reasons, Project construction would result in a less than significant impact.

Operation of the Project would not generate substantial GHG emissions, either directly or indirectly, such that a significant impact on the environment would occur. The Project would not significantly increase vehicle miles traveled ("VMT") beyond existing levels, nor would the Project result in a substantial increase in emissions from maintenance or other direct uses at the site. Specifically, the Project would facilitate minor growth of the VWS program to serve up to 60 individuals per event, with 60 events per year. VWS would use four (4) 15-passsenger vans and one (1) support vehicle to transport campers to and from the site. The average number of vehicle trips associated with transporting 60 individuals to and from the Project site would be approximately 10 daily trips, which would not constitute a significant increase in traffic trips or related GHG emissions. (See **Sections 4.2, Air Quality** and **4.13, Transportation** for more information.) For these reasons, Project operation would result in a less than significant impact related to GHGs.

b) *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

As described above, the Project is not expected to generate GHG emissions that would exceed applicable thresholds. Therefore, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases as described above. This represents a less than significant impact.

4.8 HAZARDS AND HAZARDOUS MATERIALS

4.8.1 ENVIRONMENTAL SETTING

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. Hazardous materials and waste can result in public health hazards if improperly handled, released into the soil or groundwater, or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer.

The California Department of Toxic Substances Control ("DTSC") EnviroStor database, an online data management system for tracking DTSC's cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues, does not identify any contaminated sites within the vicinity of AMSP.

4.8.2 REGULATORY SETTING

4.8.2.1 Federal

The EPA is responsible for enforcing regulations at the federal level pertaining to hazardous materials and wastes. The primary federal hazardous materials and wastes laws are contained in the Resources Conservation and Recovery Act ("RCRA") of 1976 and in the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") of 1980. CERCLA, more commonly known as Superfund, established the National Priorities List for identifying and obtaining funding for remediation of severely contaminated sites. Federal regulations pertaining to hazardous materials and wastes are contained in the Code of Federal Regulations (40 CFR). The regulations contain specific guidelines for determining whether a waste is hazardous, based on either the source of generation or the characteristics of the waste.

Transportation of hazardous materials by truck and rail is regulated by the U.S. Department of Transportation ("DOT"). DOT regulations establish criteria for safe handling procedures. Federal safety standards are also included in the California Administrative Code.

Federal Clean Water Act

The Federal Clean Water Act (33 USC 1251-1376) regulates discharges into U.S. waters through a National Pollutant Discharge Elimination System ("NPDES") permit, administered through the State Water Resources Control Board ("SWRCB") and the State Regional Water Quality Control Board ("RWQCB"). The State and Central Coast RWQCB oversee a statewide General Permit regarding management of stormwater runoff from construction sites over one (1) acre in size. The Central Coast RWQCB has authority to use planning, permitting, and enforcement to protect beneficial uses of water resources in the region. The Central Coast RWQCB uses its adopted Water Quality Control Plan for the Central Coast Region (2019), referred to as the Basin Plan, to implement policies and provisions for water quality management in the region. The Basin Plan identifies beneficial uses of major surface waters and their tributaries, in addition to water quality objectives and implementation plans to protect these beneficial uses.

The 1987 Amendments to the Federal Clean Water Act require that stormwater discharges to waters of the U.S. be regulated under the NPDES. The SWRCB issued a draft statewide General Permit in July 2010. The Central Coast RWQCB oversees the statewide General Permit regarding management of stormwater runoff from construction sites over one (1) acre in size. Provisions of the statewide General Permit indicate that discharges of material other than stormwater into waters of the U.S. are prohibited; stormwater discharges shall not cause or threaten to cause pollution, contamination, or nuisance; and that stormwater discharges not contain hazardous substances. The statewide General Permit also requires the implementation of BMPs to achieve compliance with water quality standards. A BMP is defined as any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces discharge of pollutants into bodies of water. Any project that will disturb over one (1) acre (including the Proposed Project) is required to file a "Notice of Intent" with the RWQCB with submittal of a SWPPP prior to Project construction.

4.8.2.2 State

The EPA has delegated much of its regulatory authority to individual states whenever adequate state regulatory programs exist. The Department of Toxic Substance Control Division of CAL EPA is the agency empowered to enforce federal hazardous materials and waste regulations in California, in conjunction with the EPA.

California hazardous materials and waste laws incorporate federal standards, but in many respects, are stricter. For example, the California Hazardous Waste Control Law, the state equivalent of RCRA, contains a much broader definition of hazardous materials and waste. State hazardous materials and waste laws are contained in the California Code of Regulations, Titles 22 and 26. Regulations implementing the California Hazardous Waste Control Law list hazardous chemicals; establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

4.8.3 THRESHOLDS OF SIGNIFICANCE

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

4.8.4 IMPACT ANALYSIS

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction and operation of the Project would not involve the routine transport, use, or disposal of hazardous materials. Construction activities would require the temporary use of hazardous substances, such as fuel for construction equipment. These impacts would be temporary in nature and are addressed below (see Response 4.7.5(b)). Minor hazardous materials may also be used during Project operation (i.e., cleaning and maintenance materials). Minor hazardous materials used during construction and operation would not constitute a significant hazard to the public due to the routine transport, use, or disposal of hazardous materials. Additionally, any handling of potential hazardous materials would be required to comply with existing laws and manufacturer

specifications and guidelines pertaining to the transport, use, and disposal of hazardous materials. For these reasons, the Project would result in a less than significant impact.

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Construction and operation of the Project would require minor use of hazardous materials (e.g., fuel, cleaning materials, etc.). Construction and operation of the Project could generate surface runoff that may contain urban pollutants from vehicles, including oil, grease, and heavy metals. Although potential urban runoff would be minimal due to the absence of routine onsite parking. Hazardous materials would be handled and stored in compliance with manufacturer specifications and local, state, and federal regulations pertaining to hazardous materials. In addition, final Project design would include State Parks Standard Project Requirements, which would involve preparation and implementation of a Spill Prevention and Response Plan ("SPRP"), a SWPPP, and construction BMPs pertaining to equipment decontamination (see **Table 1.4-1**). In addition, the final design of the Proposed Project would include methods to ensure that the incidental release of contaminants does not adversely affect the environment. Applicable methods may include the installation of filtering media, as well as on-going maintenance activities as part of existing park operations. Pedestrian pathways would consist of semi-permeable aggregate and would be designed to drain to adjacent landscaping, where runoff would be retained and infiltrated to minimize impacts from the release of urban pollutants. These design features and implementation of the Standard Project Requirements would minimize potential impacts associated with the Project and would ensure any impacts related to accidental release of hazardous materials would be less than significant.

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

There are no schools within one-quarter mile of the project site. No impact would occur.

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The Project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (EnviroStor, 2024). No impact would occur.

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

The Project is not located within an airport land use plan or within two miles of an airport. No impact would occur.

f) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The Proposed Project would not interfere with or impair the implementation of any emergency response plans or evacuation plans. The *2022 Monterey County Operational Area Emergency Operation Plan Annex Evacuation and Transportation* identifies the Project site as being located in the Big Sur Region. Evacuation routes within this region include SR 1 to Highway 101 or Nacimiento-Fergusson Road. The Proposed Project would result in temporary construction-related traffic, but these effects would be limited in duration and would not physically impair and/or otherwise interfere with the implementation of an existing emergency response plan or evacuation plan. Moreover, the Proposed Project would not result in a substantial increase in operational traffic such that emergency response or evacuation plans would be negatively impacted, see **4.14. Transportation.**

Additionally, State Parks has utilized the Project site for staging for emergency response (e.g., wildfire command centers, etc.) and the site would continue to be used on an as-needed basis to support wildfire response in the region. The Proposed Project would provide additional amenities that would be available to support wildfire response (e.g., the kitchen/dining pavilion) For these reasons, this represents a less than significant impact.

g) *Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

The Project could exacerbate fire risks and thereby expose people and/or structures to potential wildland fire hazards. Potential fire hazards during construction could occur in connection with the operation of equipment and other activities, which could cause sparks or other sources of ignition in dry areas. This is a temporary construction impact which would be minimized to a less than significant level through the implementation of State Parks Standard Project Requirements for fire protection and through the implementation of a Fuel Management Plan, see **Figure 7 Fuel Management Plan**. Standard requirements include, but are not limited to, equipping construction equipment with spark arrestors, parking and staging vehicles and equipment away from dry and flammable materials, and preparing a Fire Safety Plan for Department of Parks and Recreation approval prior to construction. Implementation of these standard requirements would ensure construction impacts are less than significant.

Project operation could result in potential fire hazards due to the use of campfires. Unregulated or unattended campfires could expose people and/or structures to wildland fire hazards. However, campfires would be allowed only in designated fire rings, which would be located and designed to minimize potential for fire hazards. Additionally, water spigots are located throughout the Project site and are readily accessible from fire rings and grills. See **Section 4.14, Wildfire** for additional discussion. For the reasons discussed in this section, Project construction and operation would result in a less than significant impact related to wildfire.

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 ENVIRONMENTAL SETTING

4.9.1.1 Surface Water Resources

AMSP is located within the Big Sur Watershed in the Lower Big Sur River Basin. The Big Sur River enters its lower basin through the Big Sur Gorge at the eastern boundary of the Pfeiffer Big Sur State Park and then flows in a northerly direction through the Big Sur Valley to its mouth in the northwest corner of ASMP. The area has a moderate, Mediterranean-type climate with an average annual precipitation of 43 inches, most of which falls between November and April (County, 1986).

4.9.1.2 Groundwater Resources

Water resources in the Lower Big Sur River Basin include individual and small community water systems at numerous points along the Big Sur River valley floor and tributary streams. These water systems serve residences and employee housing in the Big Sur Valley; restaurants, motels, stores along SR 1; and campgrounds along the Big Sur River. Most isolated homesites in the Big Sur Valley have their own wells or springs (County, 1986). Potable water at AMSP is supplied from an existing 20,000-gallon storage tank that is replenished by a water well at a rate of 75 gallons per minute.

4.9.1.3 Drainage

The Project site is located approximately 200 - 300 feet east of the Big Sur River. The Project site is relatively flat; elevations range from 46 feet to 52 feet above sea level. Stormwater generally drains east to west, with runoff flowing across disturbed areas and eventually into the Big Sur River.

4.9.1.4 Flooding

The majority of the Project site is designated by the Federal Emergency Management Agency ("FEMA") as "Zone X (Unshaded)," which is defined as an area of minimal flood hazard. The southwestern tip of the Project site is located within the 100-year flood hazard zone. FEMA maps this portion of the Project site as "Zone A," which comprises areas with a one (1) percent annual chance of flood, or high flood risk (FEMA, 2023).

4.9.2 REGULATORY SETTING

4.9.2.1 Federal

Federal Clean Water Act

The Federal Clean Water Act (33 USC 1251-1376) regulates discharges into U.S. waters through a National Pollutant Discharge Elimination System ("NPDES") permit, administered through the

State Water Resources Control Board ("SWRCB") and the State Regional Water Quality Control Board ("RWQCB"). Please see **Section 4.6.3.1** for more information.

Porter-Cologne Water Quality Act

The basis for water quality regulation in California is the Porter-Cologne Water Quality Control Act (California Water Code, Section 13000 et seq.). This Act requires a "Report of Waste Discharge" for any discharge (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of the state's surface or groundwater. The local Regional Water Quality Control Board, specifically the Central Coast, issues waste discharge requirements to minimize the effect of the discharges. The Regional Water Quality Control Board uses the Basin Plan (1994) to implement policies and provisions for water quality management in the region.

4.9.2.2 Local

Big Sur Coast LUP

The Big Sur Coast LUP provides policies regarding hydrology and drainage issues. The LUP prohibits new development, including filling, grading, and construction within 100-year floodplains except as needed for outdoor recreation, wildlife habitat, agriculture, and similar low-intensity open space uses, as well as bridges, water resource developments requiring a streamside location, restoration activities, and flood control projects where no other method for protecting existing structures in the floodplain is feasible and such protection is necessary for public safety or to protect existing development. New permanent structures are not permitted in the 100-year floodplain; however, the Big Sur Coast LUP recognizes campgrounds and other similar outdoor recreational uses as the most appropriate uses for these areas.

Big Sur River Protected Waterway Management Plan

The County prepared the Big Sur River Protected Waterway Management Plan ("Waterway Management Plan") in 1986 as a supplement to the Big Sur Coast LUP. The Waterway Management Plan contains numerous requirements for public and private entities with property adjacent to the river or within its watershed. Specifically, it identifies standards concerning water rights, optimization of water yields within the watershed, leach field locations, and distances of trails and campsites from the edge of the Big Sur River. It also mandates the restriction of incompatible development in the floodplain. The Waterway Management Plan calls for restoration of native vegetation along the riverbank for ecological and visual reasons and for the use of prescribed burns to reduce fuel loads.

Monterey County Code Chapter 16.16

Chapter 16.16 of the Monterey County Code identifies rules and regulations to control development within the floodplain. Chapter 16.16 is intended to promote public health, safety, and general welfare, and to minimize public and private losses due to flood conditions. Chapter 16.16 consists of regulations to: 1) restrict and/or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion

or in flood heights or velocities; 2) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; 3) control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; 4) control filling, grading, dredging, and other development which may increase flood damage; and 5) prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

4.9.3 THRESHOLDS OF SIGNIFICANCE

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

4.9.4 IMPACT ANALYSIS

a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

The Proposed Project is approximately 200 – 300 feet east of the Big Sur River. As a result, construction of the Project could result in temporary water quality impacts due to ground-

disturbing activities (e.g., grading) and the use of hazardous materials (e.g., diesel fuel, gasoline, lubricants, oils, hydraulic fluids, etc.). Operation of the Proposed Project could also result in potential impacts due to on-going maintenance activities.

Project construction would consist of localized grading primarily to ensure drainage at the lower campsite flows toward the Big Sur River to the south. Grading would also facilitate the construction of proposed structures and related improvements (e.g., walking paths, parking area, etc.). These activities could impact water quality due to temporary increases in sedimentation, erosion, hazardous material releases (see **Section 4.8, Hazards, and Hazardous Materials**), and other temporary construction impacts (e.g., debris, construction waste, etc.). Ground-disturbing activities could temporarily increase soil erosion and result in potential water quality effects; however, these ground disturbances would be temporary in nature. Additionally, the Project would incorporate State Parks Standard Project Requirements, which include erosion control BMPs and preparation of a SWPPP to ensure any water quality impacts related to construction of the Project would be minimized (see **Section 4.6, Geology and Soils** for more information).

Project operation could also result in water quality effects due to accidental hazardous material releases. Potential water quality effects could occur in connection with on-going maintenance activities and the operation of mechanized equipment, as well as increased vehicle access. Maintenance activities could affect water quality due to the handling and use of hazardous materials for facility maintenance (e.g., fuels, oils, paints, etc.). Potential impacts due to maintenance activities would be temporary and intermittent in nature and would not substantially increase potential water quality impacts. In addition, increased vehicle access and use of the new parking lot that would be constructed at the site could result in water quality impacts; however, vehicle access would not increase substantially compared to current conditions, as the new parking area would be limited to three (3) parking spaces and would only be available for ongoing VWS campouts and potential future State Parks programs and events (i.e., not available for day-use parking). Pedestrian pathways would consist of semi-permeable aggregate and would be designed to drain to adjacent landscaping, where runoff would be retained and infiltrated to minimize impacts from the release of urban pollutants. These Project design features and implementation of the standard requirements would ensure any water quality impacts are less than significant.

b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that the Project would impede sustainable groundwater management of the basin. Temporary water use would occur during Project construction in connection with dust suppression activities. However, construction water use would be minimal and would not interfere with groundwater recharge.

Project operation would use potable water from spigots located throughout the Project site, which would be connected to the Park's existing 25,000-gallon water tank. The water tank is replenished by a well at a rate of 75 gallons per minute. According to State Parks, the existing water distribution system serving the Park has sufficient capacity to accommodate the anticipated demand associated with Project operation (personal communication, State Parks, 2023). Additionally, the Project would include a graywater system consisting of drains at each water spigot leading to a dry well to store and reuse water at the site. Furthermore, the Proposed Project would not significantly alter the existing use of the site or substantially increase the number of people using the site. The Project would be consistent with the allowable use identified in the AMSP General Plan. As a result, the Proposed Project would not significantly increase groundwater demand such that the Project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that existing groundwater resources would be significantly affected. This represents a less than significant impact.

c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:*

c*i*) *Result in substantial erosion or siltation on- or off-site;*

The Project would not substantially alter the site's existing drainage pattern in a manner that would result in substantial erosion or siltation on- or off-site. Rather, the Proposed Project would improve the site's drainage by modifying the elevation to ensure erosion or siltation is minimized and runoff can be dispersed. The Project could cause temporary increases in erosion during construction due to ground-disturbing activities; however, impacts would be temporary, and implementation of State Park Standard Requirements would ensure construction-related impacts are minimized to the maximum extent feasible (see Response 4.9.5(a); see also **Section 4.6, Geology and Soils**). The Project could result in localized increases in erosion and runoff during operation due to the introduction of new impervious surfaces on-site. The Project would not, however, alter the course of a stream or river, please see Response 4.9.5(c)(iv) below, and **Appendix C. Waterways Consulting, Inc. Floodplain Memorandum**).

The Project would include the construction of new impervious surfaces (i.e., a rustic kitchen/dining pavilion with a concrete foundation), which could cause localized increases in runoff on- or off-site. The Project includes on-site drainage improvements to address impacts due to increases in impervious surfaces. Specifically the Project would construct a new graywater catchment system to capture wastewater from the existing water spigots and kitchen/dining pavilion sink. The proposed on-site graywater system would include a drain and drywell for each spigot. Water runoff from spigots would enter the drain which would lead to the dry well through ¾-inch PVC supply lines. The drywell serves as a holding reservoir and slow release system. The proposed system design was provided by State Parks staff and is currently in-use at nearby State Park facilities. In addition, the rustic kitchen/dining pavilion would consist of rainwater gutters. The water from these gutters would drain away from the buildings and percolate in the nearby vegetated areas. These

improvements would ensure that impacts would be minimized; therefore, the Project would result in a less than significant impact related to erosion or siltation.

c*ii*) *Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*

The Project would result in the construction of improvements that would alter the site's existing drainage pattern through the introduction of impervious surfaces; however, the Project would also improve drainage by modifying the elevation of the site to ensure runoff can be dispersed. Additionally, the Project site would remain largely undeveloped and most new surfaces would be permeable decomposed granite. The proposed dining pavilion would include a concrete foundation, which could result in additional runoff; however, the Project would also include landscaped areas located between the proposed pavilion and the Big Sur River to encourage on-site percolation and reduce runoff into the Big Sur River. Any overflow from the Project site would flow overland and eventually into the Big Sur River. Therefore, the Project would provide adequate drainage and would not result in surface runoff that would cause flooding on- or off-site. This represents a less than significant impact.

c*iii*) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;*

No major stormwater drainage improvements are located within the boundaries of the Project site. Some grading would be required to ensure stormwater drains off the site; however, grading would be minor and would improve site drainage to prevent standing water within developed areas during major precipitation events. During construction, State Parks Standard Project Requirements would be implemented to ensure any impacts associated with polluted runoff are minimized (see Response 4.9.5(a) and **Sections 4.6, Geology and Soils** and **4.8, Hazards and Hazardous Materials** for additional details).

Project operation would not create or contribute runoff that would exceed the capacity of existing or planned drainage system improvements. The Project would increase impervious areas; however, new development would comprise semi-permeable surfaces where feasible. Additionally, the site would remain largely undeveloped and would include landscaped areas; therefore, stormwater would primarily be retained and allowed to percolate on-site. For these reasons, the Project is not anticipated to substantially increase runoff and would therefore result in a less than significant impact.

c*iv*) *Impede or redirect flood flows?*

The Project site lies within FEMA Flood Zone X (Unshaded), which includes areas of minimal flood hazard, and Flood Zone A, which includes areas subject to inundation by the 1-percent annual chance flood event, or the 100-year flood event. While the Proposed Project is partially within FEMA Flood Zone A, the Project would not impede or redirect flows such that there would be a significant adverse environmental effect. Project components located in Flood Zone A include the lower campsite (i.e., an undeveloped, periodically mowed grass area). The Proposed

Project would be constructed in accordance with the Big Sur Coast LUP, which considers campgrounds and similar outdoor recreational uses to be the most appropriate uses in the 100-year floodplain. Additionally, the proposed campsites within the floodplain would only be available for ongoing VWS campouts and potential future State Parks programs and events (i.e., not available for regular public use) and would primarily be used during summer months as overflow for the VWS programs.

The County of Monterey further regulates development within floodplains by encouraging development to be setback 200 feet from the top of bank. As illustrated in **Figure 11. Top of Bank Setback**, in addition to the lower campsite, a portion of the parking area is within the 200-foot setback. While the lower campsite does not include any physical structures, the parking area would include a concrete pad to comply with ADA requirements. Waterways Consulting, Inc. evaluated the Proposed Project to evaluate compliance with Monterey County Code Chapter 16.16, and found that the proposed parking area would meet the requirements of Chapter 16.16. Specifically, Waterways Consulting, Inc. concluded that the Proposed Project would not significantly reduce capacity of existing rivers or water course or adversely affect any other properties by increasing stream velocities or depths or divert flows. Similarly, Waterways Consulting, Inc. further concluded that the Proposed Project would be safe from flow related erosion and would not cause flow related erosion hazards or otherwise aggravate flow related erosion hazards. And, the Proposed Project would not alter the channel of the Big Sur River such that the flood carrying capacity of would be altered. Waterways Consulting, Inc. concluded that the development within the 200-foot setback would not result in a significant impact as these improvements are limited to a concrete slab on grade, see **Appendix C. Waterways Consulting, Inc. Floodplain Memorandum**. For these reasons, this represents a less than significant impact.

d) *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

The Project is not located in an area subject to significant seiche or tsunami effects. The Project is located primarily within FEMA Flood Zone X (Unshaded), which comprises areas of minimal flood hazard. Components located in Flood Zone A include the lower campsite and undeveloped areas, which would not be occupied during winter months when flooding is likely to occur. Please also refer to Response 4.9.5(a)(iv). Therefore, the Proposed Project would result in a less than significant impact.

e) *Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The Project would not significantly impact surface or ground water quality, nor would it affect groundwater recharge (see above responses). Therefore, the Project would not result in significant water quality or groundwater quality impacts that would conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. This represents a less than significant impact.

4.10 LAND USE

4.10.1 ENVIRONMENTAL SETTING

The Project is within AMSP in unincorporated Monterey County, California. AMSP and the two (2)-acre Project site are within the Coastal Zone. Land uses within AMSP are designated by the Big Sur Coast LUP. The Project site has historically been used for a variety of purposes, including ranching, horse tours, and recreational uses. The site is currently in open space, although it was extensively developed in connection with prior uses and has continued to accommodate park-related activities consistent with the Proposed Project. An unpaved access road connects the site to the main AMSP parking lot and SR 1. The site is generally surrounded by the Big Sur River to the west, open space and SR 1 to the east, a hike-in campsite and other recreational amenities to the north, and private land to the south.

4.10.2 REGULATORY SETTING

4.10.2.1 State

California Coastal Act

The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone (see **Section 4.1 Aesthetics**). Development activities within the coastal zone, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of land use or public access to coastal waters, generally require a CDP from either the Coastal Commission or the local government if a LCP has been certified. Here, a CDP is required from the County of Monterey. A brief description of the Big Sur Coast LUP is provided below.

4.10.2.2 Local

Big Sur Coast LUP

The Project site lies within the coastal zone and is regulated by the Big Sur Coast LUP, which is the certified LCP for the region. The Big Sur Coast LUP identifies the land use category of the project site as *Resource Conservation*. This land use category primarily supports low-intensity recreational and educational uses that are compatible with the natural resources of the area. Such uses include trails, picnic areas, and boardwalks. Hike-in camping and environmental campsites, and State-approved facilities uses are allowed as secondary and conditional uses.

The overall philosophy of the Big Sur Coast LUP is to maintain the scenic beauty, rural character, and cultural traditions of the Big Sur Coast. Basic objectives of the LCP affecting AMSP include:

- Ensuring preservation of resources,
- Prohibiting development visible from SR 1,
- Retaining SR 1 as a scenic, two-lane road primarily serving recreational traffic,
- Placing the preservation of natural scenery above the need for development, and

- Providing housing for employees of local private businesses and government agencies.

Big Sur River Protected Waterway Management Plan

The Waterway Management Plan contains numerous requirements for public and private entities with property adjacent to the river or within its watershed. Specifically, it identifies standards concerning water rights, optimization of water yields within the watershed, leach field locations, and distances of trails and campsites from the edge of the Big Sur River. It also mandates the restriction of incompatible development in the floodplain. The Waterway Management Plan calls for restoration of native vegetation along the riverbank for ecological and visual reasons and for the use of prescribed burns to reduce fuel loads (see **Section 4.9, Hydrology and Water Quality**).

AMSP General Plan

State Parks prepared the AMSP General Plan in 1976 to protect and preserve the quintessential essence of California 's Big Sur coast, including its Big Sur River riparian corridor, stands of coastal redwoods, and the Park's historic infrastructure and archaeological sites, while providing opportunities for the visiting public to fully involve themselves in the recreational and interpretive enjoyment of the Park's natural, cultural and scenic features. The General Plan identifies the following primary land uses within the Park: visitor day use, visitor overnight, concession operations, park operations, and open space. Furthermore, the AMSP General Plan identifies the Project site as a location for public use (e.g., group camp or picnic areas). As a result, the Proposed Project would not increase recreational capacity at AMSP beyond previously planned levels.

4.10.3 THRESHOLDS OF SIGNIFICANCE

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Physically divide an established community?	☐	☐	☐	■
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	■	☐

4.10.4 IMPACT ANALYSIS

a) *Physically divide an established community?*

The division or disruption of an established community would occur if a project creates a physical barrier that separates, isolates, or divides portions of a built community. The physical division of a community is traditionally associated with the construction of large-scale transportation

improvements such as a highway or similar development. The Proposed Project is located entirely within AMSP and would not create a barrier that would divide an established community. The Project would be consistent with adjacent uses within the Park and with the uses identified in the Big Sur Coast LUP and the AMSP General Plan. Therefore, the Project would result in no impact related to dividing a community.

b) *Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The Project would result in the construction and operation of a permanent camping facility and associated infrastructure within AMSP to facilitate ongoing organized VWS campouts and State Parks educational and other uses at the Project site. The AMSP General Plan anticipated future recreational development within the Park, including expanded camping facilities. Consistent with the Big Sur Coast LUP and the AMSP General Plan's goal to restore and preserve the natural condition of habitats within the park, State Parks has designed the Project to avoid direct impacts to riparian habitat (see **Section 4.3, Biological Resources** for additional discussion). Additionally, the Waterway Management Plan allows for campsites to be as close as 25 feet to a stream or river with implementation of sensitive habitat protection. The nearest campsites would be more than 100 feet from the Big Sur River and therefore in compliance with the Waterway Management Plan. Please see **Figure 11, Top of Bank Setback**. Moreover, the Project includes mitigation measures that would ensure that potential impacts to sensitive habitat would be avoided (see **Section 4.3, Biological Resources** for additional discussion).

The Project would be consistent with the goals and objectives of the AMSP General Plan and the Coastal Act by providing permanent camping facilities within an area that has been used consistently for recreational purposes. The Proposed Project would improve the existing site with new facilities to support existing VWS educational programs and State Parks uses. Site facilities such as a rustic kitchen, dining pavilion, and portable restrooms could be accessed by day use visitors; however, overnight camping would be restricted to ongoing VWS youth and family campout programs as well as any planned future State Parks programs and events. Because the Project site is currently used for organized campouts, the Project would not alter the existing use of the site. Additionally, the Project would be consistent with the goals and allowable uses identified in the AMSP General Plan. Specifically, the AMSP General Plan identified the Project site as being in an area designated for "High Use Intensity," which allows 30-50 people per acre with a use frequency of 180-365 days per year (AMSP, 1976). Furthermore, the AMSP General Plan identifies the Project site as a location for public use (e.g., group camp or picnic areas). As a result, the Proposed Project would not increase recreational capacity at AMSP beyond previously planned levels.

The Big Sur River and riparian habitat located adjacent to the Project site may be considered ESHA under the Coastal Act (see **Section 4.3, Biological Resources**). To minimize impacts to ESHA, State Parks designed the Project to avoid tree removal and avoid or minimize potential impacts to sensitive habitats near the Project site. Additionally, State Parks would implement their Standard Project Requirements, which would further ensure potential impacts to ESHA are

avoided wherever feasible or minimized to the maximum extent practicable (see **Table 1.4-1**). Lastly, implementation of the mitigation measures identified in **Section 4.3, Biological Resources** and throughout this IS/MND would ensure any impacts to ESHA would be less than significant.

The Project would not impact public access to the coast, degrade the scenic and visual qualities of coastal areas, impact the biological productivity and quality of coastal waters, streams, or wetlands, adversely impact archaeological or paleontological resources or other land resources, or adversely impact other protected resources within the coastal zone. In fact, the Proposed Project would facilitate public access by providing alternative low cost visitor serving accommodations as part of ongoing educational programs being implemented by VWS and State Parks. For these reasons, the Project would not result in any conflicts with applicable policies intended to reduce or mitigate an adverse environmental effect. This represents a less than significant impact.

4.11 NOISE AND VIBRATION

4.11.1 ENVIRONMENTAL SETTING

Noise is commonly defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels ("dB") with 0 decibels corresponding roughly to the threshold of hearing. **Table 4.11-1, Definitions of Acoustical Terms Used in this Report** contains definitions of key technical terms.

Most sounds consist of a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. The method commonly used to quantify environmental sounds consists of evaluating all the frequencies of a sound in accordance with a weighting that reflects the facts that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency mid-range. This is called "A" weighting, and the decibel level measured is called the A-weighted sound level ("dBA").

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a conglomeration of noise from distant sources, which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_{01}, L_{10}, L_{50}, and L_{90}, are commonly used. They are the A-weighted noise levels equaled or exceeded during 1%, 10%, 50%, and 90% of a stated time period. A single number descriptor called the L_{eq} is also widely used and represents the average A-weighted noise level during a stated period of time.

Table 4.11-1
Definitions of Acoustical Terms Used in this Report

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period. The hourly L_{eq} used for this report is denoted as dBA $L_{eq[h]}$.
Community Noise Equivalent Level, CNEL	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels in the evening from 7:00 pm to 10:00 pm and after addition of 10 decibels to sound levels in the night between 10:00 pm and 7:00 am.
Day/Night Noise Level, Ldn or DNL	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.
Ln Values L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

In determining the daily level of environmental noise, it is important to account for the difference in response of sensitive receptors to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. Most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, a descriptor, Ldn (day/night average sound level), was developed. The Ldn (or DNL) divides the 24-hour day into the daytime of 7:00 AM to 10:00 PM and the nighttime of 10:00 PM to 7:00 AM. The nighttime noise level is weighted 10 decibels higher than the daytime noise level.

Some land uses are more sensitive to noise than others. Noise-sensitive land uses are generally defined as residences, transient lodging, schools, hospitals, nursing homes, churches, meeting halls, and office buildings. The primary source of existing noise in the Project vicinity is from vehicle traffic along SR 1.

4.11.2 REGULATORY SETTING

4.11.2.1 Local

Monterey County General Plan

The Monterey County General Plan includes guidance for noise and provides land use compatibility guidelines for exterior community noise levels. Based on these guidelines, sensitive noise receptors near the Project site are private residences, schools, childcare centers, and open spaces. The normally acceptable noise range for low-density residential areas is 50 to 60 dB. The conditionally acceptable noise range for low-density residential areas is 55 to 70 dB. Development in areas where noise levels are considered "conditionally acceptable" may be undertaken only after additional noise analysis is provided and appropriate mitigation features are included in the Project design.

4.11.3 THRESHOLDS OF SIGNIFICANCE

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

4.11.4 IMPACT ANALYSIS

a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The Proposed Project would not result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies. No noise-sensitive receptors (e.g., residences, hospitals) are located near the Project or would be exposed to construction-related noise; however, the Project could expose AMSP visitors to increased noise[11]. Project construction would result in temporary noise-related impacts due to the operation of construction equipment. Operational noise could also occur in connection with campsite facility use.

Construction

Noise impacts resulting from construction would depend on the equipment used, timing and duration of activities, and the distance between construction noise sources and noise-sensitive receptors. The Monterey County Noise Ordinance (Monterey County Code Chapter 10.60, Noise Control) limits noise generated to 85 dBA at a distance of 50 feet from the noise source. **Table 4.11-2, Construction Equipment Noise Emission Levels** contains a list of typical equipment that could be used during construction and the anticipated noise levels at 50, 100, 200, and 400 feet from the source. As demonstrated in **Table 4.11-2, Construction Equipment Noise Emission Levels**, most typical construction equipment would generate less than 85 dBA at a distance of 50 feet.

Table 4.11-2
Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level (dBA) 50 ft from Source	Typical Noise Level (dBA) 100 ft from Source[1]	Typical Noise Level (dBA) 200 ft from Source[1]	Typical Noise Level (dBA) 400 ft from Source[1]
Air Compressor	81	75	69	63
Backhoe	80	74	68	62
Ballast Equalizer	82	76	70	64
Ballast Tamper	83	77	71	65
Compactor	82	76	70	64
Concrete Mixer	85	79	73	67
Concrete Pump	82	76	70	64
Concrete Vibrator	76	70	64	58
Dozer	85	79	73	67
Generator	81	75	69	63
Grader	85	79	73	67
Impact Wrench	85	79	73	67

[11] The Project could also expose wildlife to noise impacts. Potential noise impacts to wildlife are addressed separetly in **Section 4.3, Biological Resources**.

Equipment	Typical Noise Level (dBA) 50 ft from Source	Typical Noise Level (dBA) 100 ft from Source[1]	Typical Noise Level (dBA) 200 ft from Source[1]	Typical Noise Level (dBA) 400 ft from Source[1]
Jack Hammer	88	82	76	70
Loader	85	79	73	67
Paver	89	83	77	71
Pneumatic Tool	85	79	73	67
Pump	76	70	64	58
Roller	74	68	62	56

Source: U.S. Department of Transportation, Transit Noise and Vibration Impact Assessment, 2006
1. Construction generated noise levels drop off at a rate of about 6 dBA per doubling of distance between the source and receptor.

Construction activities could expose the State Park staff residence and Park users to temporary, short-term increases in noise and groundborne vibrations; however, construction noise and vibrations would be intermittent and would be limited to weekdays between the hours of 7:00 AM and 7:00 PM, or to hours agreed upon by State Parks for the duration of the construction period. Additionally, the Project would be required to implement State Parks Standard Project Requirements, which include measures to minimize potential noise impacts (e.g., noise barriers, equipment mufflers) and would comply with all local ordinances and regulations. Compliance with the standard requirements and noise policies would ensure temporary construction-related noise impacts are less than significant.

Operation

The introduction of the new permanent camping facility and associated infrastructure would not result in a significant increase in ambient noise. The Proposed Project site is used for existing and ongoing VWS and State Parks youth and family recreational/educational programs and the permanent facilities would not change the existing use at the site; therefore, use of the new facilities is not anticipated to result in increased noise. All noise impacts would be internal to the Park; no surrounding uses would be exposed to new sources of noise. For these reasons, the Project would result in a less than significant operational noise impact.

b) *Generation of excessive groundborne vibration or groundborne noise levels?*

The Project would not generate excessive groundborne vibration. Construction of the Project could result in groundborne vibration; however, any groundborne noise and vibration would be temporary and limited. Additionally, any exposure to nearby receptors would be intermittent, as nearby receptors would include AMSP recreational users but would not include stationary sensitive receptors (e.g., residences, schools). Operation of the proposed campsite would not create a new source of groundborne noise or vibration. Therefore, the Project would result in a less than significant impact.

c) *For a project located within the vicinity of a private airstrip or an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The Project is not located within the vicinity of a private airship of an airport land use plan, or within two miles of a public airport. The nearest public airport to the Project site is the Monterey Regional Airport, located over 30 miles north of the site. No impact would occur.

4.12 RECREATION

4.12.1 ENVIRONMENTAL SETTING

AMSP consists of approximately 4,800 acres of open space. The Park is open year-round and accommodates hikers, bikers, campers, and beach goers. The Park offers 20 miles of scenic trails that afford river, ocean, and mountain-top views and serves approximately 55,000 visitors annually. Overnight lodging for the general public includes a hike-in campground approximately ¼-mile north of the main AMSP parking lot, which is tent-only and contains 22 standard tent sites and two (2) hike-and-bike campsites. Amenities within AMSP include two (2) restrooms with potable water at the main parking lot and two (2) vault restrooms and potable water at the campground. The Proposed Project also includes two (2) existing portable restrooms and potable water spigots.

4.12.2 REGULATORY SETTING

4.12.2.1 State

California Coastal Act

The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone (see **Section 4.1, Aesthetics** for additional detail). Development activities within the coastal zone, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a CDP from either the Coastal Commission or the local government if a LCP has been certified. The Coastal Act prohibits development which would interfere with the public's right of access to the coast and encourages development of lower coast visitor and recreational facilities in the coastal zone.

4.12.2.2 Local

Big Sur Coast LUP

The Big Sur Coast LUP protects the rights of access to the shoreline, public lands, and opportunities for recreational hiking access along the coast. Within AMSP, low-intensity recreational and educational uses that are compatible with the natural resources of the area and require a minimum level of development to serve basic user needs and necessitating minimal

alteration of the natural environment are the principal allowed uses. Such uses are defined as trails, hike-in camping, and supporting facilities.

AMSP General Plan

The AMSP General Plan allows for the development of a range of visitor facilities and services and assumes increased use of the Park in connection with planned area development. The AMSP General Plan considered several key areas of concern for the Park, including natural resource protection, park access and circulation, and increased day-use and overnight camping accommodations. Furthermore, the AMSP General Plan identifies the Project site as a location for public use (e.g., group camp or picnic areas). As a result, the Proposed Project would not increase recreational capacity at AMSP beyond previously planned levels.

4.12.3 THRESHOLDS OF SIGNIFICANCE

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	■	☐
b)	Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	■	☐

4.12.4 IMPACT ANALYSIS

a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

The Proposed Project would not result in a substantial increase in use of existing recreational facilities such that a substantial physical deterioration of the facility would occur or be accelerated. The Proposed Project would be constructed and operated to support existing organized educational youth and family campouts conducted by VWS and special events or programs permitted by State Parks. The Project would include site improvements to a currently undeveloped site within AMSP that is used by VWS and State Parks for educational and recreational campouts. VWS conducts 30 campouts each year accommodating 35 campers and VWS staff. The Project consists of site improvements (i.e., a permanent camping facility and associated infrastructure) that would facilitate expansion of the VWS campout program to accommodate up to 60 individuals at the site and up to 60 campouts each year. The camping facilities would be utilized solely by

VWS and State Parks for organized events and programs (i.e., not available for regular camp use); however, the site would remain accessible to regular and daily Park visitors when not in use.

Similarly, the Proposed Project is not anticipated to significantly increase visitors to AMSP such that an adverse impact would occur. The overall number of Park visitors would likely remain similar to existing conditions because 1) access to the Park would be restricted by available parking in the main AMSP parking lot, which would not be increased, and 2) use of the Project site would be restricted to VWS and State Parks programs with no public camping available at the site. The Project is not expected to significantly increase the number of individuals regularly accessing the site beyond current use. Day-use of the site would be limited in duration consistent existing operations and is not anticipated to exceed the allowable use intensity for this area of the Park, as identified in the AMSP General Plan (i.e., 30-50 individuals per acre at a frequency of 180-365 days per year), see **Section 4.10, Land Use**.

Additionally, while VWS campouts would temporarily exceed 50 individuals at the site at one time, the frequency of campouts would be limited to 60 events per year. The frequency of these campouts would therefore not exceed the allowable use identified in the AMSP General Plan for this area of the Park. Mitigation measures identified in this IS/MND would further ensure that any potential impacts on the Park and the surrounding natural environment are minimized. As a result, the Proposed Project would not result in a substantial increase in the use of existing recreational facilities such that there would be an adverse environmental effect. Therefore, the Project would result in a less than significant impact to recreational facilities.

b) *Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Please refer to Response 4.13.5(a). The Proposed Project is a recreational use. The construction and operation of new camping facilities and associated support infrastructure would expand recreational amenities within AMSP. This IS/MND evaluates the environmental impacts associated with construction and operation of the Project. The Project would not result in any new impacts beyond those evaluated within this IS/MND. All potentially significant impacts would be mitigated to a less than significant level in accordance with the requirements of CEQA. This represents a less than significant impact.

4.13 TRANSPORTATION

4.13.1 ENVIRONMENTAL SETTING

4.13.1.1 Existing Roadway Network

SR 1 provides regional access to the Project site. Local access is via an existing AMSP paved and partially unpaved road. SR 1 is a major north-south roadway that connects the Monterey Peninsula with San Luis Obispo County to the south and with Santa Cruz County and the San Francisco Bay Area to the north.

SR 1 is a four-lane freeway north of Carpenter Street, a four- to five-lane (the five-lane section has a two-way center left-turn lane) roadway between Carpenter Street and Ocean Avenue, a three-lane roadway (two (2) lanes northbound and one (1) lane southbound) between Ocean Avenue and Carmel Valley Road, and a two-lane roadway south of Carmel Valley Road. SR 1 is part of the Monterey County Congestion Management Program ("CMP") highway network and is designated as a State Scenic Highway.

4.13.2 SURVEY METHODOLOGY

Hexagon Transportation Consultants, Inc. ("Hexagon") conducted a Transportation Study for the Proposed Project in November 2023 (see **Appendix D, Transportation Study**). Hexagon evaluated the Proposed Project against the Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts in CEQA* published in December 2018. Based on the project description, characteristics, and location, Hexagon evaluated if the Proposed Project would exceed Vehicle Miles Traveled ("VMT") thresholds of significance. In addition to evaluating VMT, Hexagon examined site access and circulation at the Project site.

4.13.3 REGULATORY SETTING

4.13.3.1 State

Big Sur State Route 1 Sustainable Transportation Demand Management Plan

The Big Sur Sustainable Transportation Demand Management Plan ("TDM Plan") was prepared by Caltrans (February 2020). The TDM Plan builds upon previous planning efforts and provides a framework to address how transit, sustainability, and related enhancements can improve the Big Sur experience. These concepts include planning-level identification of shuttle opportunities, supporting strategies, and planning considerations for zero-emission vehicle charging stations. The TDM Plan also describes technology strategies that aide visitor trip planning and provide real-time traveler information. TDM strategies are considered in the context of both desired user behavior and the potential for influencing different transportation choices.

4.13.3.2 Local

Monterey County Traffic Impact Fee

Monterey County recently adopted a traffic impact fee, which is being assessed on private development project. Because it is a public project, the Proposed Project is not responsible for the payment of the fee.

4.13.4 THRESHOLDS OF SIGNIFICANCE

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

4.13.5 IMPACT ANALYSIS

a) *Conflict with a plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?*

The Proposed Project consists of construction and operation of a permanent camping facility and associated infrastructure to support VWS youth and family campouts at AMSP. Construction of the Project could result in temporary traffic along SR 1, as this is the only roadway providing regional access to the Project site. However, traffic impacts would be temporary and intermittent.

Site access would be provided via an existing roadway connecting the Project site to the main AMSP parking lot. The roadway currently provides pedestrian access in addition to service vehicle access to the site. Construction may result in limited use of the access roadway for pedestrian use; however, all recreational trails within the Park would remain accessible to Park users during construction. The Proposed Project will implement temporary traffic control measures during construction to ensure that pedestrian access is maintained throughout the duration of construction. Construction BMPs and State Parks Standard Project Requirements would be implemented, and safety precautions (e.g., construction equipment signage, flaggers or equipment monitors) would be utilized during construction hours. Additionally, all construction vehicles and equipment would be parked at the Project site, off of public roadways and off of the access road; therefore, Project construction would not substantially interfere with emergency vehicle access within the Park.

Operation of the Project would not result in significant impacts to circulation. The Project site currently accommodates 30 VWS campouts annually and accommodates approximately 35 individuals each campout. The Project would improve the site for the existing program and would facilitate expansion of the program to serve 60 individuals per event, with 60 campouts per year.

VWS uses two (2) 15-passenger vans and two (2) support vehicle to transport campers to and from the site. The Proposed Project would include the use of four (4) 15-passenger vans and one (1) support vehicles to transport campers to and from the site. Hexagon determined the average number of trips associated with transporting 60 individuals to and from the Project site would be 10 daily vehicle trips, which would not constitute a significant increase in traffic trips (Hexagon, 2024). Site access would continue to be provided by an existing roadway and vehicle access would be restricted to service vehicles and VWS and State Parks-owned vehicles; no day-use parking would be allowed at the Project site. Therefore, the Project would not increase vehicular circulation within the Park such that the Project would conflict with the circulation goals of the AMSP General Plan.

b) *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

The Proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)(1). The CEQA Guidelines Section 15064.3, subdivision (b)(1) calls for the evaluation of transportation impacts of projects based on VMT. CEQA uses the VMT metric to evaluate a project's transportation impacts. Monterey County does not currently have any adopted VMT standards. In the absence of a County adopted threshold of significance, this IS/MND relies on OPR's recommended small project screening threshold to determine whether the Proposed Project's VMT effects would be significant. For the purposes of this IS/MND, the impact of the Proposed Project would be considered significant if it would generate 110 or more daily vehicle trips.

Based on OPR's recommended screening threshold, the Proposed Project would not result in a significant traffic-related effect. Construction of the Project would temporarily increase traffic trips to transport materials, equipment, and construction personnel; however, due to the limited size of the Project and the anticipated construction period of 12 months, construction is anticipated to result in fewer than 110 vehicle trips per day and would not result in a significant impact.

Operational traffic associated with the Proposed Project would result in an average of 10 daily traffic trips, assuming the Project would accommodate 60 individuals for each VWS campout event (Hexagon, 2024). This anticipated increase in traffic would significantly less than 110 daily trips threshold of significance and would thus not constitute a significant VMT impact. For the reasons described in this section, the Proposed Project would not result in significant traffic impacts related to Project construction or operation.

c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

The Proposed Project would not substantially increase hazards due to a geometric design feature or incompatible use. The Project consists of the construction and operation of a permanent camping facility and associated infrastructure within AMSP. The Proposed Project would include a new parking area at the western edge of the Project site, which would connect to the existing road that leads to the main AMSP parking lot. The Project site is currently accessible to service vehicles and VWS vans via the existing roadway; the Proposed Project would not alter service

vehicle accessibility at the site. Similarly, parking is currently available for VWS and State Parks but is undeveloped in nature (i.e., dirt turnout). The Proposed Project would improve the existing parking spaces by constructing a concrete pad to comply with ADA requirements. The parking area would be accessible only to service vehicles and VWS or State Parks-owned vehicles for existing and potential future organized events and programs (i.e., not accessible for regular day-use parking). Therefore, the parking would not result in a substantial increase in vehicles on-site, and would not increase hazards from incompatible use or design features at the Project site. The Project does not entail any roadway improvements or other design features that would affect existing circulation or create unsafe traffic conditions. Therefore, the Project would have a less than significant impact.

d) *Result in inadequate emergency access?*

The Proposed Project would not result in inadequate emergency access. The Project site is accessible to emergency service vehicles via an existing roadway. Service vehicle access at the site would not be altered by the Proposed Project (see Responses 4.14.5(a) and (c), above).

4.14 WILDFIRE

4.14.1 ENVIRONMENTAL SETTING

In California, responsibility for wildlife prevention and suppression is shared by federal, state, and local agencies. Cal Fire prevents and suppresses wildfires in SRAs, which are non-federal lands in unincorporated areas with watershed value and areas of statewide interest, defined by land ownership, population density, and land use. Wildfire prevention in LRAs is typically provided by city fire departments, fire protection districts, counties, and CalFire under contract with the local government.

The County of Monterey is characterized by moderate to very high fire hazards. Rugged topography, dry summers, and an abundance of fuel combine to make much of Monterey County susceptible to wildland fire hazards during the warmer seasons of the year. AMSP is located within a SRA and is designated as a HFHSZ. The Project site is served by Big Sur Fire and CalFire for fire and emergency medical services. The closest station to the site is the Big Sur Fire headquarters at Post Ranch Resort, located approximately four (4) miles south of AMSP.

4.14.2 REGULATORY SETTING

4.14.2.1 State

Public Resources Code Section 4201-4204

Sections 4201 through 4204 of the California Public Resources Code direct Cal Fire to map FHSZs within SRAs, based on relevant factors such as fuels, terrain, and weather. Mitigation strategies and building code requirements to reduce wildland fire risks to buildings within SRAs are based on these zone designations.

Government Code Section 51175-51189

Sections 51175 through 51189 of the California Government Code directs Cal Fire to recommend FHSZs within LRAs. Local agencies are required to designate VHFHSZs in their jurisdiction within 120 days of receiving recommendations from Cal Fire and may include additional areas not identified by Cal Fire as VHFHSZs. Because the Proposed Project is not located within a LRA, the Project site does not have a LRA FHSZ designation.

California Fire Code

The 2016 California Fire Code Chapter 49 establishes the requirements for development within wildland-urban interface areas, including regulations for wildfire protection building construction, hazardous vegetation and fuel management, and defensible space maintained around buildings and structures.

4.14.2.2 Local

Big Sur Coast LUP

The Big Sur Coast LUP includes policies to minimize fire-related hazards. Specifically, the LUP requires that all development be sited and designed to minimize risk from geologic, flood, or fire hazards to a level generally acceptable to the community. A geotechnical report is required for development in high hazard areas. In locations determined to have significant hazards, development permits may include a special condition requiring the owner to record a deed restriction describing the nature of the hazard(s), geotechnical and/or fire suppression mitigations and long-term maintenance requirements.

AMSP General Plan

AMSP's 1976 General Plan and associated EIR identify require that firebreaks be maintained throughout the Park to minimize wildfire risk and impacts associated with wildfires that could occur in each use area.

4.14.3 THRESHOLDS OF SIGNIFICANCE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
b)	Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	■	☐

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impact to the environment?	☐	☐	■	☐
d)	Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?	☐	☐	■	☐

4.14.4 IMPACT ANALYSIS

a) *Substantially impair an adopted emergency response plan or emergency evacuation plan?*

Construction and operation of the Project would not interfere with an adopted emergency response plan or emergency evacuation plan. The Project site is not part of a vehicle transportation network used by emergency vehicles (see **Section 4.8, Hazards and Hazardous Materials** for additional detail). The Project would facilitate expansion of VWS campouts to serve a greater number of campers in the future. Additionally, the Project may be used to support any future State Parks programs or events. The introduction of new personnel (e.g., campers/park patrons) within AMSP could increase demand for emergency response services (e.g., medical emergencies), but the Project is not anticipated to introduce a significantly greater number of people to the Park, nor would the Project impair emergency access to the Project site (see **Section 4.13, Transportation** for additional detail). This Project site has also traditionally been used as a spike camp and resource for firefighters responding to regional wildfires on and off of State Parks property, as well as fuel reduction crew use. Construction and operation of the Proposed Project would not interfere with these potential uses. Therefore, the Project would not substantially impair and/or otherwise interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. This represents a less than significant impact.

b) *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

The Project could exacerbate fire risks and thereby expose people and/or structures to potential wildland fire hazards. During construction, potential fire hazards could occur in connection with the operation of equipment and other activities that could cause sparks or other sources of ignition in dry areas. This is a temporary construction impact that would be minimized through implementation of State Parks Standard Project Requirements.

Project operation could also result in potential fire hazards due to the introduction of new facilities, increased site use, and additional campfires. Unregulated or unattended campfires could expose people and/or structures to wildland fire hazards. Campfires would be allowed only in designated fire rings which would be located and designed to minimize potential for fire hazards. Additionally, camping and use of fire rings at the site would only be allowed for VWS and potential future State Parks programs (i.e., not available for regular camp use). State Parks monitors and enforces campfires within all park units (including AMSP) and does not allow campfires during red flag conditions. Furthermore, all campfires are required to be extinguished completely at the end of the night. The Project is not anticipated to result in a substantial risk of unregulated or unattended campfires. The Project site contains existing water spigots which would be readily accessible from fire rings and grills. Furthermore, in accordance with the AMSP General Plan, State Parks conducts prescribed burns and other fuel reduction activities throughout the Park to minimize the risk of wildfires in the various use areas. For these reasons, the Project would result in a less than significant impact related to wildfire.

c) *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impact to the environment?*

The Project would not require the installation of infrastructure that may exacerbate wildfire risk. State Parks currently conducts fuel reduction activities throughout the Park to minimize wildfire risks (see Response 4.14.4(b) above), and a Fuel Management Plan would be implemented to ensure wildfire risk is minimized. The Project would not require additional fuel breaks, roads, power lines, or other utilities which could exacerbate fire risk or result in environmental impacts. Additionally, as discussed in response 4.14.4(b), campfires are to be extinguished at the end of each night, and use of campfires are prohibited during red flag conditions. Therefore, the Project would result in a less than significant impact.

d) *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes?*

Although the Project is in a HFHSZ, the Project site is relatively flat and has negligible landslide potential (Pacific Crest, 2023). Soils within the Project site have moderate to very low erosion potential and any increase in erosion would occur in connection with temporary construction activities. No substantial increases in erosion are expected to result from the Project, erosion impacts during construction and operations would be minimized with implementation of State Parks Standard Project Requirements pertaining to erosion (see **Section 4.6, Geology and Soils** for additional detail) and would not result in substantial drainage alterations. As a result, the Proposed Project is not anticipated to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability or drainage changes. Therefore, the Project would not expose people or structures to significant wildfire risks as a result of runoff, post-fire slope instability, or drainage changes. For these reasons, the Proposed Project would result in a less than significant impact.

4.15 MANDATORY FINDINGS OF SIGNIFICANCE

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

a) *Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The Proposed Project would not 1) degrade the quality of environment, 2) substantially reduce the habitat of a fish or wildlife species, 3) cause a fish or wildlife population to drop below self-sustaining levels, 4) threaten to eliminate a plant or animal community, 5) reduce the number or restrict the range of a rare or endangered plant or animal, or 6) eliminate important examples of major periods of California history or prehistory. The Proposed Project would result in temporary construction-related impacts to biological resources that would be minimized or avoided through implementation of State Parks Standard Project Requirements. Potentially significant impacts from Project construction and operation to biological resources would be mitigated to a less than significant level through the incorporation of mitigation measures identified in this Initial Study Similarly, the Project site does not contain, nor is the site located near, any known cultural or Tribal cultural resources. While unlikely, construction could unearth resources that were previously unknown. However, the Proposed Project would implement mitigation measures to ensure potential impacts related to the inadvertent discovery of previously unknown resource are minimized. Further, this Initial Study also identifies mitigation measures to ensure potential impacts to previously unknown Tribal cultural resources are minimized to a less than significant

level. All potentially significant impacts associated with the Proposed Project would be minimized to a less than significant level through the implementation of mitigation measures identified in this Initial Study. This represents a less than significant impact. No additional mitigation is necessary beyond mitigation identified in each of the respective topical CEQA sections contained in this IS/MND.

b) *Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

The Proposed Project would not result in a cumulatively considerable adverse environmental effect. To determine whether a cumulative effect requires an EIR, the lead agency shall consider whether the impact is significant and whether the effects of the project are cumulatively considerable (CEQA Guidelines §15064(h)(1). This IS/MND contains mitigation to ensure that all potentially significant impacts would be minimized to a less than significant level. Temporarily disturbed areas would be restored following construction. In addition, the Project would be consistent with the anticipated development and allowed use intensity identified in the AMSP General Plan, and the Project would comply with all applicable Big Sur Coast LUP policies.

CEQA allows a lead agency to determine that a project's contribution to a potential cumulative impact is not considerable and thus not significant when mitigation measures identified in the initial study will render those potential impacts less than considerable (CEQA Guidelines 15064(h)(2). This IS/MND contains mitigation measures to minimize the Project's potential environmental effects to less than significant during construction and operation. Additionally, State Parks would implement their Standard Project Requirements that include BMPs and standard practices to avoid and minimize potential environmental impacts resulting from the Project. Because implementation of standard requirements would avoid or minimize potential Project impacts, and any potentially significant impacts would be reduced to less than significant through implementation of mitigation measures identified in this IS/MND, the Project would result in a less than significant impact. Therefore, the Proposed Project would not contribute to cumulative impacts and no additional mitigation is necessary beyond mitigation identified in each of the respective topical CEQA sections contained in this IS/MND.

c) *Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

The Proposed Project would not have a substantial adverse effect on human beings, either directly or indirectly. This IS/MND contains mitigation to ensure that all potential impacts would be minimized to less than significant. The Project would have a beneficial impact by providing additional low-impact recreational opportunities in the Big Sur Coast and within AMSP. This represents a less than significant impact. No additional mitigation is necessary beyond mitigation identified in each of the respective topical CEQA sections contained in this IS/MND.

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Chapter 5: FISH AND WILDLIFE ENVIRONMENTAL DOCUMENT FEES

The State Legislature, through the enactment of SB 1535, revoked the authority of lead agencies to determine that a project subject to CEQA review had a “de minimis” (minimal) effect on fish and wildlife resources under the jurisdiction of the Department of Fish and Wildlife. Projects that were determined to have a “de minimis” effect were exempt from payment of the filing fees.

SB 1535 has eliminated the provision for a determination of “de minimis” effect by the lead agency; consequently, all land development projects that are subject to environmental review are now subject to the filing fees, unless the Department of Fish and Wildlife determines that the Project will have no effect on fish and wildlife resources.

To be considered for determination of “no effect” on fish and wildlife resources, development applicants must submit a form requesting such determination to the Department of Fish and Wildlife. Forms may be obtained by contacting the Department by telephone at (916) 631-0603 or though the Department’s website at www.dfg.ca.gov.

The Project would be required to pay this fee.

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Chapter 6: REFERENCES

6.1 LEAD AGENCY

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6.3 LITERATURE SOURCES

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Appendix A

Biological Report

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Ventana Wildlife Society Space for Meaningful Outdoor Recreation and Education (SMORE) Project

Biological Resources Report

November 2024

Prepared for

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1. INTRODUCTION

Denise Duffy & Associates, Inc. (DD&A) was contracted by Zander Westbrook (formerly Zander Design, Landscape, Architecture and Planning) (Zander) to prepare this Biological Resources Report for the Ventana Wildlife Society (VWS) Space for Meaningful Outdoor Recreation and Education (SMORE) project (project or proposed project), located in Andrew Molera State Park (AMSP) within the Big Sur area of unincorporated Monterey County (County), California, (APN 159031002000) (**Figures 1** and **2**). The project consists of the development of two (2) tent campsites that could accommodate up to thirty (30) tents, a small amphitheater, a rustic kitchen and pavilion, and ADA-accessible nature paths throughout the site, and restoration landscaping in disturbed areas.

The project grading limits were not defined prior to the reconnaissance survey effort. Therefore, the biological resources within a larger evaluation area that could potentially be impacted by the project were surveyed. Although DD&A has been provided with a 90% project site plans this report provides information on the larger evaluation area in the event that project modifications are made prior to the completion of a 100% plan set. This report includes identification of any special-status species and sensitive habitats known or with the potential to occur within the evaluation area, analyzes what types of impacts could result from the project, and provides recommended avoidance, minimization, and mitigation measures to reduce impacts. In addition, this report includes an overview of applicable federal, state, and local regulations, regulatory and responsible agencies with jurisdiction over sensitive resources within the evaluation area, and the relevant permits that may be required for the project.

1.1 Project Description

The project consists of the development of permanent structures that will be utilized by the VWS as an outdoor education center and campground. Proposed improvements include:

- Two designated tent camp sites in the north and south corners of the evaluation area,
- A centrally located covered dining pavilion consisting of picnic tables and preparation tables and attached barbeque area consisting of barbeque grills, a Santa Margarita grill, preparation table, lawn area, and water spigot,
- An amphitheater on the northeastern edge of the evaluation area,
- Two portable restroom facilities,
- Internal pathways connecting various project components,
- A designated parking area (i.e., three Americans with Disabilities Act ("ADA") parking spaces) in the southwest corner of the evaluation area, and
- Restoration and landscaping in temporarily disturbed areas to restore and enhance on-site habitat value.

Grading for the project will include approximately 729.5 cubic yards of cut and 429.4 cubic yards of fill.

Project Vicinity

Date	Scale
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Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure 1

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Project Location

Date
4/1/2024

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IN = 300 FT

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
2

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2. METHODS

2.1 Personnel and Survey Methods

DD&A Environmental Scientist Kimiya Ghadiri conducted a survey of the evaluation area on April 26, 2023, to characterize habitats present within the evaluation area and to identify any special-status plant or wildlife species, or suitable habitat for these species, within the site. Survey methods included walking the evaluation area and using aerial maps and GPS to identify general habitat types and potential sensitive habitat types, conducting focused surveys for special-status plant species, and conducting reconnaissance-level wildlife habitat survey to identify any special-status wildlife species, or suitable habitat for such species, within the site. The evaluation area was surveyed for botanical resources following the applicable guidelines outlined in the U.S. Fish and Wildlife Service (Service) *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (Service, 2000), the California Department of Fish and Wildlife (CDFW) *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, 2018), and the California Native Plant Society (CNPS) *Botanical Survey Guidelines* (CNPS, 2001).

Data collected during the surveys were used to assess the environmental conditions of the evaluation area and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts to biological resources.

2.2 Data Sources

The primary literature and data sources reviewed to determine the presence or potential presence of special-status species and biological resources at the evaluation area include:

- Current agency status information from the Service and the CDFW for species listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA), and those considered CDFW "species of special concern", including:
  - California Natural Diversity Database (CNDDB) occurrences reports from the Big Sur, Partington Ridge, Pfeiffer Point, Point Sur, Ventana Cones, Carmel Valley, Mt. Carmel, and Soberanes Point quadrangles (**Appendix A;** CDFW, 2024); and
  - The Service's Information for Planning and Consultation (IPaC) Resource List for the evaluation area (**Appendix B**; Service, 2024a).
- The CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2024).

From these resources, a list of special-status plant and wildlife species known or with the potential to occur in the vicinity of the evaluation area was created (**Appendix C**). This list presents these species along with their legal status, habitat requirements, and a brief statement of their likelihood of occurring within the evaluation area.

2.2.1 Botany

Vegetation alliances identified in *A Manual of California Vegetation* (Sawyer et.al., 2009) were utilized to determine if habitat types identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2023) are present within the evaluation area. Information regarding the distribution and habitats of local and state vascular plants was also reviewed (Howitt and Howell, 1964 and 1973; Munz and Keck, 1973;

Baldwin et al., 2012; Matthews and Mitchell, 2015; Jepson Flora Project, 2019). All plants observed within the evaluation area during the surveys were identified to species or intraspecific taxon necessary to eliminate them as being special-status species using keys and descriptions in *The Jepson Manual: Vascular Plants of California, Edition 2* (Baldwin et al., 2012) and *The Plants of Monterey County an Illustrated Field Key* (Matthews and Mitchell, 2015). Scientific nomenclature for plant species identified within this document follows Baldwin, et. al, (2012); common names follow Matthews and Mitchell (2015). A full botanical inventory was not recorded for the evaluation area, but the dominant species within each habitat type were noted. Dominant plant species are those which are more numerous than their competitors in an ecological community or make up more of the biomass; generally, the species that are most abundant. Most ecological communities are defined by their dominant species. The California Invasive Plant Council (Cal-IPC) Inventory (Cal-IPC, 2024) was reviewed to determine if any invasive plant species are present within the evaluation area.

2.2.2 Wildlife

The following literature and data sources were reviewed: CDFW reports on special-status wildlife (Remsen, 1978; Williams, 1986; Jennings and Hayes, 1994; Thelander, 1994; Thomson et. al, 2016); California Wildlife Habitat Relationships Program species-habitat models (Zeiner et al., 1988 and 1990); and general wildlife references (Stebbins, 1972, 1985, and 2003).

2.3 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted habitat types. Vegetation communities considered sensitive include those listed on CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2023), those that are occupied by species listed under the ESA or are critical habitat in accordance with ESA, and those that are defined as Environmentally Sensitive Habitat Areas (ESHA) under the California Coastal Act (CCA). Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act [CWA] and Executive Order [EO] 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

2.4 Special-Status Species

Special-status species are those plants and animals that have been formally listed or proposed for listing as endangered or threatened or are candidates for such listing under the Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Listed species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Section 15380 are also considered special-status species. Animals on the CDFW's list of "species of special concern" (most of which are species whose breeding populations in California may face extirpation if current population trends continue) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA. Additionally, the CDFW also includes some animal species that are not assigned any of the other status designations on their "Special Animals" list; however, these species have no legal or protection status.

Plants listed as rare under the California Native Plant Protection Act (CNPPA) or included in CNPS California Rare Plant Ranks (CRPR) 1A, 1B, 2A, and 2B are also treated as special-status species as they

meet the definitions of Sections 2062 and 2067 of the CESA and in accordance with CEQA Guidelines Section 15380. In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2023) be fully considered during the preparation of environmental documents relating to CEQA. CNPS CRPR 4 species (plants of limited distribution) may, but generally do not, meet the definitions of Sections 2062 and 2067 of the CESA, and are not typically considered in environmental documents relating to CEQA. While other species (i.e., CRPR 3 or 4 species) are sometimes found in database searches or within the literature, these were not included within the analysis as they did not meet the definitions of Section 2062 and 2067 of the CESA.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected in California under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." In addition, fully protected species under the Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

2.5 Regulatory Setting

2.5.1 Federal Regulations

Federal Endangered Species Act

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The ESA is administered by the Service or National Oceanic and Atmospheric Administration Marine Fisheries Service (NMFS). In general, the NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under Service jurisdiction.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Clean Water Act

The ACOE and U.S. Environmental Protection Agency (EPA) regulate discharge of dredged and fill material into "Waters of the United States" (waters of the U.S.) under Section 404 of the Clean Water Act (CWA). Waters of the U.S. are defined broadly as waters susceptible to use in commerce (including waters subject to tides, interstate waters, and interstate wetlands) and other waters (such as interstate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds) (33 CFR 328.3). Potential wetland areas are identified as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils conditions."

Under Section 401 of the CWA, any applicant receiving a Section 404 permit from the ACOE must also obtain a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB). A Section 401 Water Quality Certification is issued when a project is demonstrated to comply with state water quality standards and other aquatic resource protection requirements.

2.5.2 State Regulations

California Endangered Species Act

The CESA was enacted in 1984. The California Code of Regulations (Title 14, §670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. "Take" is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize "take" of any state listed species.

California Fish and Game Code

Birds. Section 3503 of the Fish and Game Code states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits the take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal Migratory Bird Treaty Act. Section 3800 prohibits the take of nongame birds.

Fully Protected Species. The classification of fully protected was the state's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish (§5515), mammals (§4700), amphibians and reptiles (§5050), and birds (§3511). Most fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Species of Special Concern. As noted above, the CDFW also maintains a list of wildlife "species of special concern." Although these species have no legal status, the CDFW recommends considering these species during analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

Lake or Streambed Alteration. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW's jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne) is California's statutory authority for the protection of water quality and applies to surface waters, wetlands, and groundwater, and to both point and nonpoint sources. Under the Porter-Cologne, the State Water Resources Control Board (State Board) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level. The API is located within Region 3 – Central Coast RWQCB. Porter-Cologne incorporates many provisions of the federal CWA, such as delegation to the State Board and RWQCBs of the National Pollutant Discharge Elimination System (NPDES) permitting program.

Under Porter-Cologne, the State must adopt water quality policies, plans, and objectives that protect the State's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegate to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne sets forth the obligations of the State Board and RWQCBs to adopt and periodically update water quality control plans (basin plans). The act also requires waste dischargers to notify the RWQCBs of such activities through filing of Reports of Waste Discharge (RWD) and authorizes the State Board and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWD requirements and WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects, when implemented according to prescribed terms and conditions.

The term "Waters of the State" is defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the State." The RWQCB protects all waters in its regulatory scope but has special responsibility for wetlands, riparian areas, and headwaters, including isolated wetlands, and waters that may not be regulated by the ACOE under Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne.

California Coastal Act

The California Coastal Commission (CCC) was established by voter initiative in 1972 (Proposition 20) and later made permanent by the California State Legislature through adoption of the CCA of 1976. The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. California's coastal zone generally extends 1,000 yards inland from the mean high tide line. In significant coastal estuarine habitat and recreational areas, it extends inland to the first major ridgeline or five miles from the mean high tide line, whichever is less. In developed urban areas, the boundary is generally less than 1,000 yards. Development activities, which are broadly defined by the CCA to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use

of land or public access to coastal waters, generally require a Coastal Development Permit (CDP) from either the CCC or the local government if a Local Coastal Program (LCP) has been certified. After certification of a LCP, coastal development permit authority is delegated to the appropriate local government, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). The Commission also has appellate authority over development approved by local governments in specified geographic areas as well as certain other developments. A CDP is required in addition to any other permit required from resource agencies.

The CCC or the local government may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as ESHA. Section 30107.5 of the CCA defines an "environmentally sensitive area" as any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Development is restricted within the coastal zone and prohibited within designated ESHA, unless the development is coastal dependent and does not have a significant effect on the resources. Section 30240 of the CCA states that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." This section also states that "development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas."

2.5.3 Local Regulations

Big Sur Coast Land Use Plan

The evaluation area lies within the coastal zone and is regulated by the Big Sur Coast Land Use Plan (Big Sur Coast LUP), which is the certified LCP for the region. The Big Sur Coast LUP identifies ESHA within its boundaries as Areas of Special Biological Significance identified by the State Water Resources Control Board; rare and endangered species habitat; all coastal wetlands and lagoons; all marine wildlife haul-out, breeding and nesting area; education, research and wildlife reserves, including all tideland portions of the California Sea Otter State Fish and Game Refuge; nearshore reefs; tidepools; sea caves; islets and offshore rocks; kelp beds; indigenous dune plant habitats; Monarch butterfly mass overwintering sites; and wilderness and primitive areas.

The Big Sur Coast LUP and the County's Coastal Implementation Plan (CIP) regulate the removal of trees within the Big Sur Coast LUP. Except as exempted by the Big Sur Coast LUP, a CDP is required to remove native trees within the Big Sur Coast LUP. Further, in accordance with the Big Sur Coast LUP and the CIP, a Forest Management Plan is required to remove, damage, or relocate trees within the Big Sur Coast LUP.

Andrew Molera State Park General Plan

The California Department of Parks and Recreation (State Parks) prepared the 1976 AMSP General Plan to assure the perpetuation in natural condition of the habitats found within the Park (State Parks, 1976). The AMSP General Plan requires that any new development activities within the Park utilizes existing developed and/or disturbed areas and not alternative grasslands, forests, aquatic, coastal, or marine habitat.

3. RESULTS

3.1 Habitat Types

The evaluation area functioned as a horse stable and pasture until 2019. The site now consists of ruderal, disturbed land bisected by a dirt path (Bobcat Trail). Arroyo willow riparian habitat, supported by the adjacent Big Sur River, is present along the margins of the evaluation area.

3.1.1 Ruderal/Disturbed

- *A Manual of California Vegetation* classification(s): Poison Hemlock or Fennel Patches (*Conium maculatum – Foeniculum vulgare*) Semi-Natural Herbaceous Stands and Upland mustards (*Brassica nigra* and Other Mustards) Semi-Natural Herbaceous Stands
- CDFW *California Natural Communities List*: Not Sensitive

Ruderal areas are those areas which have been developed or have been subject to historic and ongoing disturbance by human activities and are devoid of vegetation or dominated by non-native and/or invasive weed species. Most of the evaluation consists of ruderal habitat which had been mowed prior to the April 2023 survey. This area, including a picnic table and a segment of Bobcat Trail, is regularly utilized by AMSP users for recreation. Where vegetation was present, dominant species observed included invasive herbaceous plants and grasses such as burclover (*Medicago* sp.), stork's bill (*Erodium cicutarium*), plantain (*Plantago spp.*), common dandelion (*Taraxacum officinale*), and annual grasses. Some trees, including coast live oaks (*Quercus agrifolia*), western sycamores (*Platanus racemosa*), a coast redwood (*Sequoia sempervirens*), and a walnut (*Juglans* sp.), are also present within ruderal areas. Approximately 1.4 acres of ruderal/disturbed habitat occur within the evaluation area (**Figure 3**).

Ruderal/disturbed areas are considered to have low biological value as they are generally denuded of vegetation or are dominated by non-native plant species and consist of relatively low-quality habitat from a wildlife perspective. However, some common wildlife species that do well in urbanized areas, including European starling (*Sturnus vulgaris*), western fence lizard (*Sceloporus occidentalis*), ground squirrel (*Otospermophilus beecheyi*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), American crow (*Corvus brachyrhynchos*), western scrub jay (*Aphelocoma californica*), and rock pigeon (*Columba livia*), may be found foraging within these areas.

3.1.2 Arroyo Willow Riparian

- *A Manual of California Vegetation* classification(s): Arroyo willow thickets (*Salix lasiolepis* Shrubland Alliance)
- CDFW *California Natural Communities List*: Sensitive

Riparian areas are those plant communities supporting woody vegetation found along rivers, creeks, streams, and canyon bottom drainages. They can range from a dense thicket of shrubs to a closed canopy of large mature trees. Riparian habitat, associated with the adjacent Big Sur River, occurs along the margins of the evaluation area. The canopy is dominated by arroyo willow (*Salix lasiolepis*) and the understory is dominated by poison hemlock (*Conium maculatum*) and thistle (*Cirsium* sp.). Approximately 2.1 acres of riparian habitat occur within the evaluation area (**Figure 3**).

Habitats

Date
4/1/2024

Scale
IN = 70 FT

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
3

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Riparian communities are characterized by unique ecological features that support a wide variety of plant species, stabilize creekbank soils, maintain water quality through filtration, and provide habitat for many resident and migrant wildlife, particularly birds and herpetofauna. These factors include flooding, rich and productive soils, a water table that is within reach of plant roots, and species of plants and wildlife that are adapted to the timing of fluvial events such as flooding and drought. Riparian corridors also function as linear migration routes for many wildlife species. As a result, riparian forests support a greater diversity of wildlife than any other habitat type in California (Griggs, 2009). Common species that may be found within the riparian habitat in the site include Sierran treefrog (*Pseudacris sierra*), Monterey ensatina (*Ensatina eschscholtzii eschscholtzii*), and red-winged blackbird (*Agelaius phoeniceus*).

3.2 Sensitive Habitats

3.2.1 Riparian Habitat

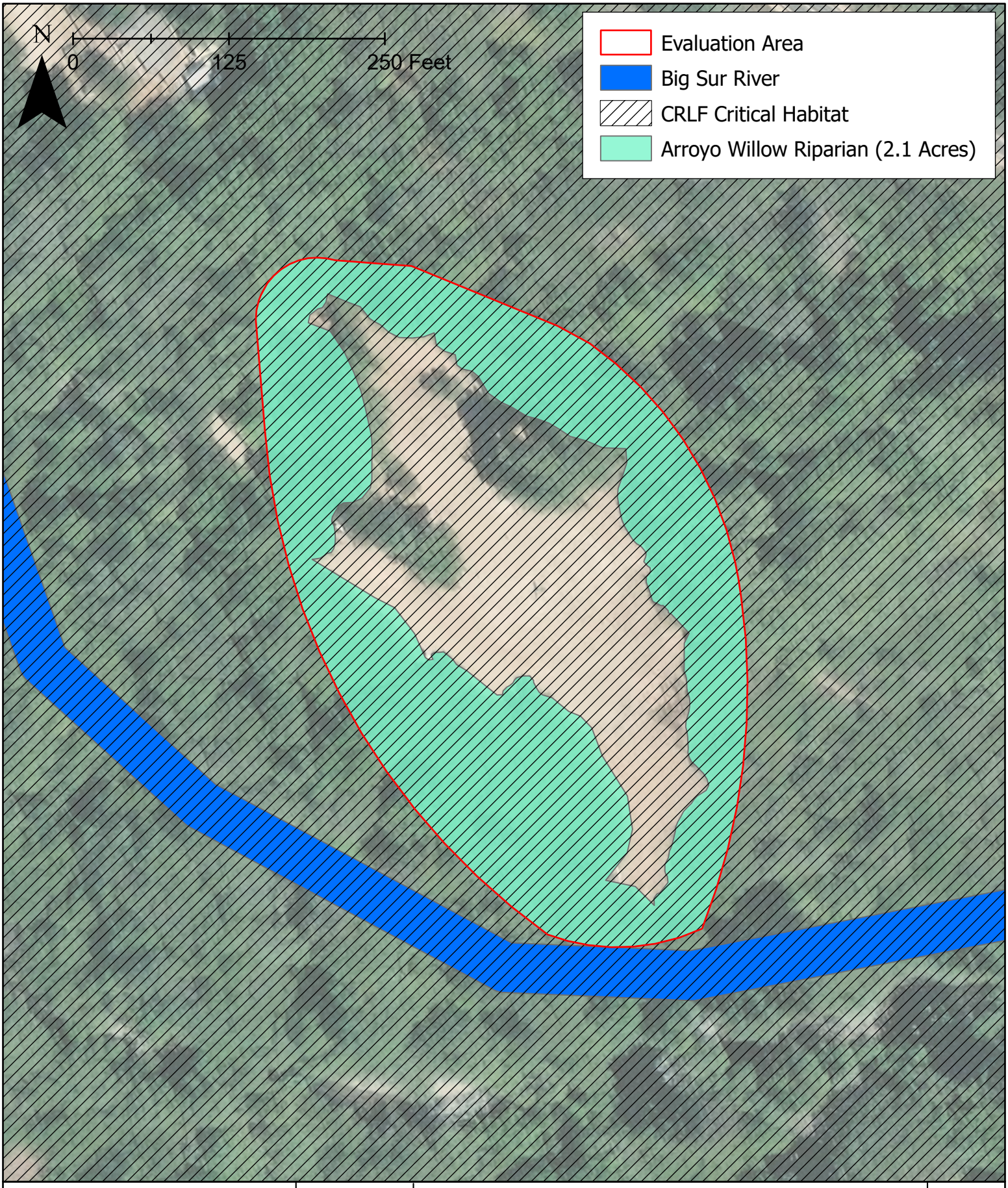
The rich soils and presence of water that make riparian ecosystems so diverse also function as productive land for agriculture and are desirable locations of development. As a result, much of the historic riparian habitat within California has been lost to agricultural conversion, urbanization, and flood control activities. To combat this habitat loss, CDFW supports a policy of minimizing the destruction or degradation of riparian habitat. Riparian areas are subject to the jurisdiction of CDFW under Section 1602 of the Fish and Game Code. Additionally, the arroyo willow floristic alliance occurring within riparian habitat in the evaluation area is identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2023). Riparian areas within the evaluation area may also be considered ESHA subject to the jurisdiction of the CCC under the Big Sur Coast LUP.

As identified above, approximately 2.1 acres of riparian habitat occur along the margins of the evaluation area (**Figure 4**). Project activities are expected to avoid, but directly abut, riparian habitat. Regulatory information and considerations for riparian habitat are included in this report with the expectation that they will only be necessary if planned protective measures, identified in Section 4 of this report, are not implemented.

3.2.2 Critical Habitat

The Service designates critical habitat for ESA-listed species in habitat areas occupied by those species which have features that are essential to the conservation of the species. The entire evaluation area lies within Critical Habitat Mapping Unit MNT-3 for the CRLF, which the Service designated on April 13, 2006 (71 FR 19244-19346) and revised on March 17, 2010 (75 FR 12816-12959). The primary physical and biological features (PBFs) of CRLF critical habitat are aquatic breeding habitat, non-breeding aquatic habitat, upland habitat, and dispersal habitat. No aquatic resources are present within the evaluation area; the site provides only potential dispersal and upland habitat for CRLF. Approximately 3.5 acres of critical dispersal habitat for CRLF (the entire evaluation area) and 2.1 acres of critical upland habitat for CRLF (riparian habitat within 300 feet of the Big Sur River) is present within the evaluation area (**Figure 4**).

Critical habitat for south-central California Coast (S-CCC) steelhead (*Oncorhynchus mykiss iredeus*) is designated adjacent to the evaluation area within the Big Sur River. The lateral extent of critical habitat for steelhead is the stream channel's width, defined by the ACOE in 33 CFR 329.11 as the ordinary high-water mark. In areas for which ordinary high water has not been defined pursuant to 33 CFR 329.11, the width of the stream channel is defined by its bank full elevation. As the evaluation area is located outside of ordinary high water, critical habitat for S-CCC steelhead is not present within the site.



Sensitive Habitats

Date
4/1/2024

Scale
IN = 100 FT

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
4

Path: F:\GIS\GIS_Projects\2023-09 Ventana Wildlife Society S'MORE Project\2023-09 Ventana Wildlife Society S'MORE Project.aprx

Critical habitat within and adjacent to the evaluation area may be considered ESHA subject to the jurisdiction of the CCC under the Big Sur Coast LUP.

3.2.3 Wetlands and Other Waters

DD&A observed a small wet area with flowing water (bisecting Bobcat Trail) at the eastern margin of the evaluation area during the April 2023 biological survey (**Figure 4**). No wetland vegetation was observed in this area. Based on conversations with State Parks and Zander, the wet crossing is a new, ephemeral feature associated with severe winter storms or, potentially, a clogged culvert that redirected flow to the area. Based on aerial review of the site, the wet crossing may have been formed by vehicle turnaround and informal parking area in previous years (pers. Comm. Sofia Zander). The wet crossing is not identified in the National Hydrography Dataset (USGS, 2022) or on the Service's wetland mapper (Service, 2024b). The crossing is ephemeral and does not meet the definition of waters of the U.S. as identified in CFR 328.3(a)(8), and, therefore, is not subject to the jurisdiction of the ACOE. The crossing, which has not been documented during normal rain years, does not meet the definition of waters of the state as identified in the *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB, 2021) and, therefore, is also not subject to the jurisdiction of the RWQCB. As a result, the wet crossing is not considered a sensitive habitat.

The Big Sur River is considered jurisdictional waters of the U.S. and State, and potential wetlands of the U.S. and/or State may be present directly adjacent to the river below the ordinary high water mark. As the evaluation area is located outside of ordinary high water, potentially jurisdictional wetlands and other waters associated with the Big Sur River are not present within the site.

3.3 Special-Status Species

Published occurrence data within the project area and surrounding U.S. Geological Survey quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the evaluation area (see Section 2, Methods and **Appendix C**). Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the site. The special-status species that are known to occur or have been determined to have a moderate or high potential to occur within or immediately adjacent to the evaluation area are discussed below. All other species are assumed unlikely to occur or have a low potential to occur within the evaluation area based on the species-specific reasons presented in **Appendix C**, are therefore unlikely to be impacted by the project, and are not discussed further.

3.3.1 Special-Status Wildlife

Southwestern Pond Turtle

Southwestern pond turtle (*Actinemys pallida,* SWPT) is a candidate species for listing under the federal ESA and a CDFW species of special concern. Previously referred to collectively as western pond turtle, recent research concluded that two subspecies of pond turtle (*Actinemys marmorata marmorata* and *A. m. pallida*) are two separate full species, northwestern (*Actinemys marmorata*) and southwestern (*A. pallida*) pond turtles. SWPT are common to uncommon in permanent and nearly permanent aquatic resources in a wide variety of habitats along the California coast from Castroville to Baja California in Mexico, including the Salinas Valley to Soledad, the foothills west of the Central Valley to Lancaster, and the southern California mountain ranges. Elevation range extends from near sea level to 2,041 meters (6.696 feet); however, they are mostly found below 1,371 meters (4,980 feet) (Stebbins, 2003). SWPT require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. SWPT remain

active year-round and may move several times during the course of overwintering. The time spent in the terrestrial habitat appears highly variable; in the southern part of their range SWPT may remain in these sites for only a month or two. In pond and lake habitats, however, some SWPT remain in the pond during the winter (Holland, 1994). Additionally, during the spring or early summer, females move overland for up to 100 meters (325 feet) to find suitable sites for egg-laying. Nests are typically excavated in compact, dry soils in areas characterized by sparse vegetation, usually short grasses or forbs (Holland, 1994). Three to 11 eggs are laid from March to August depending on local conditions (Ernst and Barbour, 1972).

The CNDDB reports 11 occurrences of SWPT within the quadrangles reviewed, the nearest of which overlaps the evaluation area. In addition, CDFW biologists have observed SWPT in the Big Sur River at a location 175 feet from the evaluation area, which is within the 325-foot upland dispersal buffer in which SWPT may nest (Daniel Shaw, personal communication, November 4, 2024). State Parks biologists have also observed this species within AMSP approximately 950 feet from the evaluation area within the Big Sur River (State Parks Senior Environmental Scientist, Jeff Frey, personal communication, November 4, 2024). At its closest point, the evaluation area is located 20 feet from the Big Sur River and contains suitable nesting habitat for SWPT; therefore, this species has a high potential to occur within the evaluation area.

California Red-Legged Frog

CRLF is a federally Threatened species and a CDFW species of special concern. It was listed as a federally Threatened species on June 24, 1996 (61 FR 25813-25833), and its critical habitat was designated on April 13, 2006 (71 FR 19244-19346) and revised on March 17, 2010 (75 FR 12816-12959). The CRLF is the largest native frog in California (44-131 mm snout-vent length) and was historically widely distributed in the central and southern portions of the state (Jennings and Hayes, 1994). Adults generally inhabit aquatic habitats with riparian vegetation, overhanging banks, or plunge pools for cover, especially during the breeding season (Jennings and Hayes, 1988). They may take refuge in small mammal burrows, leaf litter, or other moist areas during periods of inactivity or to avoid desiccation (Rathbun, et al., 1993; Jennings and Hayes, 1994). Radio telemetry data indicates that adults engage in straight-line breeding season movements irrespective of riparian corridors or topography and they may move up to two miles between non-breeding and breeding sites (Bulger et. Al., 2003).

This species requires still or slow-moving water during the breeding season where it can deposit large egg masses, which are most often attached to submergent or emergent vegetation. Breeding typically occurs between December and April, depending on annual environmental conditions and locality. Eggs require six to 12 days to hatch and metamorphosis generally occurs after 3.5 to seven months, although larvae are also capable of over-wintering. During the non-breeding season, CRLF use a wider variety of aquatic habitats, including small pools in coastal streams, springs, water traps, and other ephemeral water bodies (Service, 1996). CRLF may also move up to 300 feet from aquatic habitats into surrounding uplands, especially following rains, where individuals may spend days or weeks (Bulger et al., 2003).

The CNDDB reports 42 occurrences of CRLF within the quadrangles reviewed, the nearest of which is located approximately 3.1 miles from the evaluation area within Swiss Canyon Creek, just north of AMSP. State Parks and CDFW biologists have also observed this species within AMSP within the Big Sur River (Daniel Shaw, personal communication, November 4, 2024). No suitable breeding habitat for this species is present within the evaluation area; however, potentially suitable breeding habitat is present within the adjacent Big Sur River. Additionally, potentially suitable upland habitat is present in the evaluation area in

riparian habitat within 300 feet of the river, and the entire evaluation area may provide dispersal habitat therefore, this species has a high potential to occur within the evaluation area.

Foothill Yellow-Legged Frog

Foothill yellow-legged frog (*Rana boylii,* FYLF), specifically the Pacific Southwest Region sub-population found in the Coast Range from Monterey County to Los Angeles County, was listed as a state Endangered species in 2019 (CDFW, 2019) and a federally Endangered species on September 28, 2023 (88 FR 59698-59727). Historically, FYLF was found throughout Pacific drainages and streams from Oregon to southern California in mountain and foothill river systems. Adults generally inhabit partly shaded, shallow streams and riffles with rocky substrate in a variety of habitats including hardwood, pine, and riparian forests, as well as scrub, chaparral and wet meadows (Jennings and Hayes, 1988) (Hayes et al., 2016). Adults are rarely found far from permanent water bodies but may utilize upland habitat during winter's peak flows in seeps, puddles, submerged root wads, and large boulders or debris at high water (van Wagner 1996; Rombough 2006).

No suitable breeding habitat for this species is present within the evaluation area; however, potentially suitable breeding habitat is present within the adjacent Big Sur River and suitable upland habitat is present within riparian habitat in the evaluation area. The CNDDB reports 15 occurrences of FYLF within the quadrangles reviewed, the nearest reported in the Big Sur River riparian corridor approximately 1.1 miles upstream of the evaluation area. This occurrence and others in the area are historical; however, the current distribution and population data of the species is limited, so any suitable habitat within their historical range is considered to have the possibility of the species being present. Therefore, FYLF has a moderate potential to occur within or adjacent to the evaluation area in riparian habitat.

Monterey Dusky Footed Woodrat

The Monterey dusky-footed woodrat (*Neotoma macrotis luciana*, MDFW) is a CDFW species of special concern. This is a subspecies of the dusky-footed woodrat *(Neotoma macrotis)*, which is common to oak woodlands and other forest types throughout California. Dusky-footed woodrats are frequently found in forest habitats with moderate canopy cover and a moderate to dense understory, including riparian forests; however, they may also be found in chaparral communities. Relatively large nests are constructed of grass, leaves, sticks, and feathers and are built in protected spots, such as rocky outcrops or dense brambles of blackberry and/or poison oak. Typical food sources for this species include leaves, flowers, nuts, berries, and truffles. Dusky-footed woodrats may be a significant food source for small- to medium-sized predators. Populations of this species may be limited by the availability of nest material. Within suitable habitats, nests are often found in close proximity to each other.

Suitable habitat for MDFW is present within riparian habitat in the evaluation area. The CNDDB does not report any occurrences of this species within the quadrangles reviewed; however, this species is known to occur in the region. Nests of this species were not observed in the evaluation area during the April 2023 biological survey, but this species has the potential to move into the site prior to construction. Therefore, MDFW has a moderate potential to occur within the evaluation area.

Nesting Raptors and Other Protected Avian Species

Raptors, their nests, and other nesting birds are protected under the California Fish and Game Code and the MBTA. While the life histories of these species vary, overlapping nesting and foraging similarities allow for their concurrent discussion. Most raptors are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest habitats, as well as open grasslands, are

used most frequently for nesting. Breeding occurs February through September, with peak activity May through July. Prey for these species include small birds, small mammals, and some reptiles and amphibians. Many raptor species hunt in open woodland and habitat edges.

Various species of raptors and nesting birds, such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), turkey vulture (*Cathartes aura*), and songbirds, have a potential to nest within any of the large trees present within and adjacent to the evaluation area.

3.3.2 Special-Status Plant Species

No special-status plant species were observed within the evaluation area during the April 2023 survey and, due to lack of suitable habitat, none are expected to occur.

3.4 Protected Trees

Several mature trees, including coast live oak, coast redwood, western sycamore, elderberry, and California bay laurel (*Umbellularia californica*), are located within the evaluation area. These trees are protected under the Big Sur Coast LUP. Except as exempted by the Big Sur Coast LUP, a CDP is required to remove native trees within the Big Sur Coast LUP. Further, in accordance with the Big Sur Coast LUP and the CIP, a Forest Management Plan is required to remove, damage, or relocate trees within the Big Sur Coast LUP.

4. IMPACT ANALYSIS

Sensitive biological resources, including sensitive habitats, special-status species, and protected trees, occur or have the potential to occur within and directly adjacent to the evaluation area. Construction activities associated with the project could result in adverse impacts to these resources. However, the project is being designed to avoid riparian habitat. The following section describes the potential impacts that may result from the project, the measures that are recommended to avoid, minimize, or mitigate impacts, and the regulatory permits for biological resources that may be required for the project.

4.1 Impacts to Sensitive Habitats

Potential Impact 1: Riparian Habitat and Waters of the U.S. and State. Riparian habitat associated with the Big Sur River occurs within and adjacent to the evaluation area. Riparian habitat is considered a sensitive habitat under the jurisdiction of CDFW under Section 1602 of the California Fish and Game Code. The Big Sur River is considered jurisdictional waters of the U.S. and State subject to the jurisdiction of the ACOE and RWCQB under Sections 404 and 401 of the CWA, respectively, and potential wetlands of the U.S. and/or State subject may be present directly adjacent to the river below the ordinary high water mark. These resources may also be considered ESHA subject to the jurisdiction of the CCC under the Big Sur Coast LUP.

The evaluation area is located outside of ordinary high water and the project is being designed to avoid riparian habitat in accordance with the requirements of the AMSP General Plan. Therefore, no direct impacts to riparian habitat or the Big Sur River would occur. Impacts to these resources may occur, however, if construction activities occur outside of the proposed work limits or if construction activities result in erosion and sedimentation to adjacent habitats. Additionally, impacts to these resources could occur if an accident during construction were to result in the release of hazardous materials into the environment. Implementation of standard County-required erosion control measures and Mitigation Measures 1a through 1g would ensure avoidance of impacts to sensitive riparian habitat and waters of the U.S. and State located adjacent to the project site, and would preclude the need for a Section 1602 Streambed Alteration Agreement from CDFW and Section 404 and 401 authorizations from the ACOE and the RWQCB.

> ***Mitigation Measure 1a:*** *The project applicant shall retain a qualified biologist to prepare and conduct an Employee Education Program for the construction crew prior to any construction activities. The qualified biologist shall meet with the construction crew at the onset of construction at the project site to educate the construction crew on the following: 1) the appropriate access route(s) in and out of the construction area and a review of the project boundaries; 2) how a biological monitor shall examine the area and agree upon a method which shall ensure the safety of the monitor during such activities; 3) the special-status species and sensitive habitats that are known or may be present within and directly adjacent to the site; 4) the specific mitigation measures that shall be incorporated into the construction effort; 5) the general provisions and protections afforded by the regulatory agencies; and 6) the proper procedures if a special-status species is encountered within the project site during construction.*
>
> ***Mitigation Measure 1b:*** *Prior to construction, exclusionary fencing shall be placed to preclude construction vehicles and personnel from impacting riparian habitat and the Big Sur River. A biological monitor shall supervise the installation of exclusionary fencing and monitor at least once*

per week until construction is complete to ensure that the protective exclusionary fencing remains intact.

Mitigation Measure 1c: *Construction shall take place only under dry conditions (i.e., when the evaluation area has not received more than ¼ inch of precipitation within the last 24 hours).*

Mitigation Measure 1d: *Stationary equipment such as motors, generators, and welders located within 100 feet of riparian habitat shall be stored overnight at a designated staging area and shall be positioned over drip pans.*

Mitigation Measure 1e: *Any hazardous or toxic materials deleterious to life that could be washed into adjacent sensitive habitats shall be contained in watertight containers.*

Mitigation Measure 1f: *Refueling of equipment shall take place within designated staging areas or at least 100 feet from riparian habitats.*

Mitigation Measure 1g: *All construction debris and associated materials stored in staging area shall be removed from the work site upon completion of the project.*

Potential Impact 2: Critical Habitat. Critical upland and dispersal habitat for CRLF is present within the evaluation area, and critical habitat for S-CCC steelhead is present adjacent to the evaluation area within the Big Sur River. As described under Potential Impact 1, no direct impacts to the Big Sur River are proposed and the project would avoid indirect impacts to river with implementation of Mitigation Measures 1a through 1g. The project would result in conversion of critical habitat for CRLF into development; however, critical habitat requirements do not apply to activities that are not conducted on federal land or that do not involve a federal agency. Furthermore, while the Project would result in the development of permanent facilities, this area is subject to on-going disturbance and use in connection with existing AMSP activities and use by the VWS. Therefore, this impact is less than significant, and no mitigation is required.

4.2 Impacts to Special-Status Species

Potential Impact 3: CRLF and FYLF. The evaluation area is within the known range of CRLF (federally threatened) and FYLF (state and federally endangered), which are known from the adjacent Big Sur River. Riparian habitat within and adjacent to the evaluation area provides suitable upland habitat for both species, and ruderal habitat within the evaluation area provides dispersal for CRLF. Impacts to CRLF and/or FYLF would be considered take of ESA- and/or CESA-listed species and would require incidental take permits from the Service and/or CDFW.

As described under Potential Impact 1, no direct impacts to riparian habitat are proposed and the project would avoid indirect impacts to this resource and, consequently, take of CRLF and FYLF in this habitat with implementation of Mitigation Measures 1a through 1g. Although some ruderal habitat within the evaluation area would be converted to development, dispersal habitat is ubiquitous and migrating CRLF are widely distributed across the landscape in space and time. Therefore, the potential for CRLF to occur within ruderal habitat during construction is low and the potential for take of this species is unlikely. However, implementation of Mitigation Measures 2a through 2f would to further ensure avoidance of these species during construction and reduce the need for take authorization from the Service and/or CDFW.

Mitigation Measure 2a: *A qualified biologist shall survey the evaluation area and immediately adjacent areas 48 hours before and the morning of the onset of work activities for the presence of CRLF and FYLF. If any life stage of CRLF or FYLF is observed, construction activities shall not commence until the Service and/or CDFW are consulted, and appropriate actions are taken to allow project activities to continue.*

Mitigation Measure 2b: *During ground disturbing and vegetation removal activities, a qualified biologist shall survey appropriate areas of the construction site daily before the onset of work activities for the presence of CRLF and FYLF. The qualified biologist shall remain available to come to the site if a CRLF is identified until all ground disturbing activities are completed. If any life stage of CRLF or FYLF is found and these individuals are likely to be killed or injured by work activities, the qualified biologist shall be contacted, and work shall stop in that area until the CRLF and/or FYLF has moved on its own out of the work area. If the CRLF and/or FYLF do not move out of the work area on their own accord the Service and/or CDFW shall be contacted prior to relocation. Construction activities shall not resume until the Service and/or CDFW are consulted, and appropriate actions are taken to allow project activities to continue.*

Mitigation Measure 2c: *After ground disturbing and vegetation removal activities are complete, or earlier if determined appropriate by the qualified biologist, the qualified biologist shall designate a construction monitor to oversee on-site compliance with all avoidance and minimization measures. The qualified biologist shall ensure that this construction monitor receives sufficient training in the identification of CRLF and FYLF. The construction monitor or the qualified biologist is authorized to stop work if the avoidance and/or minimization measures are not being followed.*

Mitigation Measure 2d: *To prevent inadvertent entrapment of CRLF or FYLF during project construction, all excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day with plywood or similar materials. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals.*

Mitigation Measure 2e: *Only tightly woven fiber netting or similar material may be used for erosion control at the evaluation area. Coconut coir matting is an acceptable erosion control material. No plastic mono-filament matting shall be used for erosion control, as this material may ensnare wildlife, including CRLF and FYLF.*

Mitigation Measure 2f: *Because dusk and dawn are often the times when CRLF and FYLF are most actively foraging and dispersing, all construction activities should cease one half hour before sunset and should not begin prior to one half hour after sunrise.*

<u>*Potential Impact 4: MDFW*</u>. Riparian understory within and adjacent to the evaluation area provides nesting and foraging habitat for MDFW. As described under Potential Impact 1, no direct impacts to riparian habitat are proposed and the project would avoid indirect impacts to this riparian habitat and, consequently, MDFW with implementation of Mitigation Measures 1a through 1g and 3.

Mitigation Measure 3*. To avoid or minimize impacts to MDFW, the project applicant will retain a qualified biologist to conduct pre-construction surveys in suitable habitat proposed for*

construction. Surveys for MDFW nests will be conducted within three days prior to construction within the project site. All MDFW nests identified will be flagged for avoidance. Nests that cannot be avoided will be manually deconstructed prior to land clearing activities to allow animals to escape harm. If a litter of young is found or suspected, nest material will be replaced, and the nest will be left alone for two to three weeks before a re-check to verify that young are capable of independent survival before proceeding with nest dismantling.

Potential Impact 5: Raptors and Other Nesting Birds. Raptors and other protected avian species have the potential to nest in trees, within and directly adjacent to the evaluation area. The project does not involve tree removal or disturbance and is not expected to result in direct impacts to raptors or other nesting birds. However, indirect impacts from construction activities (e.g., noise, vibrations) could result in injury, nest abandonment, and/or mortality of raptors and other nesting birds, if nesting directly adjacent to the site during construction activities. This is a potentially significant impact that can be minimized to less-than-significant with implementation of Mitigation Measures 1a and 4.

Mitigation Measure 4: *Project activities that may affect protected nesting avian species (e.g., noise, vibrations) shall be scheduled after September 15 and before February 1 to avoid the breeding and nesting season. Alternatively, a qualified biologist shall be retained by the project applicant to conduct pre-construction surveys for nesting raptors and other protected avian species within 300 feet of proposed project activities if work occurs between February 1 and September 15. Pre-construction surveys shall be conducted no more than 14 days prior to the start of project activities during the early part of the breeding season (February through April) and no more than 30 days prior to the initiation of these activities during the late part of the breeding season (May through September). Because some bird species nest early in spring and others nest later in summer, and because some species breed multiple times in a season, surveys for nesting birds may be required to continue during project activities to address new arrivals. The necessity and timing of these continued surveys shall be determined by the qualified biologist.*

If raptors or other protected avian species nests are identified during the pre-construction surveys, the qualified biologist shall notify the project applicant and an appropriate no-disturbance buffer shall be imposed within which no disturbance should take place (generally 300 feet in all directions for raptors; other avian species may have species-specific requirements) until the young of the year have fledged and are no longer reliant upon the nest or parental care for survival, as determined by a qualified biologist.

Potential Impact 6: Nesting SWPT. The project is located within 20 feet of the Big Sur River. SWPT have been observed within this resource on several occasions by CDFW and State Parks staff. Ruderal habitat within the evaluation area and adjacent to the Big Sur River riparian habitat may provide nesting habitat for this species. Construction activities within the project site, including vegetation removal and grading, may result in direct mortality of individuals, if present at the time of construction. This would be considered a significant impact under CEQA, which can be reduced to a less-than-significant level with implementation of Mitigation Measure 1a and 5.

Mitigation Measure 5: *A qualified biologist shall conduct a pre-construction survey for SWPT and their nests within the project site no more than three days prior to construction. If a SWPT nest is found, it will be monitored and avoided until the eggs hatch. All SWPTs discovered within the*

project site immediately prior to or during project activities shall be allowed to move out of the area of their own volition. If this is not feasible, they shall be captured by a qualified biologist and relocated out of harm's way to the nearest suitable habitat at least 100 feet upstream or downstream from the project site where the individual was found.

4.3 Impacts to Protected Trees

Potential Impact 6: Protected Trees. Several mature trees, including coast live oak, coast redwood, western sycamore, California bay laurel, and elderberry are located within the evaluation area. These trees are protected under the Big Sur Coast LUP and their removal or damage could require a coastal development permit from the CCC. The AMSP General Plan also requires the preservation of all mature native trees. The project is being designed to avoid impacting any tree and, therefore, a coastal development permit for tree removal is not anticipated. However, grading around trees could lead to significant damage or mortality if 30 percent or more of an individual tree's root base is damaged. Implementation of Mitigation Measures 1a , 5a, and 5b would minimize potential impacts to trees and preclude the need for a coastal development permit for impacts to trees.

Mitigation Measure 5a: *Trees within and directly adjacent to the project site which have the potential to be impacted by project activities, as determined by a qualified arborist or biologist, shall be protected from damage during construction with temporary fencing. Fencing shall consist of chain link, supported snowdrift or plastic mesh, or field fence. Fencing shall have cross bracing (typically 2x4 material) on both the top and lower edges of the fencing material to prevent sagging and provide lateral support. Fencing shall stand a minimum height of four feet above grade and be placed to the farthest extent possible from the base of the trees to protect driplines (typically 10-12 feet away from the base of a tree). Where access or space is limited, it is permissible to protect trees within the 10-12-foot distance with approval from a qualified arborist or biologist.*

Tree fencing shall remain in place during the entire construction period. Torn or damaged roots shall be cleanly cut to sound wood wherever possible to minimize decay entry points. Any roots found that must be cut should be cut by manually digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment. No tree seals shall be used as the seal material only promotes decay.

Mitigation Measure 5b: *Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall be prohibited adjacent to trees.*

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APPENDIX A

California Natural Diversity Database Report

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Big Sur (3612137) OR Partington Ridge (3612126) OR Pfeiffer Point (3612127) OR Carmel Valley (3612146) OR Mt. Carmel (3612147) OR Soberanes Point (3612148) OR Ventana Cones (3612136) OR Point Sur (3612138))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abies bracteata bristlecone fir	PGPIN01030	None	None	G2G3	S2S3	1B.3
Actinemys pallida southwestern pond turtle	ARAAD02032	Proposed Threatened	None	G2G3	SNR	SSC
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Agrostis blasdalei Blasdale's bent grass	PMPOA04060	None	None	G2G3	S2	1B.2
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S2S3	SSC
Aphyllon robbinsii Robbins' broomrape	PDORO040Q0	None	None	G1	S1	1B.1
Arctostaphylos edmundsii Little Sur manzanita	PDERI04260	None	None	G2	S2	1B.2
Arctostaphylos hookeri ssp. hookeri Hooker's manzanita	PDERI040J1	None	None	G3T2	S2	1B.2
Arctostaphylos montereyensis Toro manzanita	PDERI040R0	None	None	G2?	S2?	1B.2
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Carex obispoensis San Luis Obispo sedge	PMCYP039J0	None	None	G3?	S3?	1B.2
Carlquistia muirii Muir's tarplant	PDASTDU010	None	None	G2	S2	1B.3
Central Maritime Chaparral Central Maritime Chaparral	CTT37C20CA	None	None	G2	S2.2	
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Cirsium occidentale var. compactum compact cobwebby thistle	PDAST2E1Z1	None	None	G3G4T2	S2	1B.2
Clarkia jolonensis Jolon clarkia	PDONA050L0	None	None	G2	S2	1B.2
Coelus globosus globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
Cordylanthus rigidus ssp. littoralis seaside bird's-beak	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S3	SSC
Dacryophyllum falcifolium tear drop moss	NBMUS8Z010	None	None	G2	S2	1B.3
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2Q	S2	
Delphinium hutchinsoniae Hutchinson's larkspur	PDRAN0B0V0	None	None	G2	S2	1B.2
Delphinium umbraculorum umbrella larkspur	PDRAN0B1W0	None	None	G3	S3	1B.3
Ericameria fasciculata Eastwood's goldenbush	PDAST3L080	None	None	G2	S2	1B.1
Eriogonum nortonii Pinnacles buckwheat	PDPGN08470	None	None	G2	S2	1B.3
Erysimum ammophilum sand-loving wallflower	PDBRA16010	None	None	G2	S2	1B.2
Eumetopias jubatus Steller sea lion	AMAJC03010	Delisted	None	G3	S2	
Euphilotes enoptes smithi Smith's blue butterfly	IILEPG2026	Endangered	None	G5T2	S2	
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Fratercula cirrhata tufted puffin	ABNNN12010	None	None	G5	S1S2	SSC
Fritillaria falcata talus fritillary	PMLIL0V070	None	None	G2	S2	1B.2
Fritillaria liliacea fragrant fritillary	PMLIL0V0C0	None	None	G2	S2	1B.2
Galium californicum ssp. luciense Cone Peak bedstraw	PDRUB0N0E3	None	None	G5T3	S3	1B.3
Galium clementis Santa Lucia bedstraw	PDRUB0N0H0	None	None	G2	S2	1B.3
Grimmia torenii Toren's grimmia	NBMUS32330	None	None	G2	S2	1B.3
Hydrobates homochroa ashy storm-petrel	ABNDC04030	None	None	G2	S2	SSC
Malacothamnus lucianus Arroyo Seco bushmallow	PDMAL0Q0B2	None	None	G3T1Q	S1	1B.2
Malacothrix saxatilis var. arachnoidea Carmel Valley malacothrix	PDAST660C2	None	None	G5T2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Meconella oregana Oregon meconella	PDPAP0G030	None	None	G2	S2	1B.1
Meta dolloff Dolloff Cave spider	ILARA17010	None	None	G3	S3	
Monterey Pine Forest Monterey Pine Forest	CTT83130CA	None	None	G1	S1.1	
Nannopterum auritum double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
North Central Coast Fall-Run Steelhead Stream North Central Coast Fall-Run Steelhead Stream	CARA2631CA	None	None	GNR	SNR	
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	G5T2Q	S2	SSC
Optioservus canus Pinnacles optioservus riffle beetle	IICOL5E020	None	None	G2	S1	
Pedicularis dudleyi Dudley's lousewort	PDSCR1K180	None	Rare	G2	S2	1B.2
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Pinus radiata Monterey pine	PGPIN040V0	None	None	G1	S1	1B.1
Piperia yadonii Yadon's rein orchid	PMORC1X070	Endangered	None	G1	S1	1B.1
Plagiobothrys uncinatus hooked popcornflower	PDBOR0V170	None	None	G2	S2	1B.2
Rana boylii pop. 6 foothill yellow-legged frog - south coast DPS	AAABH01056	Endangered	Endangered	G3T1	S1	
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Rosa pinetorum pine rose	PDROS1J0W0	None	None	G1Q	S1	1B.2
Sanicula maritima adobe sanicle	PDAPI1Z0D0	None	Rare	G2	S2	1B.1
Sidalcea malachroides maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2
Taricha torosa Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Tortula californica California screw moss	NBMUS7L090	None	None	G2G3	S2?	1B.2
Trifolium polyodon Pacific Grove clover	PDFAB402H0	None	Rare	G1	S1	1B.1

Record Count: 61

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APPENDIX B

IPaC Resource List

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly a ected by activities in the project area. However, determining the likelihood and extent of e ects a project may have on trust resources typically requires gathering additional site-speci c (e.g., vegetation/species surveys) and project-speci c (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS o ce(s) with jurisdiction in the de ned project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Monterey County, California

Local office

Ventura Fish And Wildlife O ce

(805) 644-1766
(805) 644-3958
FW8VenturaSection7@FWS.Gov

2493 Portola Road, Suite B
Ventura, CA 93003-7726

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of in uence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly a ected by activities in that area (e.g., placing a dam upstream of a sh population even if that sh does not occur at the dam site, may indirectly impact the species by reducing or eliminating water ow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential e ects to species, additional site-speci c and project-speci c information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local o ce and a species list which ful lls this requirement can **only** be obtained by requesting an o cial species list from either the Regulatory Review section in IPaC (see directions below) or from the local eld o ce directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an o cial species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the sheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an o ce of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially a ected by activities in this location:

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **nal** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern Sternula antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **nal** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Marbled Murrelet Brachyramphus marmoratus There is **nal** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened
Western Snowy Plover Charadrius nivosus nivosus There is **nal** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo Coccyzus americanus There is **nal** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened
Wherever found
There is **nal** critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/2891

Foothill Yellow-legged Frog Rana boylii — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5133

Western Spadefoot Spea hammondii — Proposed Threatened
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5425

Fishes

NAME	STATUS

Tidewater Goby Eucyclogobius newberryi — Endangered
Wherever found
There is **nal** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/57

Insects

NAME	STATUS

Monarch Butter y Danaus plexippus — Candidate
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Smith's Blue Butter y Euphilotes enoptes smithi — Endangered
Wherever found
There is **proposed** critical habitat for this species.
https://ecos.fws.gov/ecp/species/4418

Crustaceans

NAME	STATUS

NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi Wherever found There is **nal** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Marsh Sandwort Arenaria paludicola Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2229	Endangered

Critical habitats

Potential e ects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
California Red-legged Frog Rana draytonii https://ecos.fws.gov/ecp/species/2891#crithab	Final

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Speci cally, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds

- Nationwide conservation measures for birds https://www.fws.gov/sites/default/ les/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in o shore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", speci cally the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey e ort (see below) can be used to establish a level of con dence in the presence score. One can have higher con dence in the presence score if the corresponding survey e ort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted

Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

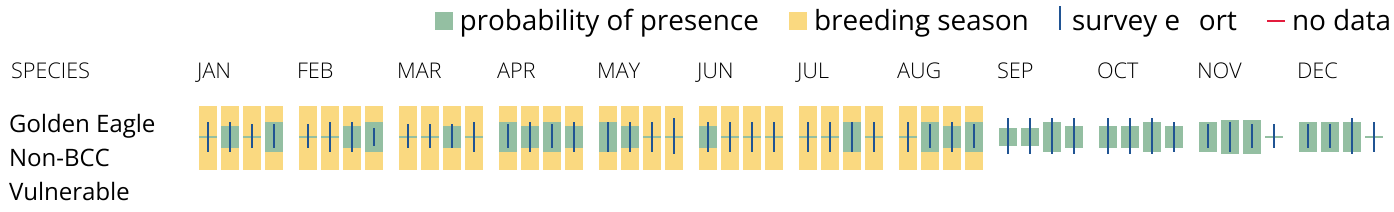
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey e ort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas o the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my speci ed location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and ltered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project

intersects, and that have been identi ed as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my speci ed location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and ltered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identi ed as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to o shore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field O ce if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Speci cally, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds

- Nationwide conservation measures for birds https://www.fws.gov/sites/default/ les/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may nd in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur o the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black Oystercatcher Haematopus bachmani This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9591	Breeds Apr 15 to Oct 31

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Black Swift Cypseloides niger — Breeds Jun 15 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8878

Black Turnstone Arenaria melanocephala — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Elegant Tern Thalasseus elegans — Breeds Apr 5 to Aug 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8561

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in o shore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Heermann's Gull Larus heermanni — Breeds Mar 15 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Long-eared Owl asio otus — Breeds Mar 1 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3631

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Western Gull Larus occidentalis — Breeds Apr 21 to Aug 25
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", speci cally the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey e ort (see below) can be used to establish a level of con dence in the presence score. One can have higher con dence in the presence score if the corresponding survey e ort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted

Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

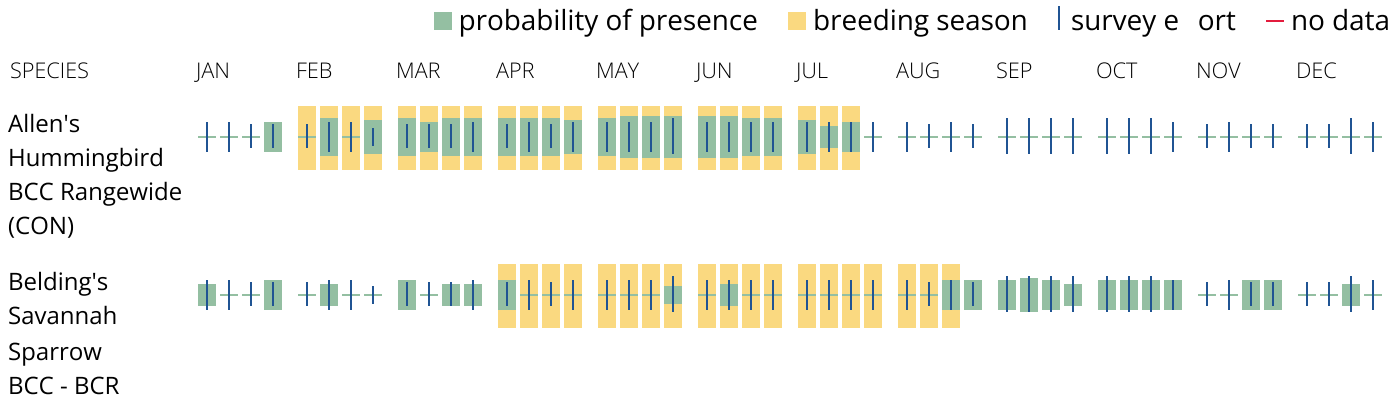
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

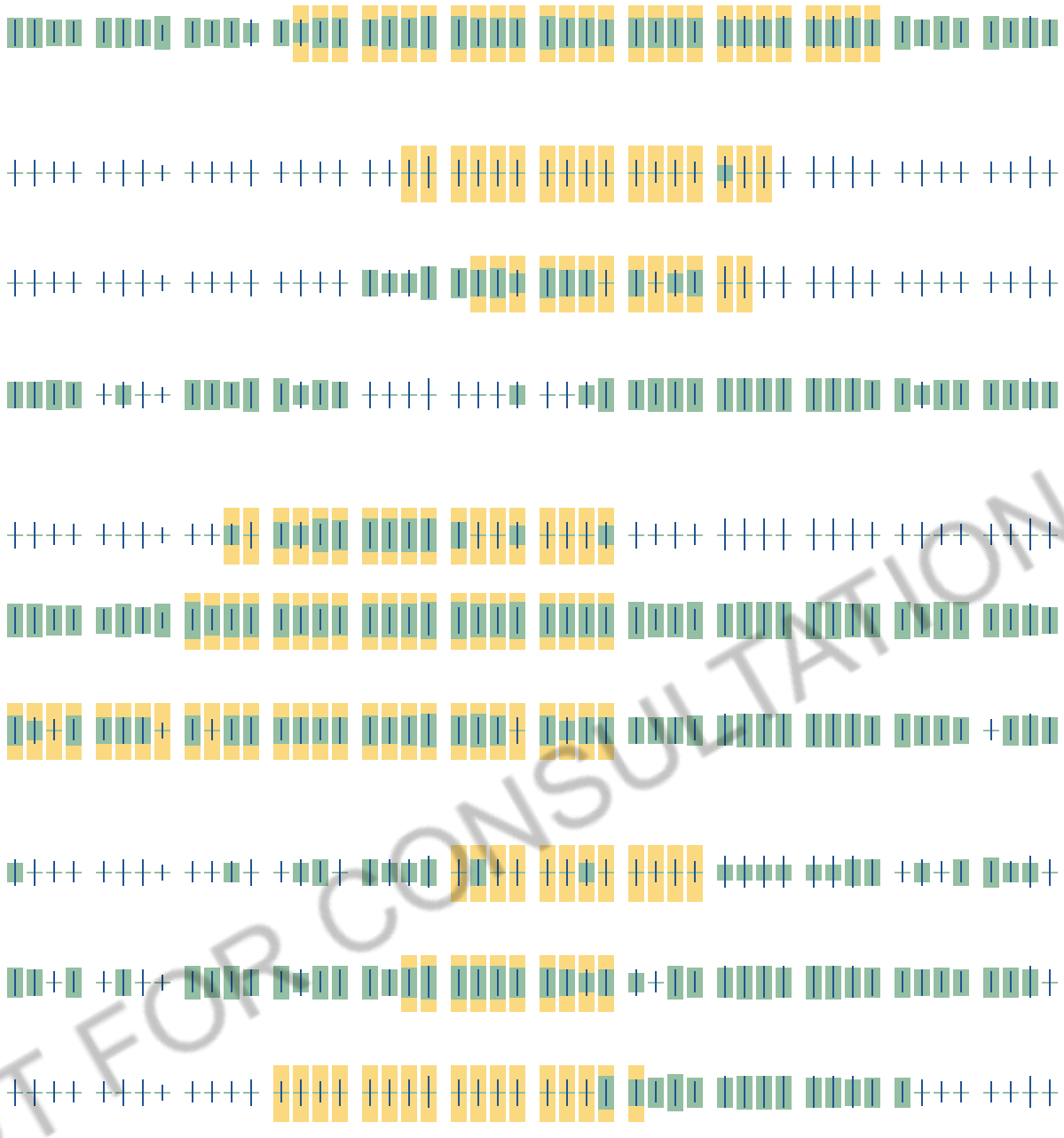
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

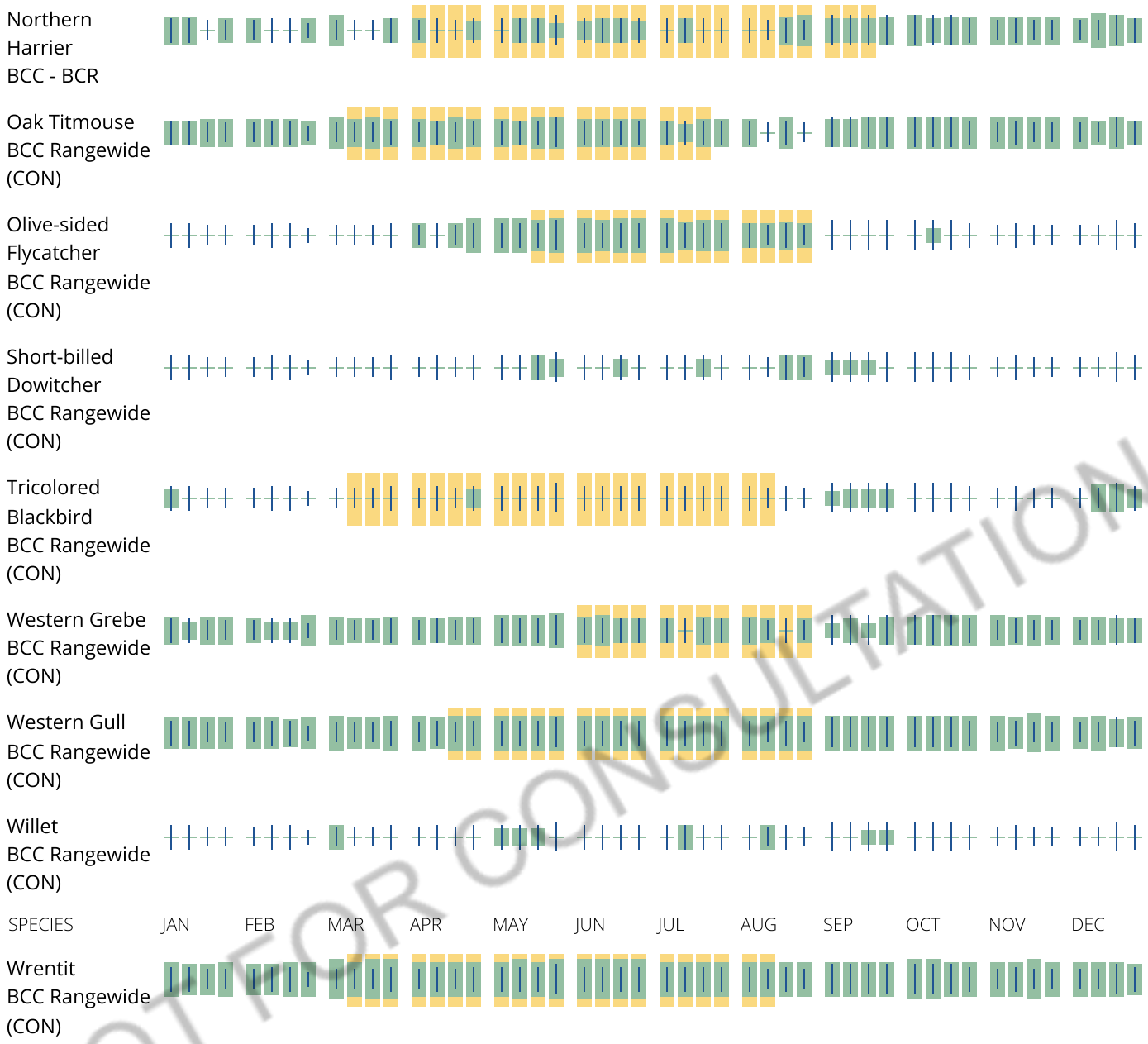
To see a bar's survey e ort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas o the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my speci ed location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area o the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also o ers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results les underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my speci ed location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey e ort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey e ort is the key component. If the survey e ort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey e ort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to con rm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be con rmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on Federal expenditures and nancial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field O ce or visit the CBRA Consultations website. The CBRA website provides tools such as a ow chart to help determine whether consultation is required and a template to facilitate the consultation process.

CBRA information is not available at this time

This can happen when the CBRS map service is unavailable, or for very large projects that intersect many coastal areas. Try again, or visit the CBRS map to view coastal barriers at this location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the o cial CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Bu er Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an o cial determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the o shore areas of units (e.g., dredging, breakwaters, o shore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identi ed based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classi cation established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth veri cation work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or eld work. There may be occasional di erences in polygon boundaries or classi cations between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuber cid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may de ne and describe wetlands in a di erent manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to de ne the limits of proprietary jurisdiction of any Federal, state, or local

government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modi cations within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning speci ed agency regulatory programs and proprietary jurisdictions that may a ect such activities.

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APPENDIX C

Special-Status Species Table

Special-Status Species Table

Big Sur, Partington Ridge, Pfeiffer Point, Point Sur, Carmel Valley, Mt. Carmel, Soberanes Point, and Ventana Cones Quadrangles

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
MAMMALS			
Corynorhinus townsendii Townsend's big-eared bat	-- / CSC / --	Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees.	**Low** Suitable night roost habitat is located within the evaluation area. The CNDDB records 3 occurrences within the reviewed quadrangles, with the closes one being a day roost site in building 3 mi away. It is not likely that the species will be roosting within the evaluation area during construction activities.
Neotoma macrotis luciana Monterey dusky-footed woodrat	-- / CSC / --	Forest and oak woodland habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	**Moderate** Suitable nesting habitat is present within the evaluation area.
Taxidea taxus American badger	-- / CSC / --	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	**Unlikely** No suitable habitat is present within or adjacent to the evaluation area.
BIRDS			
Agelaius tricolor Tricolored blackbird	-- / ST / --	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	**Low** No suitable habitat is present within the evaluation area.
Brachyramphus marmoratus Marbled murrelet (nesting)	FT / SE / --	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	**Unlikely** No suitable habitat is present within the evaluation area.
Charadrius alexandrinus nivosus Western snowy plover	FT / CSC / --	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	**Unlikely** No suitable habitat is present within the evaluation area.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FT / SE / --	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	**Low** Suitable habitat is present adjacent to the evaluation area, however there are no occurrences recorded in the CNDDB for the reviewed quadrangles.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
Cypseloides niger Black swift	-- / CSC / --	Regularly nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats.	**Unlikely** No suitable habitat is present within the evaluation area.
Empidonax traillii extimus Southwestern willow flycatcher (nesting)	FE / SE / --	Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (*Salix sp*.), tamarisk (*Tamarix ramosissima)*, or both.	**Low** Suitable habitat is present adjacent to the evaluation area, however there are no occurrences recorded in the CNDDB for the reviewed quadrangles.
Fratercula cirrhata Tufted puffin (nesting colony)	-- / CSC / --	Nests on islands and, less commonly, on coastal cliffs. Most common at nesting colonies and on nearby marine pelagic and subtidal waters from late March to September. Requires islands free from human disturbance with soil suitable for digging burrows or with natural rock cavities.	**Unlikely** No suitable habitat is present within the evaluation area.
Gymnogyps californianus California condor	FE / SE / --	Roosting sites in isolated rocky cliffs, rugged chaparral, and pine covered mountains 2000-6000 feet above sea level. Foraging area removed from nesting/roosting site (includes rangeland and coastal area - up to 19 mile commute one way). Nest sites in cliffs, crevices, potholes.	**Low** No suitable nesting or roosting habitat is present within the evaluation area.
Hydrobates homochroa Ashy storm-petrel	-- / CSC / --	Tied to land only to nest, otherwise remains over open sea. Nests in natural cavities, sea caves, or rock crevices on offshore islands and prominent peninsulas of the mainland.	**Unlikely** No suitable habitat is present within the evaluation area.
Sterna antillarum browni California least tern (nesting colony)	FE / SE&CFP /--	Found in seacoasts, beaches, bays, estuaries, lagoons, lakes and rivers, breeding on sandy or gravelly beaches and banks of rivers or lakes, rarely on flat rooftops of buildings. Since 1970, most nesting has occurred from Santa Barbara to San Diego County.	**Low** Marginally suitable habitat is located adjacent to evaluation area; however, it is located outside of their known range and there are no occurrences recorded in the CNDDB for the reviewed quadrangles.
Vireo bellii pusillus Least Bell's vireo (nesting)	FE / SE / --	Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	**Low** Suitable habitat is located within and adjacent to the evaluation area, however there are no occurrences recorded in the CNDDB for the reviewed quadrangles.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
REPTILES AND AMPHIBIANS			
Actinemys pallida Southwestern pond turtle	CT / CSC / --	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks. Nests are typically excavated in compact, dry soils in areas characterized by sparse vegetation, usually short grasses or forbs up to 100 meters from aquatic habitats.	**High** Suitable nesting and overwintering habitat is present within the evaluation area. The CNDDB reports one occurrence from 1995 that overlaps with the evaluation area. Additionally, CDFW has consistently observed the species at a location on the Big Sur River 175 feet from the evaluation area. State Parks biologists have also observed the species within the Andrew Molera State Park (AMSP) at the Big Sur River Lagoon approximately one mile from the evaluation area in 2009 and approximately 950 ft downriver from the evaluation area in 2004.
Ambystoma californiense California tiger salamander	FT / ST / --	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	**Unlikely** No suitable habitat is present within the evaluation area.
Anniella pulchra Northern California legless lizard	-- / CSC / --	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	**Low** Marginally suitable habitat is present within the evaluation area. The CNDDB reported one occurrence of the species over 12 miles away in different habitat.
Phrynosoma blainvillii Coast horned lizard	-- / CSC / --	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	**Low** No suitable habitat is located within the evaluation area.
Rana boylii Foothill yellow-legged frog	FE / SE / --	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.	**Moderate** Suitable habitat exists within and adjacent to the evaluation area. The CNDDB reports a historical presence of the species within the adjacent Big Sur River.
Rana draytonii California red-legged frog	FT / CSC / --	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	**High** Suitable habitat exists within and adjacent to the evaluation area in riparian habitat. The CNDDB reports 42 occurrences in the reviewed quadrangles, the closest just 1.5 mi downstream in the Big Sur River. In addition, State Parks biologists have observed this species within the Big Sur River inside AMSP as recently as 2023.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
Spea hammondii Wester spadefoot	FC / CSC / --	Grasslands with shallow temporary pools are optimal habitats for the western spadefoot. Occur primarily in grassland habitats but can be found in valley and foothill woodlands. Vernal pools are essential for breeding and egg laying.	**Low** No suitable breeding habitat is present within the evaluation area or in immediate vicinity.
Taricha torosa Coast range newt	-- / CSC / --	Occurs mainly in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral but is known to occur in grasslands and mixed conifer types. Seek cover under rocks and logs, in mammal burrows, rock fissures, or man-made structures such as wells. Breed in intermittent ponds, streams, lakes, and reservoirs.	**Low** No suitable breeding habitat is present within or adjacent to the evaluation area.
FISH			
Eucyclogobius newberryi Tidewater goby	FE / CSC / --	Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County.	**Unlikely** No suitable habitat is present within the evaluation area.
Oncorhynchus mykiss irideus Steelhead (south-central California coast DPS)	FT / -- / --	Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams.	**Unlikely** No suitable habitat is present within the evaluation area.
INVERTEBRATES			
Branchinecta lynchi Vernal pool fairy shrimp	FT / -- / --	Require ephemeral pools with no flow. Associated with vernal pool/grasslands from near Red Bluff (Shasta County), through the central valley, and into the South Coast Mountains Region. Require ephemeral pools with no flow.	**Unlikely** No suitable habitat is present within the evaluation area.
Danaus plexippus Monarch butterfly (California overwintering population)	-- / -- / --	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	**Unlikely** No suitable overwintering habitat is present within the evaluation area.
Euphilotes enoptes smithi Smith's blue butterfly	FE / -- / --	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Eriogonum latifolium* and *E. parvifolium*.	**Low** No suitable habitat or host plants are present within the evaluation area, however the CNDDB records 33 occurrences within the reviewed quadrangles with the closest located 2 mi away.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
PLANTS			
Abies bracteata Bristlecone fir	-- / -- / 1B	Endemic to Santa Lucia Mountains. Broadleaved upland forest, chaparral, and lower montane coniferous forest on rocky soils at elevations of 183-1600 meters. Evergreen tree in the Pinaceae family.	**Not Present** No suitable habitat present, evaluation area exists outside of known elevation range for the species.
Agrostis blasdalei Blasdale's bent grass	-- / -- / 1B	Coastal bluff scrub, coastal dunes, and coastal prairie at elevations from 0-150 meters. Perennial rhizomatous herb in the Poaceae family. Blooms May – July.	**Not Present** No suitable habitat is present within the evaluation area.
Arctostaphylos edmundsii Little sur manzanita	-- / -- / 1B	Coastal bluff scrub and chaparral on sandy soils at elevations of 30-105 meters. Evergreen shrub in the Ericaceae family; blooms November-April.	**Not Present** No suitable habitat is present within the evaluation area. Species was not observed during the April 2023 survey.
Arctostaphylos hookeri spp. *hookeri* Hooker's manzanita	— / — / 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June.	**Not Present** Evaluation area is located outside of the known elevation range for this species. No suitable habitat is present within the evaluation area.
Arctostaphylos montereyensis Toro manzanita	— / — / 1B	Maritime chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 30-730 meters. Evergreen shrub in the Ericaceae family; blooms February-March.	**Not Present** Evaluation area is located outside of the known elevation range for this species. No suitable habitat is present within the evaluation area.
Arenaria paludicola Marsh sandwort	FE / SE / 1B	Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August.	**Not Present** No suitable habitat is present within the evaluation area.
Carex obispoensis San Luis Obispo sedge	-- / -- / 1B	Closed-cone coniferous forests, chaparral, coastal prairie, coastal scrub, and valley foothill grasslands, often on serpentinite seeps and clay soils, but also sometimes on gabbro soils, at elevations of 10-820 meters. Perennial rhizomatous herb in the Cyperaceae family; blooms April-June.	**Not Present** Marginally suitable habitat is present within the evaluation area. Species was not observed during the April 2023 survey.
Carlquistia muirii Muir's tarplant	-- / -- / 1B	Montane chaparral and lower and upper montane coniferous forest at elevations of 1100-2500 meters. Perennial rhizomatous herb in the Asteraceae family; blooms July-August	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Cirsium occidentale var. *compactum* Compact cobwebby thistle	-- / -- / 1B	Chaparral, coastal dunes, coastal scrub, and coastal prairie at elevations of 5-150 meters. Perennial herb in the Asteraceae family blooms April-June.	**Not Present** Suitable habitat is present within the evaluation area. The CNDDB reports an occurrence 1.1 mi away, and Cirsium species were observed within the evaluation area during the April 2023 botanical survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
Clarkia jolonensis Jolon clarkia	-- / -- / 1B	Cismontane woodland, chaparral, riparian woodland, and coastal scrub at elevations of 20-660 meters. Annual herb in the Onagraceae family; blooms April-June.	**Not Present** Marginally suitable habitat is present within the evaluation area, and the CNDDB reports and occurrence 3.2 miles away along the Big Sur River. However, none was observed in the April 2023 botanical survey.
Cordylanthus rigidus spp. *littoralis* Seaside bird's beak	— / SE / 1B	Closed-cone coniferous forests, maritime chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Annual hemi-parasitic herb in the Orobanchaceae family; blooms April-October.	**Not Present** Suitable habitat is present within the evaluation area; however, none was observed during the April 2023 survey.
Dacryophyllum falcifolium Tear drop moss	-- / -- / 1B	North coast coniferous forests on carbonate soils at elevations of 50-275 meters. Moss. Known only in Monterey and Santa Cruz counties.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Delphinium hutchinsoniae Hutchinson's larkspur	-- / -- / 1B	Broadleaved upland forest, chaparral, coastal scrub, and coastal prairie at elevations of 0-427 meters. Perennial herb in the Ranunculaceae family; blooms March-June.	**Not Present** Suitable habitat is present within the evaluation area; however, none was observed during the April 2023 survey.
Delphinium umbraculorum Umbrella larkspur	-- / -- / 1B	Cismontane woodland at elevations of 400-1600 meters. Perennial herb in the Ranunculaceae family; blooms April-June.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Ericameria fasciculata Eastwood's goldenbush	— / — / 1B	Openings in closed-cone coniferous forest, maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 30-275 meters. Evergreen shrub in the Asteraceae family; blooms July-October.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Eriogonum nortonii Pinnacles buckwheat	— / — / 1B	Chaparral and valley and foothill grassland on sandy soils, often on recent burns, at elevations of 300-975 meters. Annual herb in the Polygonaceae family; blooms May-September.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Erysimum ammophilum Sand-loving wallflower	— / — / 1B	Openings in maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June.	**Not Present** No suitable habitat is present within the evaluation area.
Fritillaria falcata Talus fritillary	-- / -- / 1B	Chaparral, cismontane woodland, and lower montane coniferous forest on serpentine or often talus soils at elevations of 300-1525 meters. Bulbiferous, perennial herb in the Liliaceae family; blooms March-May.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Fritillaria liliacea Fragrant fritillary	-- / -- / 1B	Cismontane woodland, coastal prairie, coastal scrub, and valley and foothill grassland, often serpentinite, at elevations of 3-410 meters. Bulbiferous perennial herb in the Liliaceae family; blooms February-April.	**Not Present** Marginally suitable habitat is present within the evaluation area; however, none was observed during the April 2023 survey.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
Galium californicum ssp. *luciense* Cone Peak bedstraw	-- / -- / 1B	Broadleaved upland forest, chaparral, cismontane woodland, and lower montane coniferous forest at elevations of 400-1525 meters. Perennial herb in the Rubicaceae family; blooms March-September.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Galium clementis Santa Lucia bedstraw	-- / -- / 1B	Lower and upper montane coniferous forest on granitic or serpentine rocky soils at elevations of 1130-1780 meters. Perennial herb in the Rubicaceae family; blooms May-July.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Grimmia torenii Toren's grimmia	-- / -- / 1B	Endemic to California. Occurrences are known from Lake, Mendocino, Contra Costa, and Santa Cruz Counties. Found in the Coast Range at elevations of 325-1160 meters. Occurs on pillow basalts and some sand stones. Often serpentine soil occurs in areas occupied by this species. A moss in the Gimmiaceae family.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Malacothamnus palmeri var. *lucianus* Arroyo Seco bush-mallow	-- / -- / 1B	Chaparral, cismontane woodland, meadows, and seeps at elevations of 10-915 meters. Perennial deciduous shrub in the Malvaceae family; blooms: April-August.	**Not Present** Suitable habitat is present within the evaluation area. The April 2023 botanical survey reported mallow species present, and the CNDDB records 3 occurrences within the reviewed quadrangles, with the closes located 0.3 miles away upriver from the evaluation area.
Malacothrix saxatilis var. *arachnoidea* Carmel Valley malacothrix	— / — / 1B	Chaparral and coastal scrub on rocky soils at elevations of 25-1036 meters. Perennial rhizomatous herb in the Asteraceae family; blooms June-December.	**Not Present** No suitable habitat is present within the evaluation area.
Meconella oregana Oregon meconella	— / — / 1B	Coastal prairie and coastal scrub at elevations of 250-620 meters. Annual herb in the Papaveraceae Family; blooms March-April.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Pedicularis dudleyi Dudley's lousewort	-- / SR / 1B	Maritime chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland at elevations of 60-900 meters. Perennial herb in the Orbanchaceae family; blooms April-June.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Pinus radiata Monterey pine	— / — / 1B	Closed-cone coniferous forest and cismontane woodland at elevations of 25-185 meters. Evergreen tree in the Pinaceae family. Only three native stands in CA at Ano Nuevo, Cambria, and the Monterey Peninsula; introduced in many areas.	**Not Present** The evaluation area does not contain suitable habitat and is outside of the species' known range.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Evaluation area
Piperia yadonii Yadon's rein orchid	FE / — / 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms February-August.	**Not Present** Marginally suitable habitat is present within the evaluation area; however it is potentially out of species range as the southernmost reported occurrence in the CNDDB is about 8 miles north of site in maritime chaparral.
Plagiobothrys uncinatus Hooked popcorn-flower	— / — / 1B	Chaparral, cismontane woodlands, and valley and foothill grasslands on sandy soils at elevations of 300-760 meters. Annual herb in the Boraginaceae family; blooms April-May.	**Not Present** No suitable habitat is present within the evaluation area. Evaluation area exists outside of the known elevation range of the species.
Rosa pinetorum Pine rose	— / — / 1B	Closed-cone coniferous forest at elevations of 2-300 meters. Perennial shrub in the Rosaceae family; blooms May-July. Possible hybrid of *R. spithamea*, *R. gymnocarpa*, or others; further study needed.	**Not Present** No suitable habitat is present within the evaluation area.
Sanicula maritima Adobe sanicle	-- / -- / 1B	Chaparral, coastal prairie, meadows, seeps, and valley and foothill grassland on clay or serpentine soils at elevations of 3-240 meters. Perennial herb in the Apiaceae family; blooms February-May.	**Not Present** Marginally suitable habitat is present; however, the necessary soil types are not. None was observed in the April 2023 botanical survey.
Tortula californica California screw moss	— / — / 1B	Valley and foothill grassland and chenopod scrub on sandy soils at elevations of 10-1460 meters. Moss in the Pottiaceae family.	**Not Present** Marginally suitable habitat is present within the evaluation area. The CNDDB only records one occurrence within the reviewed quadrangles 12 mi away, and none was observed during the April 2023 botanical survey.
Trifolium polyodon Pacific Grove clover	— / SR / 1B	Mesic areas of closed-cone coniferous forest, coastal prairie, meadows and seeps, and valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-July.	**Not Present** Suitable habitat is present within the evaluation area; however, it is located outside of the species' known and limited range and was not observed during the April 2023 botanical survey.

STATUS DEFINITIONS

Federal

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
FC = Candidate for listing under the federal Endangered Species Act
UR = Species that have been petitioned for listing under the ESA and for which a 90 day and/or 12 Month finding has not been published in the Federal Register, as well as species being reviewed through the candidate process but the CNOR has not yet been signed
-- = no listing

State

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SC = Candidate for listing under California Endangered Species Act
SR = listed as Rare under the California Endangered Species Act
CFP = California Fully Protected Species
CSC = CDFW Species of Concern
-- = no listing

California Native Plant Society

1B = California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
2B = California Rare Plant Rank 2B species; plants rare, threatened, or endangered in California, but more common elsewhere
-- = no listing

POTENTIAL TO OCCUR

Present = known occurrence of species within the site and presence of suitable habitat conditions; or observed during field surveys
High = known occurrence of species in the immediate vicinity; presence of suitable habitat conditions
Moderate = known occurrence of species in the vicinity; presence of suitable habitat conditions
Low = species known to occur in the vicinity; presence of marginal habitat conditions
Unlikely = species not known to occur in the vicinity and/or no suitable habitat is present within the site
Not Present = species was not observed during surveys or site lacks specialized habitat features to support the species

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Appendix B

Geotechnical Report

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GEOTECHNICAL INVESTIGATION

VENTANA WILDLIFE SOCIETY
S'MORES PROJECT
ANDREW MOLERA STATE PARK
BIG SUR, CALIFORNIA

FOR
DENISE DUFFY & ASSOCIATES
MONTEREY, CALIFORNIA

Pacific Crest
ENGINEERING INC

CONSULTING GEOTECHNICAL ENGINEERS

2347-M502-C41
OCTOBER 2023
www.4pacific-crest.com

October 4, 2023 Project No. 2347-M502-C41

Ms. Oliviya Wyse
Denise Duffy & Associates, Inc.
947 Cass Street, Suite 5
Monterey, CA 95040

Subject: **Geotechnical Investigation – Design Phase**
S'MORE Project – Andrew Molera State Park
Big Sur, California

Dear Ms. Wyse,

In accordance with your authorization, we have performed a geotechnical investigation for the proposed S'MORE Project in Big Sur, California.

The accompanying report presents our conclusions and recommendations as well as the results of the geotechnical investigation on which they are based. The conclusions and recommendations presented in this report are contingent upon our review of the plans during the design phase of the project, and our observation and testing during the construction phase of the project.

Very truly yours,

PACIFIC CREST ENGINEERING INC.

Prepared by:

Chris Johnson, PE
Principal Civil Engineer
CE 82630
Expires, 9/30/24

Reviewed by:

Elizabeth Mitchell, GE
Associate Geotechnical Engineer
GE 2718
Expires 12/31/24

TABLE OF CONTENTS

GEOTECHNICAL INVESTIGATION REPORT
S'MORE Project -Andrew Molera State Park
Big Sur, California

I. INTRODUCTION

PURPOSE AND SCOPE

This report describes the geotechnical investigation and presents our conclusions and recommendations for the proposed S'MORE Project located in Andrew Molera State Park in Big Sur, California. For purposes of this report, "site" refers to the approximately 1¾-acre meadow located to the southeast of the entrance to Andrew Molera State Park located at 45500 Hwy-1 in Big Sur, California.

Our scope of services for this project has consisted of:

1. Site reconnaissance to observe the existing conditions.

2. Review of the following published maps:

   - Geologic Map of the Point Sur, Big Sur, and Pfeiffer Point Quadrangles, Dibblee (2007)
   - Map Showing Liquefaction Susceptibility of Monterey County, California, Rosenberg, 2001.
   - U.S. Geological Survey, Quaternary fault and fold database, USGS website (https://www.usgs.gov/natural-hazards/earthquake-hazards/faults) accessed Dec. 2022.
   - Geographic Information System – Monterey County, "Geologic Hazards Map" https://www.co.monterey.ca.us/government/about/gis-mapping-data#main_frame, accessed October 2023.

3. The digging and logging of five (5) test trenches.

4. Laboratory analysis of retrieved soil samples.

5. Engineering analysis of the field and laboratory test results.

6. Review of the preliminary site plan showing the locations of the proposed improvements prepared by Zander Design dated March 17, 2023.

7. Preparation of this report documenting our investigation and presenting geotechnical recommendations for the design and construction of the project.

PROJECT LOCATION

The subject site is situated to the southeast of the entrance to Andrew Molera State Park located at 45500 Hwy-1 in Big Sur, California. Please refer to the Regional Site Map, Figure No. 1, in Appendix A for the general vicinity of the project site, which is approximately located by the following coordinates:

Latitude = 36.283286 degrees
Longitude = -121.840742 degrees

PROPOSED IMPROVEMENTS

Based on our review of the preliminary site plan referenced above, it is our understanding that the project will include a new restroom building, two group tent sites, picnic tables, an amphitheater, a rustic outdoor kitchen, covered dining area, lockers, and parking spots. The general locations of the existing and proposed improvements relative to the site are illustrated on Figure No. 2, in Appendix A. If the proposed development differs significantly from that described above, our office should be contacted for additional recommendations.

II. INVESTIGATION METHODS

FIELD INVESTIGATION

Five, 24-inch-wide test trenches were dug at the site on August 31, 2032. The approximate locations of the test borings are shown on Figure No. 2, in Appendix A. The excavation method used was hydraulically operated track mounted mini excavator. An engineer from Pacific Crest Engineering Inc. was present during the drilling operations to log the soil encountered.

The soils encountered in the trenches were logged in the field and visually described in accordance with the Unified Soil Classification System (ASTM D2488) as described in the Trench Log Explanation, Figures No. 5 and 9, in Appendix A. The soil classification was verified upon completion of laboratory testing in accordance with ASTM D2487.

Appendix A contains the site plan showing the locations of the test trenches, our trench logs and an explanation of the soil classification system used. Stratification lines on the trench logs are approximate as the actual transition between soil types may be gradual.

LABORATORY TESTING

The laboratory testing program was developed to aid in evaluating the engineering properties of the materials encountered at the site. Laboratory tests performed include:

- Moisture Density relationships in accordance with ASTM D2937.
- Gradation testing in accordance with ASTM D1140.
- Atterberg Limits testing in accordance with ASTM D4318

The results of the laboratory testing are presented on the trench logs opposite the sample tested and/or presented graphically in Appendix A.

III. FINDINGS AND ANALYSIS

GEOLOGIC SETTING

The surficial geology in the area of the project site is mapped as Alluvial Deposits, Qa (Dibblee, 2007). These deposits are described by Dibblee as *"Alluvial gravel, sand and silt/clay of valley areas and flood plains."* The native soils encountered during our field investigation are generally consistent with this description.

SURFACE CONDITIONS

The subject site is located approximately 4000 feet east of the Pacific Ocean. The relatively flat meadow is surrounded by steeper topography typical of the Big Sur area. The meadow generally drains towards the Big Sur River located to the south. The site is covered with native grasses, shrubs and trees typical of the Big Sur area.

At the time of our field investigation, the site was relatively undeveloped and occupied by an unpaved access road, access gate, walking trails, and underground electrical and water lines.

SUBSURFACE CONDITIONS

Our subsurface exploration consisted of five (5) exploratory trenches that were excavated as close to the proposed improvement footprints as possible. The trenches extended 5 to 6 feet below existing grades. The soil profiles and classifications, laboratory test results and groundwater conditions encountered for each test boring are presented in the Logs of Test Pits, in Appendix A. The general subsurface conditions are described below.

Subsurface conditions encountered within the borings generally consisted of gravel, sand with silt, and silty sand, with varying degrees of gravel. These sandy soils were generally poorly graded and fine to medium grained. The gravels ranged in size from 1" in diameter up to 4" diameter or greater. Boulders were encountered in some locations up to 14" or greater in diameter

Groundwater was not encountered within the trenches during our field investigation. The groundwater conditions described in this report reflect the conditions encountered during our August 2023 field investigation at the specific locations trenched. It must be anticipated that regional groundwater tables may vary with location and could fluctuate with variations in rainfall, runoff, irrigation and other changes to the conditions encountered at the time our observations were made.

Please refer the Logs of Test Pits in Appendix A, for a more detailed description of the subsurface conditions encountered in each of our exploratory trenches at the subject site.

FAULTING AND SEISMICITY

Faulting

Mapped faults which have the potential to generate earthquakes that could significantly affect the subject site are listed in Table No. 3. The fault distances are approximate distances based on the U.S. Geological Survey, Quaternary fault and fold database, accessed in January 2023 from the USGS website (https://www.usgs.gov/programs/earthquake-hazards/faults) and overlaid onto Google Earth.

Table No. 1 - Distance to Significant Faults

Fault Name	Distance (miles)	Direction
San Gregorio	½	Northeast
Pfeiffer Point	5¼	Southwest
Monterey Bay - Tularcitos	14	Northeast
Reliz	23	Northeast
San Andreas	40	Northeast

Seismic Shaking and CBC Design Parameters

Due to the proximity of the site to active and potentially active faults, it is reasonable to assume the site will experience high intensity ground shaking during the lifetime of the project. Structures founded on thick, soft soil deposits are more likely to experience more destructive shaking, with higher amplitude and lower frequency, than structures founded on bedrock. Generally, shaking will be more intense closer to earthquake epicenters. Thick, soft soil deposits large distances from earthquake epicenters, however, may result in seismic accelerations significantly greater than expected in bedrock.

Selection of seismic design parameters should be determined by the project structural designer. The site coefficients and seismic ground motion values shown in the table below were developed based on CBC 2022 incorporating the ASCE 7-16 standard, and the project site location.

Table No. 2 - 2022 CBC Seismic Design Parameters [1]

Seismic Design Parameter	ASCE 7-16 Value
Site Class	D[2,3]
Spectral Acceleration for Short Periods	Ss = 1.172g
Spectral Acceleration for 1-second Period	S_1 = 0.447g
Short Period Site Coefficient	Fa = 1.031
1-Second Period Site Coefficient	Fv = N/A[2]
MCE Spectral Response Acceleration for Short Period	S_{MS} = 1.209g
MCE Spectral Response Acceleration for 1-Second Period	S_{M1} = N/A[2]
Design Spectral Response Acceleration for Short Period	S_{DS} = 0.806g
Design Spectral Response Acceleration for 1-Second Period	S_{D1} = N/A[2]

Note 1: Design values have been obtained by using the ASCE Hazard Tool at https://asce7hazardtool.online

Note 2: Per Section 11.4.8 of ASCE 7-16, a ground motion hazard analysis may be required for Site Class D sites with S_1 greater than or equal to 0.2. The values provided in this table assume that the value of the seismic response coefficient Cs can be determined by the structural engineer based on the Exceptions as detailed in Section 11.4.8. This should be verified by the structural designer and Pacific Crest Engineering, Inc. should be contacted for revised Table 2 parameters if these Exceptions are not applicable to the project.

Note 3: The site would normally be Site Class F because it is underlain by potentially liquefiable soils. If the fundamental period of vibration of the structures is less than 0.5 seconds, the site class can be determined by assuming there is no liquefaction (ASCE 7-16 Section 20.3.1). Therefore, Site Class D was selected for the project site.

The recommendations of this report are intended to reduce the potential for structural damage to an acceptable risk level, however strong seismic shaking could result in damage to improvements and the need for post-earthquake repairs. It should be assumed that exterior improvements such as pavements or sidewalks may need to be repaired or replaced following strong seismic shaking.

GEOTECHNICAL HAZARDS

A quantitative analysis of geotechnical hazards was beyond our scope of services for this project. In general however, the geotechnical hazards associated with the project site include seismic shaking (discussed above), ground surface fault rupture, liquefaction, lateral spreading, and landsliding. A qualitative discussion of these hazards is presented below.

Ground Surface Fault Rupture

Pacific Crest Engineering Inc. has not performed a specific investigation for the presence of active faults at the project site. Based upon our review of the Monterey County GIS Hazard Maps, the project site is not transected by a mapped active or potentially active fault.

Ground surface fault rupture typically occurs along the surficial traces of active faults during significant seismic events. Since the nearest known active, or potentially active fault trace is mapped approximately ½-mile from the site, it is our opinion that the potential for ground surface fault rupture to occur at the site may be considered low.

Liquefaction and Lateral Spreading

Based upon our review of the Monterey County GIS Hazard Maps, the project site is mapped within a high liquefaction hazard zone.

Liquefaction is a phenomenon that can occur in saturated soil that has restricted drainage and is subject to seismic shaking. Liquefaction occurs when the soil grains are cyclically accelerated such that they begin to loose contact, allowing pressurized pore water to flow between soil particles. The soil, which derives its strength from point-to-point contact between grains, can become fluidized, resulting in significantly lower shear strengths. When the cyclic accelerations cease, the water pressure dissipates and the soil grains settle, regaining contact. Settlement can be differential due to the presence of non-homogeneous earth materials and due to differential densification and dewatering processes. Liquefaction can result in bearing failure and differential ground settlement, which can be highly damaging to structures, pavements and utilities.

A quantitative liquefaction analysis was beyond our scope of services for this project and was not performed. Therefore, we cannot form an opinion as to the potential magnitude of seismically induced settlement that may be realized at the site. In addition, even if liquefaction was not initiated during a major earthquake, severe ground shaking could result in some densification of the loose site soils and possibly settlement of the ground surface.

Liquefaction induced lateral spreading occurs when a liquefied soil mass fails toward an open slope face, or fails on an inclined topographic slope. The site is relatively flat, consequently the potential for lateral spreading may be considered low.

Landsliding

Based upon our review of the Monterey County GIS Hazard Maps, the project site is mapped within an area with a low potential for landsliding. Furthermore, the site and immediate vicinity are relatively flat to gently sloping. It is our opinion that the potential for shallow landsliding to occur and adversely affect the proposed development may be considered negligible.

Slope failures can also occur where surface drainage is allowed to concentrate onto unprotected slopes. Appropriate landscaping and good control of surface drainage around the project area becomes very important to reduce potential for shallow slumping of slopes. Erosion control measures should be implemented and maintained. Under no circumstances should surface runoff be directed toward, or discharged upon, any topographic slopes.

IV. DISCUSSION AND CONCLUSIONS

GENERAL

1. The results of our investigation indicate that the proposed improvements are feasible from a geotechnical engineering standpoint, provided our recommendations are included in the design and construction of the project.

2. Grading and foundation plans should be reviewed by Pacific Crest Engineering Inc. during their preparation and prior to contract bidding.

3. Pacific Crest Engineering Inc. should be notified at least four (4) working days prior to any site clearing and grading operations on the property in order to observe the stripping and disposal of unsuitable materials, and to coordinate this work with the grading contractor. During this period, a pre-construction conference should be held on the site, with at least the client or their representative, the grading contractor and one of our engineers present. At this meeting, the project specifications and the testing and inspection responsibilities will be outlined and discussed.

4. The findings, conclusions and recommendations provided in this report are based on the understanding that Pacific Crest Engineering will remain as Geotechnical Engineer of Record throughout the design and construction phase of the project. The validity of the findings, conclusions and recommendations contained in this report are dependent upon our review of project plans as well as an adequate testing and observation program during the construction phase. Field observation and testing must therefore be provided by a representative of Pacific Crest Engineering Inc., to enable us to form an opinion as to whether the extent of work related to earthwork or foundation excavation complies with the project plans, specifications and our geotechnical recommendations. Pacific Crest Engineering assumes no responsibility for any site work that is performed without the full knowledge and direct observation of Pacific Crest Engineering Inc.

PRIMARY GEOTECHNICAL CONSIDERATIONS

5. Based upon the results of our investigation, it is our opinion that the primary geotechnical issues associated with the design and construction of the proposed project include the following:

a. *Compressible Soils and Divergent Bearing Conditions*: Variable and compressible native soils underlie the proposed improvements. Foundations, concrete slabs-on-grade, and pavements underlain by compressible material may be subject to settlement and distress. In order to reduce potential settlement and distress we recommend that soils underlying proposed structure foundations be subexcavated and recompacted with engineered fill as detailed in the "Earthwork" section of this report.

b. *Boulders and Cobbles:* Our exploratory trenches encountered large cobbles and boulders during our investigation. Appropriate equipment should be selected prior to excavating these oversized materials. Secondly, these oversized materials if encountered during construction will

be too large to be used as engineered fill. The contractor should plan on segregating this oversized material out during the engineered fill placement operations.

c. *Excavation Conditions:* The surficial soils across the proposed development area are generally comprised of cohesionless soils which may be highly susceptible to collapse when excavated. The conditions may result in trench instability and collapse regardless of excavation depth. In order to reduce this risk, we recommend that all excavations be either sloped back to a stable gradient or shored. It must be understood that excavation safety and application of an appropriate shoring system(s) is the sole responsibility of the contractor. Refer to the Excavation and Shoring section of this report for additional recommendations.

d. *Surface Drainage:* The loose cohesionless surficial soils that predominate the proposed development area are highly erodible. Consequently, the collection and discharge of storm water must be conducted in a controlled manner. Refer to the *"Surface Drainage"* and *"Erosion Control"* sections of the report for additional recommendations.

e. *Strong Seismic Shaking:* The project site is located within a seismically active area and strong seismic shaking is expected to occur within the design lifetime of the project. Improvements should be designed and constructed in accordance with the most current CBC and the recommendations of this report to minimize reaction to seismic shaking. Structures built in accordance with the latest edition of the California Building Code have an increased potential for experiencing relatively minor damage which should be repairable, however strong seismic shaking could result in architectural damage and the need for post-earthquake repairs.

V. RECOMMENDATIONS

EARTHWORK

Clearing and Stripping

1. The initial preparation of the site may consist of demolition of portions of any existing structures and their foundations and removal of designated trees and debris. All foundation elements from existing structures must be completely removed from the improvement areas. Tree removal should include the entire stump and root ball. Septic tanks and leaching lines, if found, must be completely removed. The extent of this soil removal will be designated by a representative of Pacific Crest Engineering Inc. in the field. This material must be removed from the site.

2. Any voids created by the removal of encountered structures, old foundations, tree and root balls, septic tanks, and leach lines must be backfilled with properly compacted engineered fill which meets the requirements of this report.

3. Any wells encountered shall be capped in accordance with the requirements and approval of the County Health Department. The strength of the cap shall be equal to the adjacent soil and shall not be located within 5 feet of a structural footing.

4. Surface vegetation, tree roots and organically contaminated topsoil should then be removed ("stripped") from the area to be graded. In addition, any remaining debris or large rocks must also be removed (this includes asphalt or rocks greater than 2 inches in greatest dimension). This material may be stockpiled for future landscaping.

5. It is anticipated that the depth of stripping may be 2 to 4 inches. Final required depth of stripping must be based upon visual observations by a representative of Pacific Crest Engineering Inc., in the field. The required depth of stripping will vary based upon the type and density of vegetation across the project site and with the time of year.

Subgrade Preparation

6. As discussed above, it is likely that there are areas of man-made fill and deleterious material at the site that our field investigation did not detect. Areas of man-made fill and deleterious material, if encountered, will need to be completely excavated to undisturbed native material. The excavation process should be observed and the extent designated by a representative of Pacific Crest Engineering Inc., in the field. Any voids created by fill removal must be backfilled with properly compacted engineered fill.

7. Following the stripping and backfilling of voids, the exposed soils in the construction areas should be processed as follows:

a. *New Restroom Building, Covered Dining Area, & Amphitheater:* The exposed soils with the restroom building envelope, covered dining area and amphitheater foundations should be subexcavated to a minimum depth of 18 inches below the bottom of foundation elevation or 30 inches below design subgrade elevation, whichever is deeper. The excavation should extend a minimum of 3 feet horizontally from the outside edge of the foundation system. The base of the excavation should then be scarified a minimum of 8-inches, moisture conditioned and recompacted in accordance with the recommendations of this report. The building pads should then be backfilled to design subgrade elevation with engineered fill conforming to the recommendations of this report.

b. *Exterior Concrete Slab-On-Grade, Fire Pits, Flatwork Areas and Other Minor Structures:* The exposed soils in flatwork, exterior concrete slab-on-grade, and pavement areas should be subexcavated 18 inches below bottom of slab. The bottom of excavation should then be scarified to a minimum depth of 8 inches, moisture conditioned, and compacted as engineered fill as outlined below. The recompacted sections should extend a minimum of 2 feet horizontally beyond the relative flatwork, exterior concrete slab-on-grade, and pavement areas.

8. Final subexcavation depths may be modified by a representative of Pacific Crest Engineering Inc., in the field.

9. Excavations made adjacent to existing footings must not extend below a line drawn outward at a gradient of 2:1 (H:V) from the bottom outside edge of the footing.

10. Depending on the time of year and level of site disturbance, wet and soft subgrade soils may be encountered during construction. If wet or unstable subgrades are encountered, they may need to be subexcavated and replaced with stabilization fabric, crushed rock or other materials to create a stable working surface. The depth of over-excavations and method used should be determined in the field at the time of construction. All subexcavations should be observed by a representative of Pacific Crest Engineering Inc. and modified as necessary to establish a stable subgrade.

Material for Engineered Fill

11. Native or imported soil proposed for use as engineered fill should meet the following requirements:

a. free of organics, debris, and other deleterious materials,
b. free of "recycled" materials such as asphaltic concrete, concrete, brick, etc.,
c. granular in nature, well graded, and contain sufficient binder to allow utility trenches to stand open,
d. free of rocks in excess of 2 inches in size.

12. In addition to the above requirements, import fill should have a Plasticity Index between 4 and 12, and a minimum Resistance "R" Value of 30, and be non-expansive.

13. Samples of any proposed imported fill planned for use on this project should be submitted to Pacific Crest Engineering Inc. for appropriate testing and approval not less than ten (10) working days before the anticipated jobsite delivery. This includes proposed import trench sand, drain rock and for aggregate base materials. Imported fill material delivered to the project site without prior submittal of samples for appropriate testing and approval must be removed from the project site.

Engineered Fill Placement and Compaction

14. Following any necessary subexcavations and/or subgrade preparation, areas should be brought up to design grades with engineered fill that is moisture conditioned and compacted as described below.

15. Engineered fill should be placed in maximum 8-inch lifts, before compaction, at a moisture content which is within 1 to 3 percent of the laboratory optimum value.

16. The soil on the project site should be compacted as follows:

a. In pavement areas the upper 8 inches of subgrade, and all aggregate subbase and aggregate base, should be compacted to a minimum of 95% of its maximum dry density,
b. In pavement areas all utility trench backfill should be compacted to 95% of its maximum dry density,
c. All remaining soil on the project site should be compacted to a minimum of 90% of its maximum dry density.

17. The maximum dry density will be obtained from a laboratory compaction curve run in accordance with ASTM Procedure #D1557. This test will also establish the optimum moisture content of the material. Field density testing will be performed in accordance with ASTM Test #D6938 (nuclear method).

18. We recommend field density testing be performed in maximum 1-foot elevation differences. In general terms, we recommend at least one compaction test per 100 linear feet of utility trench or retaining wall backfill, and at least one compaction test per 1,000 square feet of building or structure area. This is a subjective value and may be changed by the geotechnical engineer based on a review of the final project layout and exposed field conditions.

Cut and Fill Slopes

19. No cut or fill slopes are currently proposed for this project. Should that assumption change, our office should be contacted to provide additional recommendations.

Soil Moisture and Weather Conditions

20. If earthwork activities are done during or soon after the rainy season, the on-site soils and other materials may be too wet in their existing condition to be used as engineered fill. These materials may require a diligent and active drying and/or mixing operation to reduce the moisture content to the levels required to obtain adequate compaction as an engineered fill. If the on-site soils or other materials are too dry, water may need to be added. In some cases the time and effort to dry the on-site soil may be considered excessive, and the import of aggregate base may be required.

Utility Trench Backfill

21. Utility trenches that are parallel to the sides of the building should be placed so that they do not extend below a line sloping down and away at a 2:1 (horizontal to vertical) slope from the bottom outside edge of all footings.

22. Utility pipes should be designed and constructed so that the top of pipe is a minimum of 24 inches below the finish subgrade elevation of any road or pavement areas. Any pipes within the top 24 inches of finish subgrade should be concrete encased, per design by the project civil engineer.

23. For the purpose of this section of the report, backfill is defined as material placed in a trench starting one foot above the pipe, and bedding is all material placed in a trench below the backfill.

24. Unless concrete bedding is required around utility pipes, free-draining clean sand should be used as bedding. Sand bedding should be compacted to at least 95 percent relative compaction. Clean sand is defined as 100 percent passing the #4 sieve, and less than 5 percent passing the #200 sieve.

25. Approved imported clean sand or native soil should be used as utility trench backfill. Backfill in trenches located under and adjacent to structural fill, foundations, concrete slabs and pavements

should be placed in horizontal layers no more than 8 inches thick. This includes areas such as sidewalks, patios, and other hardscape areas. Each layer of trench backfill should be moisture conditioned and compacted to at least 95 percent relative compaction.

26. All utility trenches beneath perimeter footings should be backfilled with controlled density fill (such as 2-sack sand\cement slurry) to help minimize potential moisture intrusion below interior floors. The length of the plug should be at least three times the width of the footing or grade beam at the building perimeter, but not less than 36 inches. A representative from Pacific Crest Engineering Inc. should be contacted to observe the placement of slurry plugs. In addition, all utility pipes which penetrate through the footings, stem walls or grade beams (below the exterior soil grade) should also be sealed water-tight, as determined by the project civil engineer or architect.

27. Utility trenches which carry "nested" conduits (stacked vertically) should be backfilled with a control density fill (such as 2-sack sand\cement slurry) to an elevation one foot above the nested conduit stack. The use of pea gravel or clean sand as backfill within a zone of nested conduits is not recommended.

28. A representative from our firm should be present to observe the bottom of all trench excavations, prior to placement of utility pipes and conduits. In addition, we should observe the condition of the trench prior to placement of sand bedding, and to observe compaction of the sand bedding, in addition to any backfill planned above the bedding zone.

29. Jetting of the trench backfill is not recommended as it may result in an unsatisfactory degree of compaction.

30. Trenches must be shored as required by the local agency and the State of California Division of Industrial Safety construction safety orders.

Excavations and Shoring

31. As discussed above, the cohesionless soils that predominate the site may be susceptible to caving, resulting in excavation instability. The contractor should be aware of this condition and implement the necessary excavation shoring techniques.

32. It should be understood that on-site safety is the *sole responsibility* of the Contractor, and that the Contractor shall designate a *competent person* (as defined by CAL-OSHA) to monitor the slope excavation prior to the start of each workday, and throughout the work day as conditions change. The competent person designated by the Contractor shall determine if flatter slope gradients are more appropriate, or if shoring should be installed to protect workers in the vicinity of the slope excavation. Refer to Title 8, California Code of Regulations, Sections 1539-1543.

33. All excavations must meet the requirements of 29 CFR 1926.651 and 1926.652 or comparable OSHA approved state plan requirements.

34. Temporary shoring is not currently anticipated for this project. Should these requirements change, please contact our office for additional recommendations.

35. At the time this report was prepared, the project plans had not been completed and the foundation details had not been finalized. We request an opportunity to review these items during the design stages to determine if supplemental recommendations will be required.

Spread Footings

36. We recommend the proposed structures be supported by reinforced concrete spread foundations embedded into compacted engineered fill. This system should consist of continuous perimeter footings, in conjunction with continuous interior foundations. **Given the potentially liquefiable nature of the project site, isolated footings are not recommended.**

37. Building areas should be underlain by soil subgrades that have been prepared as outlined in the earthwork section of this report.

38. All footings must be trenched at least 18 inches into compacted engineered fill.

39. No footings shall be constructed with the intent of placing engineered fill against the footing after the footing is poured and counting that engineered fill as part of the embedment depth of the footing.

40. Footings constructed to the criteria above may be designed using the following parameters: bearing capacities:

a. Allowable bearing capacity = 2,000 psf for dead plus live loading with a 1/3rd increase for seismic or wind loading
b. Ultimate friction coefficient between foundations and underlying soil subgrade = 0.30
c. Ultimate passive resistance = 300 pounds per cubic foot

41. Passive soil resistance and friction on the base of the footing may be used in combination with no reduction.

42. Passive resistance between the sides of the footing and the adjacent soil is only applicable where concrete is placed neatly against undisturbed soil or engineered fill. Voids created by concrete forms should be backfilled with compacted engineered fill or concrete.

43. The upper 1 foot of soil should be ignored when calculating passive soil resistance.

44. In computing the pressures transmitted to the soil by the footings, the embedded weight of the footing may be neglected.

45. Footings located adjacent to utility trenches should be deepened so that the base of the foundation extends below an imaginary 1:1 plane that starts at the base of the trench/pad grade and extends upwards towards the footing.

46. No footing should be placed closer than 10 feet to the top of a fill slope nor 8 feet from the base of a cut slope.

47. No footing shall be placed on slopes steeper than 4:1 (h:v). **If the intent is to place the foundation on sloping ground which exceeds 4:1 (h:v), Pacific Crest Engineering Inc. should be contacted for an alternative pier and grade beam foundation design**.

48. All grade beams, thickened slab edges and other foundation elements which impart structure loads to the soil (from dead, live, wind or seismic loads) should be considered "footings" and constructed according to the recommendations of this section, including required depths below lowest adjacent soil grade.

49. The footing excavations must be free of loose material prior to placing concrete. The footing excavations should be thoroughly saturated prior to placing concrete.

50. Footing excavations must be observed by a representative of Pacific Crest Engineering Inc. before placement of formwork, steel and concrete to verify bedding into proper material.

51. The footings should contain steel reinforcement as determined by the project civil or structural engineer in accordance with applicable CBC or ACI Standards.

SLAB-ON-GRADE CONSTRUCTION

52. In addition to the recommendations presented below, design and construction of concrete slab-on-grade floors should also follow Section 4.505.2 of the 2023 California Green Building Standards Code, which includes installing a vapor retarder in direct contact with concrete and a mix design that addresses bleeding, shrinkage and curling.

53. Interior concrete slabs should bear upon non-expansive engineered fill that has been prepared as described in the Earthwork section of this report.

54. All exterior slabs, patios, walkways, etc., should be structurally independent of structural foundation system(s).

55. Interior slabs may be structurally integrated with the footings. If the slabs are constructed as "free floating" slabs, they should be provided with a minimum ¼ inch felt separation between the slab and footing. The slabs should be separated into approximately 15' x 15' square sections with dummy joints or similar type crack control devices.

56. All concrete slabs-on-grade should be underlain by a minimum 6 inch thick capillary break of ¾ inch clean crushed rock (no fines). It is recommended that neither Class II baserock nor sand be employed as the capillary break material.

57. Where floor coverings are anticipated or vapor transmission may be a problem, a vapor retarder/membrane should be placed between the capillary break layer and the floor slab in order to reduce the potential for moisture condensation under floor coverings. We recommend a high quality vapor retarder at least 10 mil thick and puncture resistant (Stego Wrap or equivalent). The vapor retarder must meet the minimum specifications for ASTM E-1745, Standard Specification For Water Vapor Retarder. Please note that low density polyethylene film (such as Visqueen) may meet minimum current standards for permeability but not puncture resistance. Laps and seams should be overlapped at least six inches and properly sealed to provide a continuous layer beneath the entire slab that is free of holes, tears or gaps. Joints and penetrations should also be properly sealed.

58. Floor coverings should be installed on concrete slabs that have been constructed according to the guidelines outlined in ACI 302.2R and the recommendations of the flooring material manufacturer.

59. Currently, ACI 302-1R and Section 4.505.2 of the **2023** California Green Building Standards Code recommend that concrete slabs to receive moisture sensitive floor coverings be placed directly upon the vapor retarder, with **no sand cushion**. ACI states that vapor retarders are not effective in preventing residual moisture within the concrete slab from migrating to the surface. Including a low water-to-cement ratio (less than 0.50) and/or admixtures into the mix design are generally necessary to minimize water content, reduce soluble alkali content, and provide workability to the concrete. As noted in CIP 29 (*Concrete in Practice by the National Ready Mixed Concrete Association*), placing concrete directly on the vapor retarder can also create potential problems. If environmental conditions do not permit rapid drying of bleed water from the slab surface then the excess bleeding can delay finishing operations (refer to CIP 13, 19 and 20). Most of these problems can be alleviated by using a concrete with a low water content, moderate cement factor, and well-graded aggregate with the largest possible size. **With the increased occurrence of moisture related floor covering failures, minor cracking of floors placed on a vapor retarder and other problems discussed here are considered a more acceptable risk than failure of floor coverings, and these potential risks should be clearly understood by the Client and Project Owner**.

60. If a sand layer is chosen as a cushion for slabs without floor coverings, it should consist of a clean sand. Clean sand is defined as 100 percent passing the #4 sieve, and less than 5 percent passing the #200 sieve.

61. Requirements for pre-wetting of the subgrade soils prior to the pouring of the slabs will depend on the specific soils and seasonal moisture conditions and will be determined by a representative of Pacific Crest Engineering Inc. at the time of construction. It is important that the subgrade soils be properly moisture conditioned at the time the concrete is poured. Subgrade moisture contents should not be allowed to exceed our moisture recommendations for effective compaction, and should be maintained until the slab is poured.

62. Recommendations given above for the reduction of moisture transmission through the slab are general in nature and present good construction practice. Moisture protection measures for concrete slabs-on-grade should meet applicable ACI and ASTM standards. Pacific Crest Engineering Inc. are not waterproofing experts. For a more complete and specific discussion of moisture protection within the structure, a qualified waterproofing expert should be consulted to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. The waterproofing consultant should provide recommendations for mitigation of potential adverse impacts of moisture vapor transmission on various components of the structure as deemed appropriate.

63. Slab thickness, reinforcement, and doweling should be determined by the project civil or structural engineer. The use of welded wire mesh is not recommended for slab reinforcement.

RETAINING WALLS

64. Site retaining walls are not currently proposed for this project. Should that understanding change, our office should be contacted to provide additional recommendations.

PAVEMENT DESIGN

65. The design of pavements was outside of our scope of services for this project. General recommendations for any proposed pavements are as follows.

66. To have the selected pavement sections perform to their greatest efficiency, it is very important that the following items be considered:

a. Properly scarify and moisture condition the upper 8 inches of the subgrade soil and compact it to a minimum of 95% of its maximum dry density, at a moisture content of 1 to 3% over the optimum moisture content for the soil.

b. Provide sufficient gradient to prevent ponding of water.

c. Use only quality materials of the type and thickness (minimum) specified. All aggregate base and subbase must meet Caltrans Standard Specifications for Class 2 materials and be angular in shape. All Class 2 aggregate base should be ¾ inch maximum in aggregate size.

d. Compact the base and subbase uniformly to a minimum of 95% of its maximum dry density.

e. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within prescribed limits by Cal Trans Specifications.

f. Porous pavement systems which consist of porous paving blocks, asphaltic concrete or concrete are generally not recommended due to the potential for saturation of the subgrade soils and resulting increased potential for a shorter pavement life. At a minimum, porous pavement systems should include a layer of Mirafi HP370 geotextile fabric placed on the

subgrade soil beneath the porous paving section. These pavement systems should only be used with the understanding by the Owner of the increased potential for pavement cracking, rutting, potholes, etc.

g. Maintenance should be undertaken on a routine basis.

SURFACE DRAINAGE

67. Surface water drainage is the responsibility of the project civil engineer. The following should be considered by the civil engineer in design of the project.

68. Surface water must not be allowed to pond or be trapped adjacent to foundations, or on building pads and parking areas.

69. All roof eaves should be guttered, with the outlets from the downspouts provided with adequate capacity to carry the storm water away from structures to reduce the possibility of soil saturation and erosion. The connection should be in a closed conduit which discharges at an approved location away from structures and graded areas.

70. Slope failures can occur where surface drainage is allowed to concentrate on unprotected slopes. Appropriate landscaping and surface drainage control around the project area is imperative in order to minimize the potential for shallow slope failures and erosion. Stormwater discharge locations should not be located at the top or on the face of any slope.

71. Final grades should be provided with positive gradient away from all foundation elements. Soil grades should slope away from foundations at least 5 percent for the first 10 feet. Impervious surfaces should slope away from foundations at least 2 percent for the first 10 feet. Concentrations of surface runoff should be handled by providing structures, such as paved or lined ditches, catch basins, etc.

72. Irrigation activities at the site should be done in a controlled and reasonable manner.

73. Following completion of the project we recommend that storm drainage provisions and performance of permanent erosion control measures be closely observed through the first season of significant rainfall, to determine if these systems are performing adequately and, if necessary, resolve any unforeseen issues.

74. The building and surface drainage facilities must not be altered, nor any filling or excavation work performed in the area without first consulting Pacific Crest Engineering Inc. Surface drainage improvements developed by the project civil engineer must be maintained by the property owner at all times, as improper drainage provisions can produce undesirable affects.

EROSION CONTROL

75. The surface soils are classified as having a high potential for erosion. Therefore, the finished ground surface should be planted with ground cover and continually maintained to minimize surface erosion. For specific and detailed recommendations regarding erosion control on and surrounding the project site, the project civil engineer or an erosion control specialist should be consulted.

76. The surfaces of all cut and fill slopes should be prepared and maintained to reduce erosion. This work, at a minimum, should include track rolling of the slope and effective planting. The protection of the slopes should be installed as soon as practicable so that a sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without the erosion control measures having been provided.

PLAN REVIEW

77. We respectfully request an opportunity to review the project plans and specifications during preparation and before bidding to verify that the recommendations of this report have been included and to provide additional recommendations, if needed. These plan review services are also typically required by the reviewing agency. Misinterpretation of our recommendations or omission of our requirements from the project plans and specifications may result in changes to the project design during the construction phase, with the potential for additional costs and delays in order to bring the project into conformance with the requirements outlined within this report. Services performed for review of the project plans and specifications are considered "post-report" services and billed on a "time and materials" fee basis in accordance with our latest Standard Fee Schedule.

VI. LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. This Geotechnical Investigation was prepared specifically for Denise Duffy and Associates and for the specific project and location described in the body of this report. This report and the recommendations included herein should be utilized for this specific project and location exclusively. This Geotechnical Investigation should not be applied to nor utilized on any other project or project site.

2. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be provided.

3. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractors and Subcontractors carry out such recommendations in the field.

4. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural process or the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur, whether

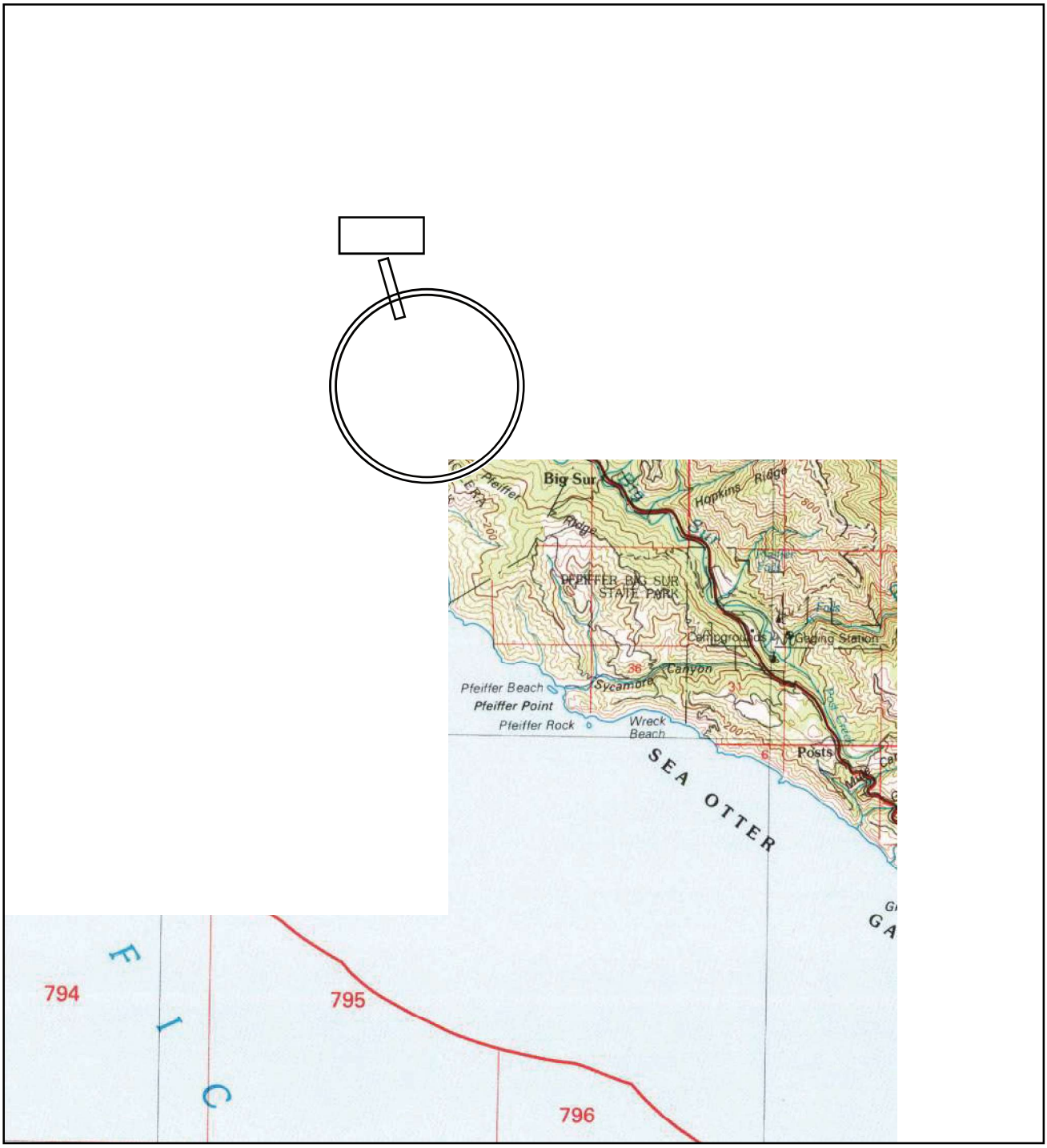
they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside of our control. This report should therefore be reviewed in light of future planned construction and then current applicable codes. This report should not be considered valid after a period of two (2) years without our review.

5. This report was prepared upon your request for our services in accordance with currently accepted standards of professional geotechnical engineering practice. No warranty as to the contents of this report is intended, and none shall be inferred from the statements or opinions expressed.

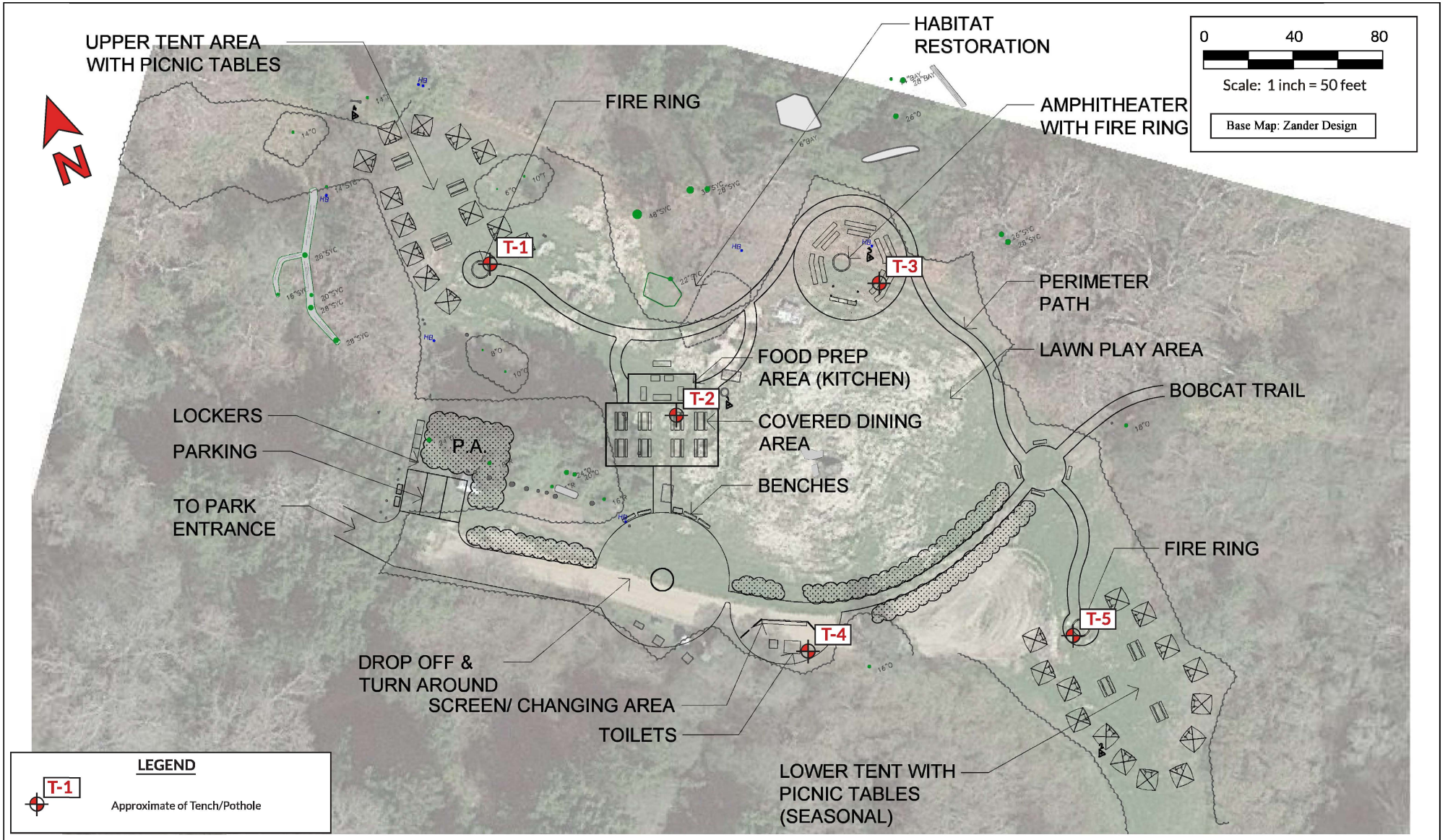
6. The scope of our services mutually agreed upon for this project did not include any environmental assessment or study for the presence of hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site.

APPENDIX A

Regional Site Map
Site Map Showing Test Borings
Key to Soil Classification
Log of Test Borings
Atterberg Test Results



Pacific Crest ENGINEERING INC	**Regional Site Map** Ventana - S'MORE Project Big Sur, California	Figure No. 1 Project No. 2347 Date: 10/4/23



Pacific Crest ENGINEERING INC

Site Map Showing Test Borings
Ventana Wildlife Society - S'MORE Project
Big Sur, California

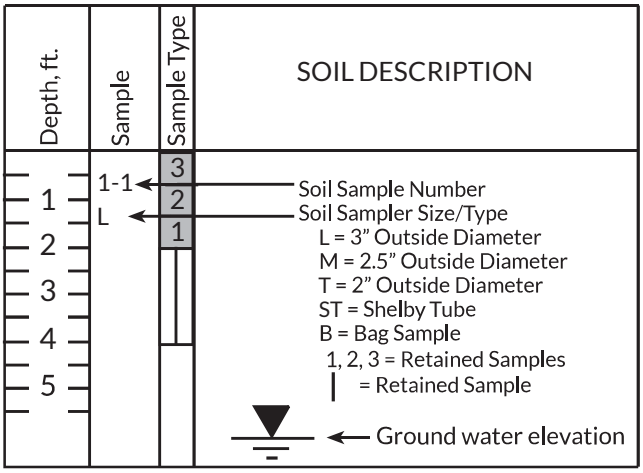
Figure No. 2
Project No. 2347
Date: 10/4/23

KEY TO SOIL CLASSIFICATION - FINE GRAINED SOILS (FGS)
UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2487 (Modified)

MAJOR DIVISIONS		SYMBOL	FINES	COARSENESS	SAND/GRAVEL	GROUP NAME
SILT AND CLAY	*LL < 35% Low Plasticity	**CL** Lean Clay PI > 7 Plots Above A Line -OR- **ML** Silt PI > 4 Plots Below A Line	<30% plus No. 200	<15% plus No. 200		Lean Clay / Silt
				15-30% plus No. 200	% sand ≥ % gravel	Lean Clay with Sand / Silt with Sand
					% sand < % gravel	Lean Clay with Gravel / Silt with Gravel
			≥30% plus No. 200	% sand ≥ % gravel	< 15% gravel	Sandy Lean Clay / Sandy Silt
					≥ 15% gravel	Sandy Lean Clay with Gravel / Sandy Silt with Gravel
				% sand < % gravel	< 15% sand	Gravelly Lean Clay / Gravelly Silt
					≥ 15% sand	Gravelly Lean Clay with Sand / Gravelly Silt with Sand
		CL - ML 4 < PI < 7	<30% plus No. 200	<15% plus No. 200		Silty Clay
				15-30% plus No. 200	% sand ≥ % gravel	Silty Clay with Sand
					% sand < % gravel	Silty Clay with Gravel
			≥30% plus No. 200	% sand ≥ % gravel	< 15% gravel	Sandy Silty Clay
					≥15% gravel	Sandy Silty Clay with Gravel
				% sand < % gravel	< 15% sand	Gravelly Silty Clay
					≥15% sand	Gravelly Silty Clay with Sand
	35% ≤ *LL < 50% Intermediate Plasticity	**CI**	<30% plus No. 200	<15% plus No. 200		Clay
				15-30% plus No. 200	% sand ≥ % gravel	Clay with Sand
					% sand < % gravel	Clay with Gravel
			≥30% plus No. 200	% sand ≥ % gravel	< 15% gravel	Sandy Clay
					≥ 15% gravel	Sandy Clay with Gravel
				% sand < % gravel	< 15% sand	Gravelly Clay
					≥ 15% sand	Gravelly Clay with Sand
	*LL > 50% High Plasticity	**CH** Fat Clay Plots Above A Line -OR- **MH** Elastic Silt Plots Below A Line	<30% plus No. 200	<15% plus No. 200		Fat Clay or Elastic Silt
				15-30% plus No. 200	% sand ≥ % gravel	Fat Clay with Sand Elastic Silt with Sand
					% sand < % gravel	Fat Clay with Gravel / Elastic Silt with Gravel
			≥30% plus No. 200	% sand ≥ % gravel	< 15% gravel	Sandy Fat Clay / Sandy Elastic Silt
					≥ 15% gravel	Sandy Fat Clay with Gravel / Sandy Elastic Silt with Gravel
				% sand < % gravel	< 15% sand	Gravelly Fat Clay / Gravelly Elastic Silt
					≥ 15% sand	Gravelly Fat Clay with Sand / Gravelly Elastic Silt with Sand

* LL = Liquid Limit
* PI = Plasticity Index

BORING LOG EXPLANATION



MOISTURE

DESCRIPTION	CRITERIA
DRY	Absence of moisture, dusty, dry to the touch
MOIST	Damp, but no visible water
WET	Visible free water, usually soil is below the water table

CONSISTENCY

DESCRIPTION	UNCONFINED SHEAR STRENGTH (KSF)	STANDARD PENETRATION (BLOWS/FOOT)
VERY SOFT	< 0.25	< 2
SOFT	0.25 - 0.5	2 - 4
FIRM	0.5 - 1.0	5 - 8
STIFF	1.0 - 2.0	9 - 15
VERY STIFF	2.0 - 4.0	16 - 30
HARD	> 4.0	> 30

Pacific Crest ENGINEERING INC

Trench Log Explanation - FGS
Ventana - S'MORES Project
Big Sur, California

Figure No. 3
Project No. 2347
Date: 10/4/23

KEY TO SOIL CLASSIFICATION - COARSE GRAINED SOILS
UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2487 (Modified)

MAJOR DIVISIONS		FINES	GRADE/TYPE OF FINES	SYMBOL	GROUP NAME *
GRAVEL	More than 50% of coarse fraction is larger than No. 4 sieve size	<5%	Cu ≥ 4 and 1 ≤ Cc ≤ 3	GW	Well-Graded Gravel/ Well-Graded Gravel with Sand
			Cu < 4 and/or 1 > Cc > 3	GP	Poorly Graded Gravel/Poorly Graded Gravel with Sand
		5-12%	ML or MH	GW - GM	Well-Graded Gravel with Silt / Well- Graded Gravel with Silt and Sand
				GP - GM	Poorly Graded Gravel with Silt / Poorly Graded Gravel with Silt and Sand
			CL, CI or CH	GW - GC	Well-Graded Gravel with Clay / Well-Graded Gravel with Clay and Sand
				GP - GC	Poorly Graded Gravel with Clay / Poorly Graded Gravel with Clay and Sand
		>12%	ML or MH	GM	Silty Gravel / Silty Gravel with Sand
			CL, CI or CH	GC	Clayey Gravel/ Clayey Gravel with Sand
			CL - ML	GC - GM	Silty, Clayey Gravel/Silty, Clayey Gravel with Sand
SAND	50% or more of coarse fraction is smaller than No. 4 sieve size	<5%	Cu ≥ 6 and 1 ≤ Cc ≤ 3	SW	Well-Graded Sand / Well-Graded Sand with Gravel
			Cu < 6 and/or 1 > Cc > 3	SP	Poorly Graded Sand / Poorly Graded Sand with Gravel
		5-12%	ML or MH	SW - SM	Well-Graded Sand with Silt / Well- Graded Sand with Silt and Gravel
				SP - SM	Poorly Graded Sand with Silt / Poorly Graded Sand with Silt and Gravel
			CL, CI or CH	SW - SC	Well-Graded Sand with Clay / Well-Graded Sand with Clay and Gravel
				SP - SC	Poorly Graded Sand with Clay / Poorly Graded Sand with Clay and Gravel
		>12%	ML or MH	SM	Silty Sand / Silty Sand with Gravel
			CL, CI or CH	SC	Clayey Sand / Clayey Sand with Gravel
			CL - ML	SC - SM	Silty, Clayey Sand / Silty, Clayey Sand with Gravel

* The term "with sand" refers to materials containing 15% or greater sand particles within a gravel soil, while the term "with gravel" refers to materials containing 15% or greater gravel particles within a sand soil.

US STANDARD SIEVE SIZE:	3 inch	¾ inch	No. 4	No. 10	No. 40	No. 200	0.002 μm
	COARSE	FINE	COARSE	MEDIUM	FINE		
COBBLES AND BOULDERS	GRAVEL		SAND			SILT	CLAY

RELATIVE DENSITY

DESCRIPTION	STANDARD PENETRATION (BLOWS/FOOT)
VERY LOOSE	0 - 4
LOOSE	5 - 10
MEDIUM DENSE	11 - 30
DENSE	31 - 50
VERY DENSE	> 50

MOISTURE

DESCRIPTION	CRITERIA
DRY	Absence of moisture, dusty, dry to the touch
MOIST	Damp, but no visible water
WET	Visible free water, usually soil is below the water table

LOGGED BY CMJ DATE EXCAVATED 8/31/23 TEST PIT DIAMETER N/A TEST PIT NO. T1

DRILL RIG Tri County Excavator HAMMER TYPE N/A

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	T1-1	B	**SILTY SAND:** Dark brown (10 YR 3/3), poorly graded, fine grained, low to no plasticity, trace gravels up to 1" in diameter, dry	SM				7.4		42.8	8	
2	T1-2	B	**SILTY GRAVEL WITH SAND:** Dark brown (10YR 3/3), poorly graded, boulders up to 10" in diameter, dry	GM				5.5		19.3		
3			**SAND WITH GRAVEL:** Brown (10YR 5/3), well graded, boulders up to 10" in diameter, trench caving at 3' depth	SM-GM								
4	T1-3	B										
5			Bottom of hole at 5 feet. No groundwater encountered. Trench caving at 4 feet.									
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

Pacific Crest ENGINEERING INC

Log of Test Pits
Ventana - SMORE Project
Big Sur, California

Figure No. 5
Project No. 2347
Date: 10/4/23

LOGGED BY CMJ DATE EXCAVATED 8/31/23 TEST PIT DIAMETER N/A TEST PIT NO. T2

DRILL RIG Tri County Excavator HAMMER TYPE N/A

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	T2-1	B	**SILTY SAND:** Brown (10 YR 5/3), poorly graded, fine grained, trace organics, dry	SM				1.7				
2	T2-2	B	**SILTY SAND:** Dark brown (10YR 3/3), poorly graded, fine grained, trace 1" gravels, interbedded layers of SP-SM, moist	SM				11.4		22.4		
3	T2-3	B	**SILTY SAND WITH GRAVEL:** Dark brown (10YR 3/3), well graded, boulders up to 8" in diameter, moist	SM								
6			Bottom of hole at 5.5 feet. No groundwater encountered.									

Pacific Crest ENGINEERING INC

Log of Test Pits
Ventana - S'MORES Project
Big Sur, California

Figure No. 6
Project No. 2347
Date: 10/4/23

LOGGED BY CMJ DATE EXCAVATED 8/31/23 TEST PIT DIAMETER N/A TEST PIT NO. T3

DRILL RIG Tri County Excavator HAMMER TYPE N/A

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	T3-1	B	**SILTY GRAVEL WITH SAND:** Brown (10 YR 5/3), poorly graded sand, trace gravels up to 1" in diameter, dry	GM								
2			**GRAVEL:** Brown (10YR 5/3), poorly graded, boulders up to 13" in diameter	GP								
3			**SILTY GRAVEL WITH SAND:** Dark brown (10YR 3/3), well graded sand, gravels up to 5" in diameter, moist	SM								
4	T3-2	B										
5												
6			Bottom of hole at 5.5 feet. No groundwater encountered.									
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
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21												
22												
23												

Pacific Crest ENGINEERING INC

Log of Test Pits
Ventana - S'MORES Project
Big Sur, California

Figure No. 7
Project No. 2347
Date: 10/4/23

LOGGED BY CMJ DATE EXCAVATED 8/31/23 TEST PIT DIAMETER N/A TEST PIT NO. T4

DRILL RIG Tri County Excavator HAMMER TYPE N/A

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	T4-1	B	**GRAVEL WITH SAND:** Brown (10 YR 5/3), poorly graded, fine grained, gravels up to 4" in diameter, dry to moist	GW				1.3		0.6		
3	T4-2	B	**GRAVEL:** Brown (10YR 5/3), well graded sand, well graded boulders up to 14 inches in diameter, trench caving at 3 feet, moist	GW								
5			Bottom of hole at 5 feet. No groundwater encountered.									

Pacific Crest ENGINEERING INC

Log of Test Pits
Ventana - S'MORES Project
Big Sur, California

Figure No. 8
Project No. 2347
Date: 10/4/23

LOGGED BY CMJ DATE EXCAVATED 8/31/23 TEST PIT DIAMETER N/A TEST PIT NO. T5

DRILL RIG Tri County Excavator HAMMER TYPE N/A

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	T5-1	B	**SILTY SAND:** Brown (10 YR 5/3), interbedded with SILTY SAND WITH GRAVEL, poorly graded, fine grained, dry to moist	SM				8.3		22.4	8	
4	T5-2	B	**SILTY GRAVEL WITH SAND:** Dark brown (10YR 3/3), poorly graded, fine grained, gravels up to 2" in diameter, moist	GM				6.1		40.7		
5	T5-3	B										
6			**GRAVEL WITH SAND:** Brown (10YR 5/3), well graded, boulders up to 6", well graded sand, moist Trench is caving at this stratum	GW								
7			Bottom of hole at 6 feet. No groundwater encountered.									

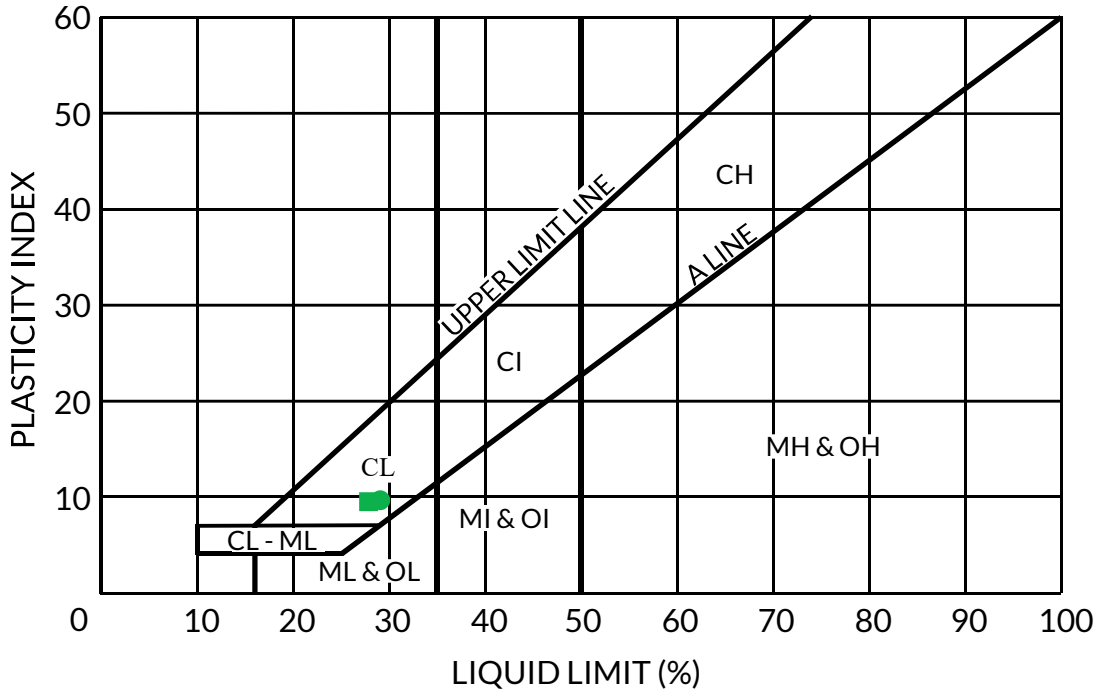
Pacific Crest ENGINEERING INC

Log of Test Pits
Ventana - S'MORES Project
Big Sur, California

Figure No. 9
Project No. 2347
Date: 10/4/23

ATTERBERG LIMITS - ASTM D4318

PLASTICITY CHART



*This chart has been modified to include the intermediate classifications CI, MI and OI for clays and silts with liquid limits between 35 and 50.

SYMBOL	SAMPLE #	LL (%)	PL (%)	PI
●	**T1-1**	**29**	**21**	**8**
■	**T5-1**	**27**	**19**	**8**

Pacific Crest ENGINEERING INC	**Atterberg Limits** Ventana - S'MORE Project Big Sur, California	Figure No. 10 Project No. 2347 Date: 10/4/23

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Appendix C

Waterways Consulting, Inc. Floodplain Memorandum

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September 26, 2024

Nela Rullan
Designer, Project Manager
Zander Westbrook Design
2927 Newbury Street, Suite B
Berkeley, CA 94703

RE: S'MORE Campground Potential Flooding Impact

Dear Ms. Rullan,

Waterways Consulting (Waterways) is submitting this letter at your request, in reference to the potential for flood impacts at the proposed S'MORE Campground project, which is located on the northerly (river-right) floodplain of the Big Sur River in Monterey County.

A small portion of the flatwork associated with the proposed project will encroach within the estimated 200-foot setback from the existing top of the bank of the Big Sur River. The 200-foot setback line was established using Lidar data and is presented on the attached "Top of the Bank Setback" figure. Therefore, the project requires a licensed civil engineer to certify that the portions of the development that are proposed within the 200-foot setback are compliant with the following elements of the Monterey County Code, Chapter 16.16:

- The proposed development will not significantly reduce the capacity of existing rivers or water courses or other adversely affect any other properties by increasing stream velocities or depths, or diverting flow
- The proposed new development and will be safe from flow related erosion and will not cause flow related erosion hazards or otherwise aggravate flow related erosion hazards.
- If the channel is proposed to be altered, that the flood carrying capacity of the altered or relocated portion of the river or watercourse is maintained.'

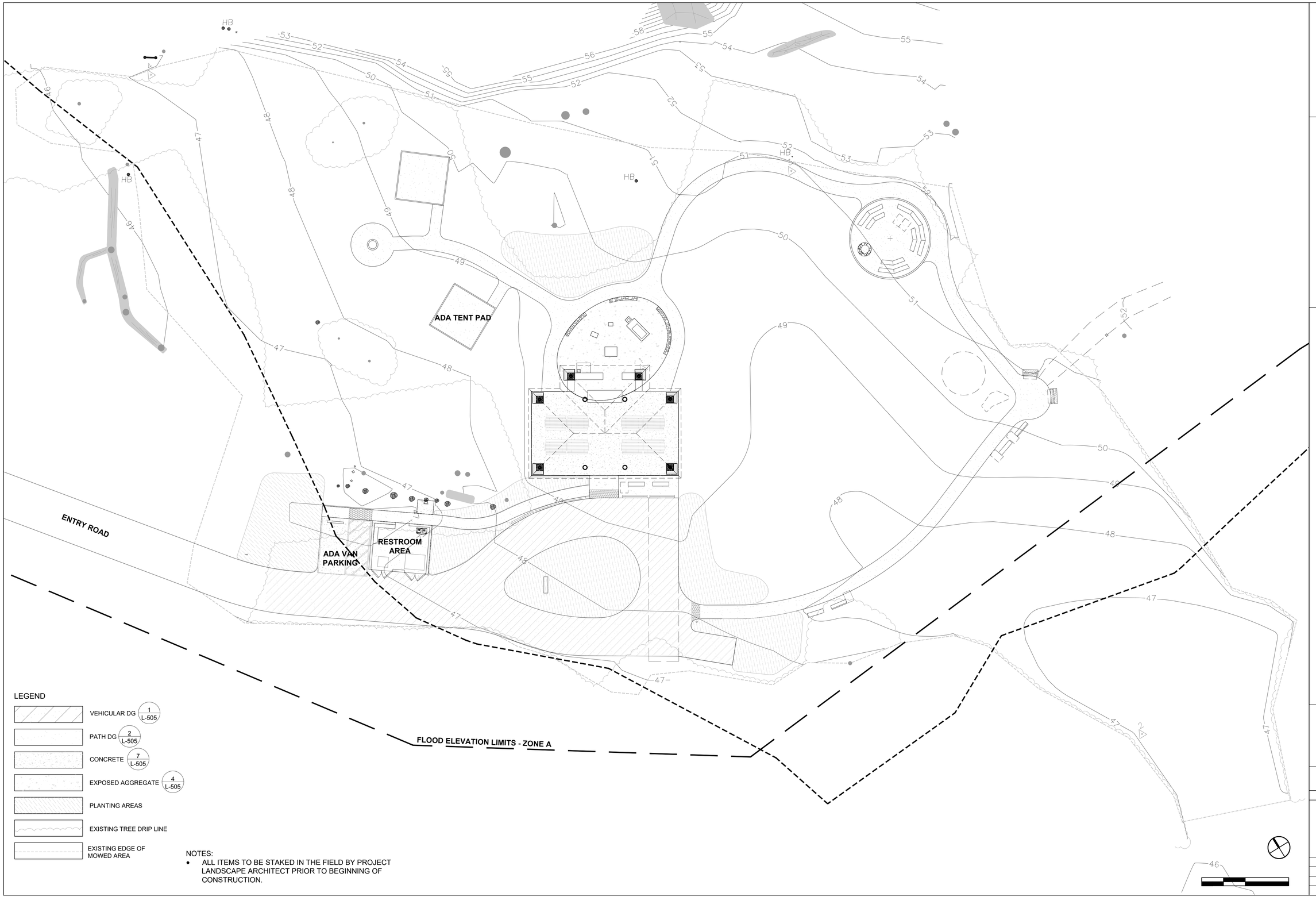
Waterways has analyzed the latest FEMA Special Flood Hazard Area (SFHA) map, published June 21, 2017 (FIRM Panel No. 06053C0712H). This reach of the Big Sur River has been assigned a FEMA Zone A designation, indicating that a detailed hydraulic analysis has not been performed and no depths or based flood elevations are shown for the 1% annual chance of flooding (100-Year flood). Within Zone A, the 100-year flood extents are established by FEMA using approximate methods.

The Zone A, 100-Year flood extents have been overlaid on the proposed site plan as depicted on the attached "Top of the Bank Setback" figure. The FEMA 100-Year flood boundary is outside of the area where infrastructure is proposed. We can confidently state that the proposed project elements within the 200-foot setback will meet the above-stated requirements of Chapter 16.16. Even if the 100-year extents were expanded to include all proposed elements within the 200-foot setback, we would still be confidents in drawing this conclusion, because the proposed improvements are limited to concrete slabs on grade.

Please feel free to call me at 831-566-8486 if you have any questions, require further clarification, or would like additional information.

Sincerely,

Matt Weld
Principal
Waterways Consulting, Inc.



LEGEND

- VEHICULAR DG (1 / L-505)
- PATH DG (2 / L-505)
- CONCRETE (7 / L-505)
- EXPOSED AGGREGATE (4 / L-505)
- PLANTING AREAS
- EXISTING TREE DRIP LINE
- EXISTING EDGE OF MOWED AREA

NOTES:

- ALL ITEMS TO BE STAKED IN THE FIELD BY PROJECT LANDSCAPE ARCHITECT PRIOR TO BEGINNING OF CONSTRUCTION.

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Appendix D

Transportation Study

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Hexagon Transportation Consultants, Inc.

Memorandum

Date: October 10, 2024

To: Tyler Potter, Denise Duffy & Associates, Inc.

From: Gary Black
Nivedha Baskarapandian

Subject: Transportation Study for the Proposed Outdoor Education and Recreation Area Project in Monterey County, California

Hexagon Transportation Consultants, Inc. has completed a transportation study for the proposed Outdoor Education and Recreation Area project in the Andrew Molera State Park in Monterey County, California. The Ventana Wildlife Society (VWS), in collaboration with the California Department of Parks and Recreations and California Coastal Conservancy, is proposing to construct and operate a new outdoor education facility at Andrew Molera State Park in Big Sur, California (Figure 1). The SMORE project would provide permanent outdoor education and family/group camping facilities to support the Ventana Wildlife Society's on-going educational programs on the project site. The SMORE project consists of the construction of 30 designated tent campsites, a small amphitheater, a rustic kitchen, and pavilion, and ADA-accessible nature paths throughout the site (Figure 2). VWS would manage the facility as a concessionaire. The new outdoor recreational area is to be used by the Ventana Wildlife Society for overnight camps. The State Park will still be available for day use by the general public. Access to the site is provided by an existing driveway along Highway 1.

The memo quantifies the number of trips generated by the project and its distribution, identifies any vehicle miles traveled (VMT) impacts, and reviews the project site plan to determine overall adequacy of site access, on-site circulation, and parking. The methodology, results, and conclusions are discussed below.

Project Trip Generation

Estimates of the trips to be added to the surrounding roadway network by the proposed outdoor recreational area were calculated using a project description provided by the Ventana Wildlife Society. The description includes attendance estimates and estimates of transport vehicle usage. VWS currently serves 30 campouts a year with 35 campers and utilizes two 15-passenger vans and two support vehicles to transport campers. VWS plans to serve 60 campouts a year with 60 campers in the future and would utilize four 15-passenger vans and one support vehicle.

As shown in Table 1, the average number of project trips generated by the proposed outdoor recreational area would be 10 daily trips, including five AM and five PM peak hour trips. All of these trips will originate from the VWS headquarters north of the project site in Monterey. Therefore, inbound project trips would come from Monterey via southbound Highway 1 and outbound trips would go towards Monterey via northbound Highway 1.

Table 1
Project Trip Generation

Land Use	Size	Units	Daily Trips	AM Peak-Hour Trips In	AM Peak-Hour Trips Out	AM Peak-Hour Trips Total	PM Peak-Hour Trips In	PM Peak-Hour Trips Out	PM Peak-Hour Trips Total
Proposed									
Outdoor Recreational Area [1]	60	campers	10	0	5	5	5	0	5

Notes:

[1] Outdoor recreational area trip generation based on the future vehicle use by Ventana Wildlife Society. VWS would use four VWS owned passenger vans and one support vehicle to shuttle campers to the project site.

Vehicle Miles Traveled Analysis

The California Environmental Quality Act (CEQA) guidelines specify that transportation impacts are to be evaluated based on Vehicle Miles Traveled (VMT). VMT measures the number of vehicle trips and trip length and is a direct measurement of greenhouse gas emissions. A reduction in VMT would result in a reduction in greenhouse gas emissions and supports the development of multimodal transportation networks and a diversity of land uses that reduce the reliance on individual vehicles.

VMT Impact Criteria

The County of Monterey, at the time of this report, has not yet adopted any analysis procedures, standards, or guidelines. In the absence of an adopted policy with impact thresholds, this assessment relies on guidelines published by the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018. The guidelines set forth procedures for determining project impacts on VMT based on the project description, characteristics, and location. The VMT methodology also includes screening criteria that are used to identify types, characteristics, and locations of projects that would not exceed the VMT thresholds of significance. If a project meets the screening criteria, it is then presumed that the project would result in a less than significant impact on VMT, and a detailed VMT analysis is not required.

Screening for VMT Analysis

Land use projects that meet at least one of the following screening criteria are presumed to have a less than significant impact on VMT and do not require CEQA transportation analysis:

1. Small Projects (generating 110 daily trips or less)
2. Retail uses of 50,000 square feet or less ("Local Serving Retail")
3. Local serving public projects such as fire stations, neighborhood parks, libraries, and community centers
4. 100% Affordable Housing projects
5. Transit Supportive Projects

The proposed project meets the screening criteria for small projects since the project would generate only 10 daily trips. It is presumed that small projects will have a less than significant VMT impact and do not require a detailed CEQA transportation analysis. Thus, the proposed project meets the screening criteria set forth in the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, and the project does not require a detailed VMT analysis.

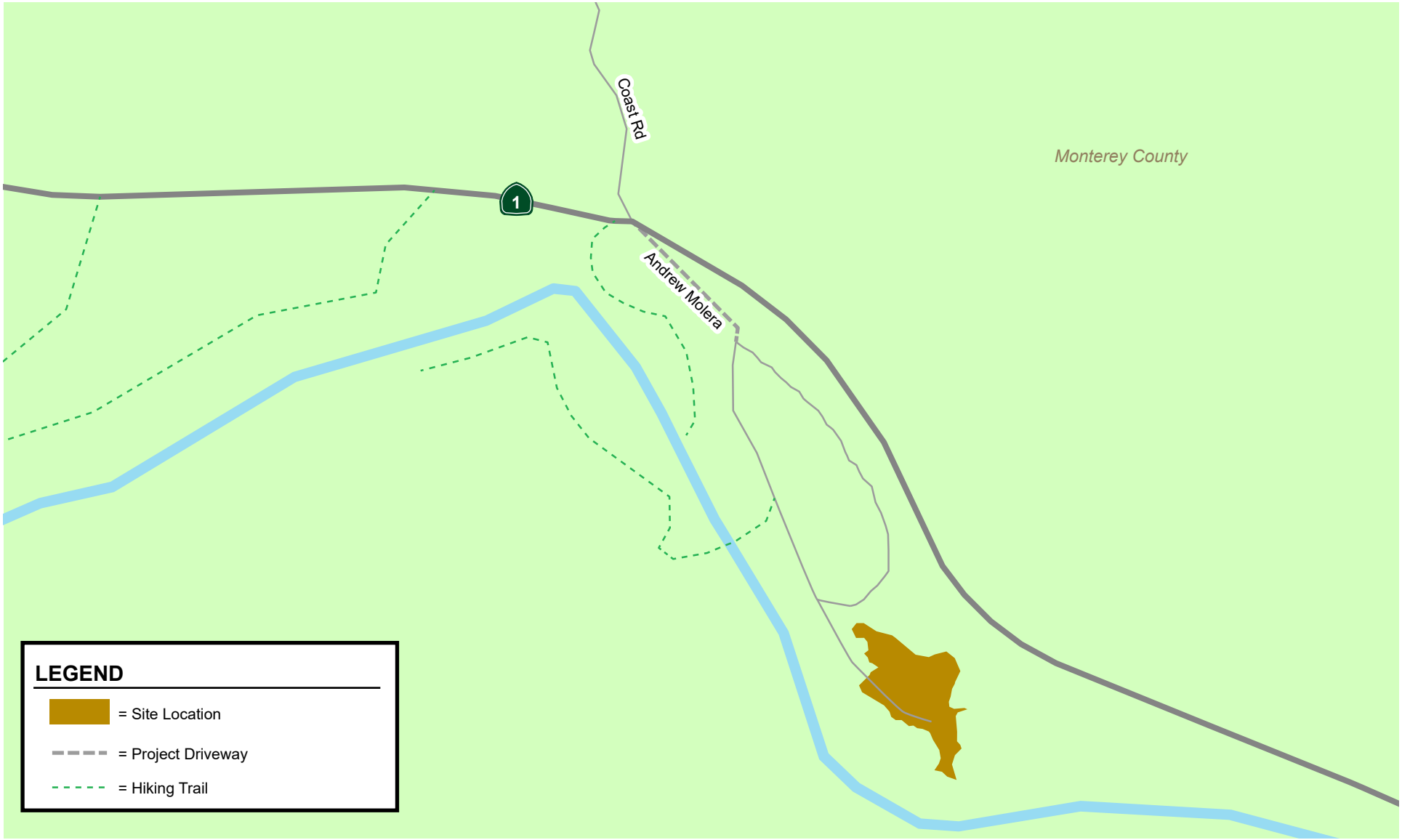

Figure 1
Project Site Location

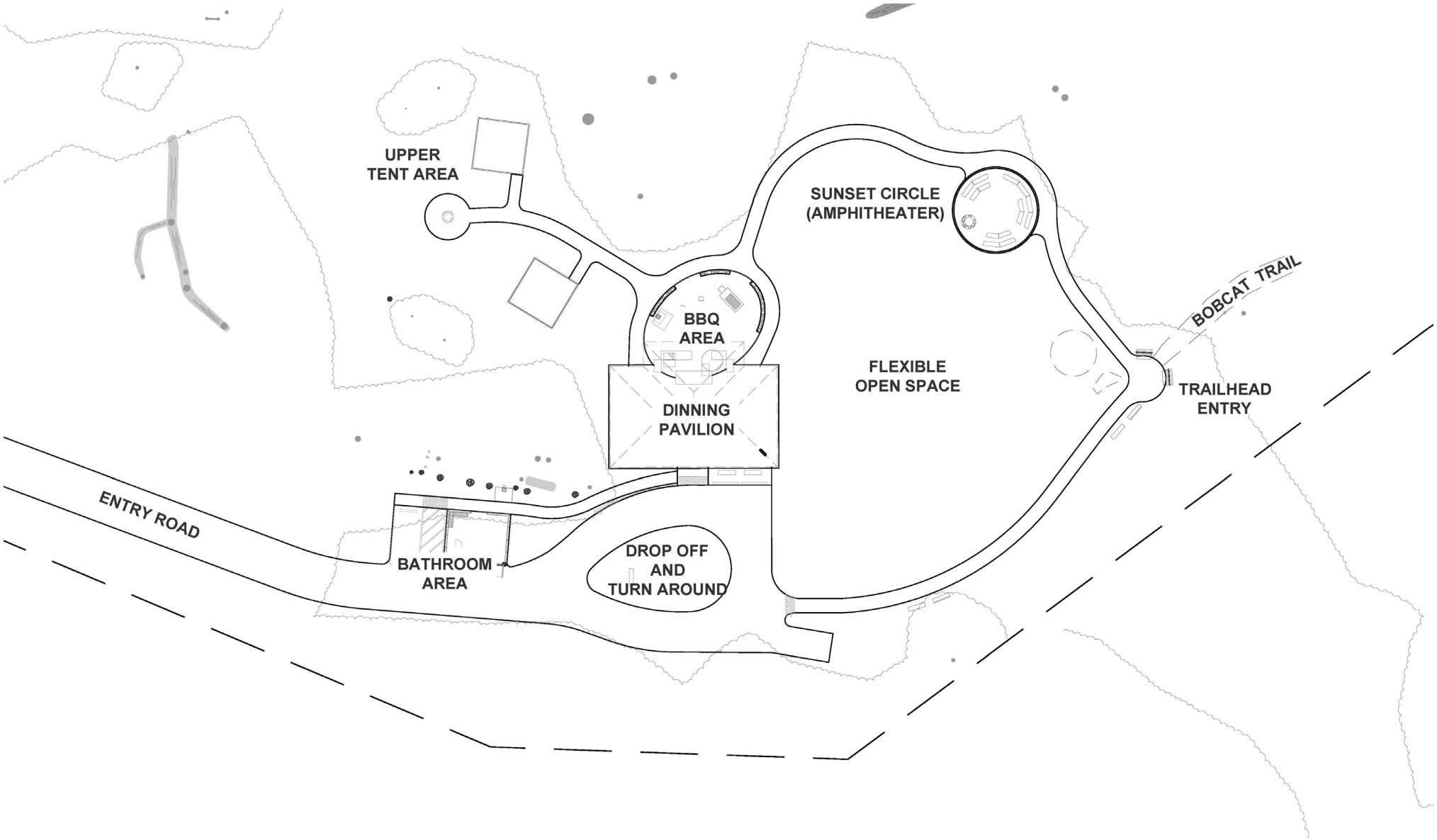

Figure 2
Site Plan

Site Access and Circulation

The site access and on-site circulation evaluation is based on the site plan prepared by Zander Design dated October 9, 2024 (see Figure 2). Site access was evaluated to determine the adequacy of the site's driveways with regard to the following: traffic volume, vehicle queues, geometric design, and stopping sight distance. On-site vehicular circulation and parking layout were reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

Site Access

Figure 1 shows that vehicular access to the project would be provided by an existing single driveway off of Highway 1 across from Coast Road. The driveway would provide access to and from the outdoor recreational area.

Project Driveway Operations

The project would add a minimal number of new trips to the existing driveway. Therefore, the project trips would not have a significant impact on the existing driveway operations.

Sight Distance

The project driveway off of Highway 1 should be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that entering and exiting vehicles can see vehicles and bicycles traveling on Highway 1. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway and provides drivers with the ability to locate sufficient gaps in traffic and exit a driveway.

Sight distance was checked for the project driveway. Sight distance recommendations vary depending on the roadway speeds. The posted speed limit on Highway 1 is 55 mph. The Caltrans recommended stopping sight distance for the project driveway is 500 feet (based on a design speed of 55 mph). The project driveway has 600 feet of sight distance looking left at Highway 1 southbound traffic and 500 feet of sight distance looking right at Highway 1 northbound traffic. A site visit showed that due to the low vegetation at the gore between Highway 1 and the project driveway there is enough sight distance for vehicles to exit the driveway onto Highway 1 (see Figure 3). Hexagon recommends that the vegetation in the gore area of the driveway be maintained at less than three feet in height to improve the sight distance for vehicles leaving the project site.

On-Site Circulation

Parking for vehicles would be located in a surface parking lot right at the entrance of the site. The site plan shows that the drive aisle would provide access to the parking spaces. The site plan also shows that a traffic circle would be provided for vehicles to leave the parking lot and project site.

Walkways would be provided on site through each of the campsites and amenities for the campers. Overall, the site shows acceptable connectivity and maneuvering for vehicles and pedestrians.

Looking Left

Looking Right

Figure 3
Project Sight Distance

Conclusions

The results of the transportation study for the S’MORE project are summarized below.

- The project would generate five AM and five PM peak-hour trips.
- Since the project can be considered a small project, its impact on VMT would be less than significant according to CEQA standards.
- The proposed site plan shows adequate site access and on-site circulation.

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