Veterans Memorial Park Project

Draft
Initial Study/Mitigated Negative Declaration

Project Number:
Planning Division Project Numbers: CUP 2021-0014, CDP 2021-0052, HDP 2021-0003, HMP 2021-0006 (PUB 2019-0012)
Capital Improvement Project Number: CIP 4609

Prepared for

City of Carlsbad
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March 2022

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Section 1 – Initial Study Checklist

1. PROJECT NAME: Veterans Memorial Park

2. PROJECT NO: CUP 2021-0014, CDP 2021-0052, HDP 2021-0003, HMP 2021-0006 (PUB 2019-0012), CIP 4609

3. LEAD AGENCY:

City of Carlsbad
1635 Faraday Avenue
Carlsbad, California 92008

4. PROJECT APPLICANT:

City of Carlsbad Parks & Recreation Dept.
799 Pine Avenue, Suite 200
Carlsbad, California 92008

5. LEAD AGENCY CONTACT PERSON:

Eric Lardy, Principal Planner
442-339-2712, Eric.Lardy@carlsbadca.gov

6. PROJECT LOCATION:

The Veterans Memorial Park (herein referred to as the "Project" or the "park") is located in the City of Carlsbad in San Diego County, California. The Project site is located approximately 350 feet east of the intersection of Cannon Road and Faraday Avenue, 1.4 miles east of the Interstate (I) 5/Cannon Road interchange, 0.5-mile southeast of the Agua Hedionda Lagoon, and located southeast of the intersection of Faraday Avenue and Whitman Way.

The Project site is approximately 93.70 acres, of which approximately 43.37 acres are located within the hardline preserve of the City's Habitat Management Plan (HMP). The remaining 50.33 acres of the Project site are outside of the preserve. A total of 38.82 acres[1] of the Project site would be impacted as part of the Project, and 54.88 acres would be avoided. Sensitive habitat areas identified within the developable portion of the site were identified early on in Project design and have been avoided to the extent feasible[2]. Exhibit 1 depicts the Project site in the context of the local and regional roadway system. An aerial image depicting existing conditions on the site is provided as Exhibit 2.

7. GENERAL PLAN LAND USE DESIGNATION:

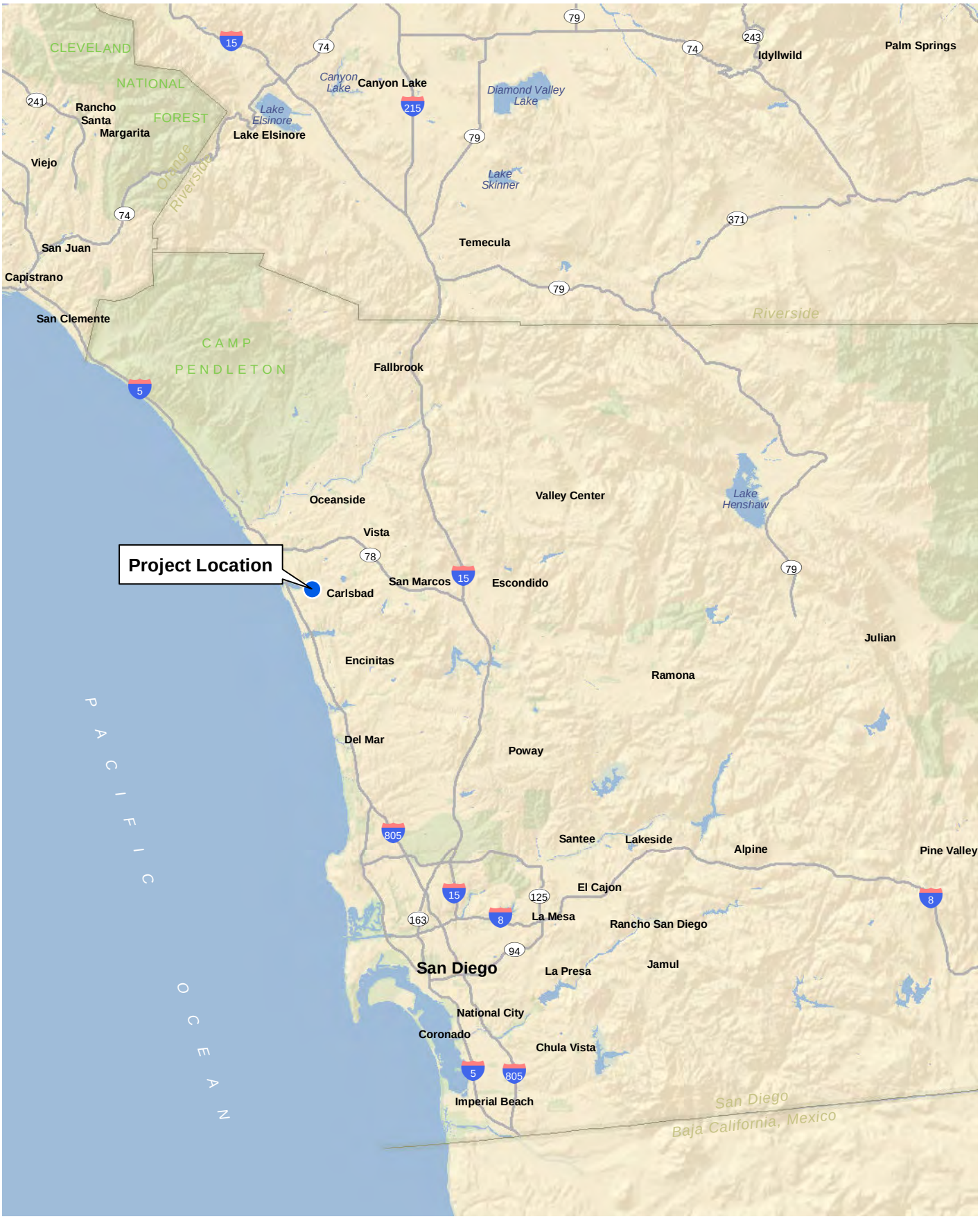
Open Space (O-S)

8. ZONING:

Open Space (O-S)

[1] The impact footprint used for biological resources analyses includes trails and indirect impact buffers. Therefore, the biological resources impact is 38.82 acres, slightly larger than the actual grading footprint, which is 37.1 acres.

[2] As described in more detail in Section IV, Biological Resources, sensitive habitat areas have been avoided to the greatest extent practicable, which includes Diegan coastal sage scrub, coastal sage scrub– chaparral scrub, southern maritime chaparral, and riparian scrub containing willows. Also, areas identified in earlier studies as being territories (e.g., habitat) for coastal California gnatcatchers were also avoided.



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Regional Location

Exhibit 1

Veterans Memorial Park

N
W
E
S

10 5 0 10

Miles

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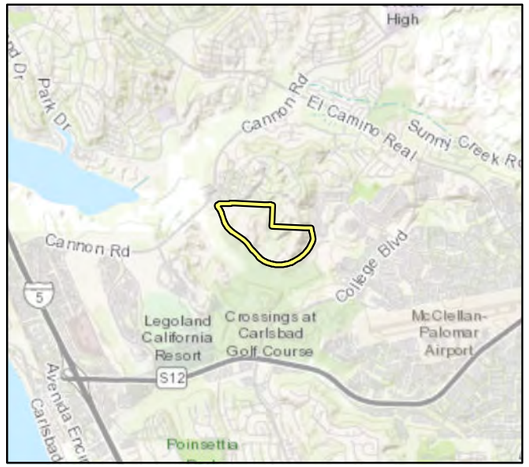

Project Boundary

N
W E
S

300 150 0 300
Feet

Aerial Source: Esri, Maxar 2020

Project Location

Exhibit 2

Veterans Memorial Park

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9. PROJECT DESCRIPTION:

The Project consists of the development of a public park on 38.82 acres[3] of a 93.70 acre parcel (the Project site), which would include a Veterans memorial plaza/gathering area, playgrounds, a bike park, formal picnic areas, passive recreation areas, outdoor exercise area, an outdoor education area, open turf, and multi-use trails. Site Plans for the Project and Bike Park are provided as Exhibits 3 and 4, respectively. More information on the park uses and amenities proposed in each area of the park is provided below.

PRIMARY AREAS OF THE PARK: The park would be physically separated into three distinct areas. The northern area of the park would include: parking lot; a veteran's memorial plaza; a community gathering area; two buildings connected by a pavilion, referred to below as the north buildings; an inclusive playground; and part of an ADA accessible pathway that winds throughout the park to a public art feature at the upper plateau. The central area of the Project would include an ADA accessible winding pathway; a fitness climb on the north slope leading from the northern area of the park to the upper plateau; picnic areas; a rustic, nature-inspired playground; passive recreation areas (e.g., yoga and passive relaxation areas and an interpretive garden); a prominent public art feature; native plant gardens; and a fitness run on the south slope connecting the upper plateau to the south parking lot. The southern area of the park would include a parking lot; a playground for young children; a building containing restrooms and storage areas; a family-oriented bike park with spectator seating nearby and nature inspired features; a shaded plaza near the entrance to the bike park for group picnicking and recreation programs; a multi-generational outdoor fitness area with an obstacle course and exercise stations; an outdoor education area; a fitness run from the parking lot to the upper plateau; an ADA-accessible pathway from the parking lot northward, connecting to the winding ADA pathway in the central area of the Project site; and a building referred to below as the south building.

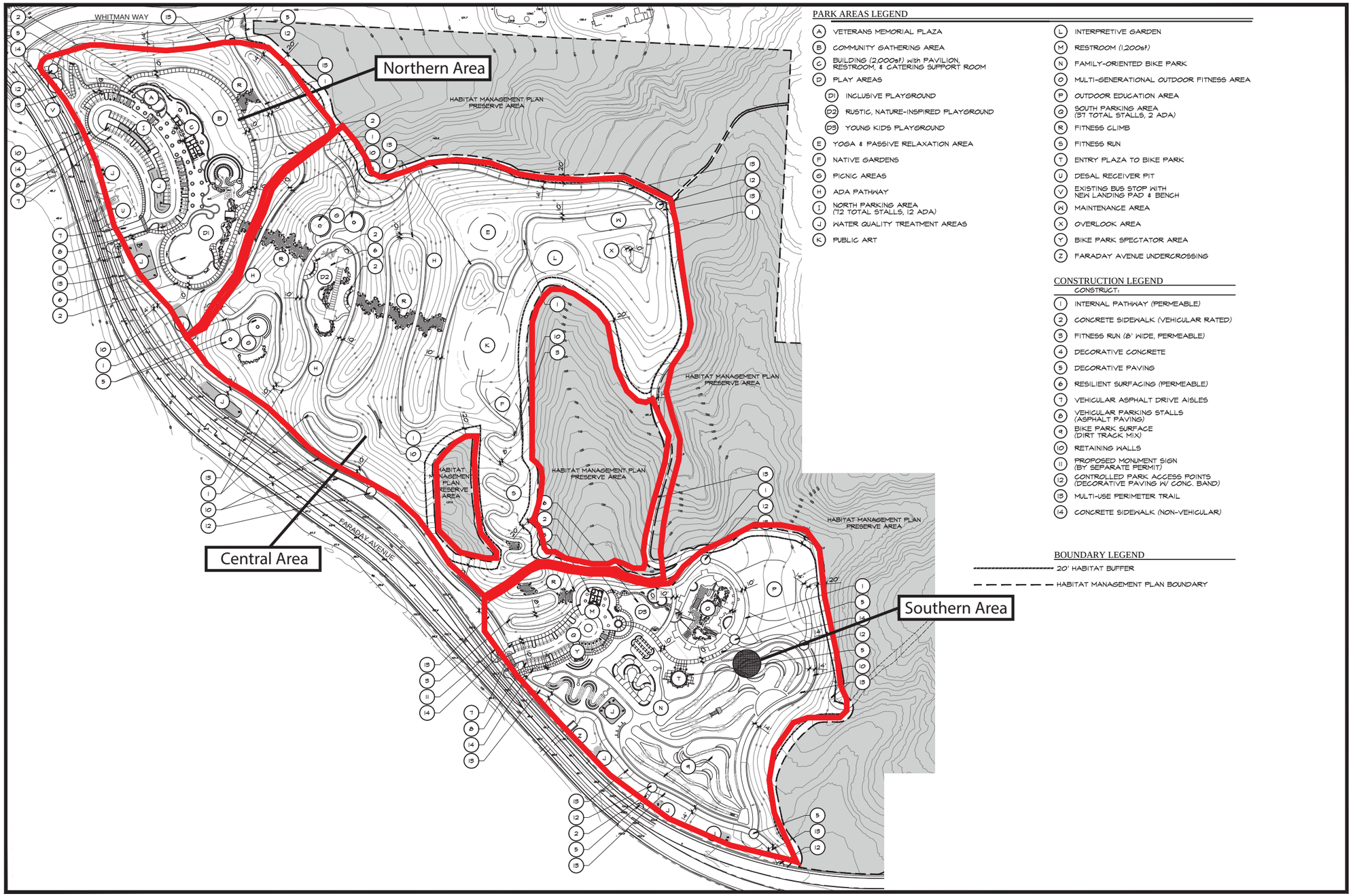
North Buildings: The northern area of the park would include two one-story buildings, referred to herein as the north buildings that would consist of two separate structures, "Building A" and "Building B", that would be connected by an 816 square foot pavilion. The larger structure would be approximately 1,486 square feet and would contain restrooms, a mechanical room, storage, an office, and the catering support room. The smaller structure would be approximately 380 square feet and would contain staff vehicles (golf cart) and equipment storage, an electrical room, and a trash enclosure.

South Building: The southern area of the park would include a one-story, 820 square foot building that would contain restroom, an electrical room, storage, and mechanical rooms.

CIRCULATION AND PARKING

Vehicular Access and Parking: As shown on Exhibit 5, Streets and Utilities Plan, the park would have two parking areas. Left turn lanes would be provided on Faraday Avenue at both access points, and all turning movements would be allowed into and out of the Project site. Faraday Avenue would be reconfigured to include a two-way left turn lane just south of each driveway, which would allow for drivers exiting the park to make a two-stage left turn onto Faraday Avenue. To accommodate these improvements, portions of the existing center median along Faraday Avenue would be removed/modified.

[3] The impact footprint used for biological resources analyses includes trails and indirect impact buffers. Therefore, the biological resources impact is 38.82 acres, slightly larger than the actual grading footprint, which is 37.1 acres.



PARK AREAS LEGEND

- (A) VETERANS MEMORIAL PLAZA
- (B) COMMUNITY GATHERING AREA
- (C) BUILDING (2,000sf) with PAVILION, RESTROOM, & CATERING SUPPORT ROOM
- (D) PLAY AREAS
  - (D1) INCLUSIVE PLAYGROUND
  - (D2) RUSTIC, NATURE-INSPIRED PLAYGROUND
  - (D3) YOUNG KIDS PLAYGROUND
- (E) YOGA & PASSIVE RELAXATION AREA
- (F) NATIVE GARDENS
- (G) PICNIC AREAS
- (H) ADA PATHWAY
- (I) NORTH PARKING AREA (72 TOTAL STALLS, 12 ADA)
- (J) WATER QUALITY TREATMENT AREAS
- (K) PUBLIC ART
- (L) INTERPRETIVE GARDEN
- (M) RESTROOM (1,200sf)
- (N) FAMILY-ORIENTED BIKE PARK
- (O) MULTI-GENERATIONAL OUTDOOR FITNESS AREA
- (P) OUTDOOR EDUCATION AREA
- (Q) SOUTH PARKING AREA (37 TOTAL STALLS, 2 ADA)
- (R) FITNESS CLIMB
- (S) FITNESS RUN
- (T) ENTRY PLAZA TO BIKE PARK
- (U) DESAL RECEIVER PIT
- (V) EXISTING BUS STOP WITH NEW LANDING PAD & BENCH
- (W) MAINTENANCE AREA
- (X) OVERLOOK AREA
- (Y) BIKE PARK SPECTATOR AREA
- (Z) FARADAY AVENUE UNDERCROSSING

CONSTRUCTION LEGEND

CONSTRUCT:

- (1) INTERNAL PATHWAY (PERMEABLE)
- (2) CONCRETE SIDEWALK (VEHICULAR RATED)
- (3) FITNESS RUN (8' WIDE, PERMEABLE)
- (4) DECORATIVE CONCRETE
- (5) DECORATIVE PAVING
- (6) RESILIENT SURFACING (PERMEABLE)
- (7) VEHICULAR ASPHALT DRIVE AISLES
- (8) VEHICULAR PARKING STALLS (ASPHALT PAVING)
- (9) BIKE PARK SURFACE (DIRT TRACK MIX)
- (10) RETAINING WALLS
- (11) PROPOSED MONUMENT SIGN (BY SEPARATE PERMIT)
- (12) CONTROLLED PARK ACCESS POINTS (DECORATIVE PAVING W/ CONC. BAND)
- (15) MULTI-USE PERIMETER TRAIL
- (14) CONCRETE SIDEWALK (NON-VEHICULAR)

BOUNDARY LEGEND

- 20' HABITAT BUFFER
- HABITAT MANAGEMENT PLAN BOUNDARY

Source: RJM Design Group, February 2022

Site Plan

Veterans Memorial Park

Exhibit 3

N W E S

0 100 200 400 Feet

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BIKE PARK AREAS LEGEND

- (A) BIKE PARK ENTRANCE
- (B) USER STAGING / REST AREAS
- (C) BEGINNER PUMP TRACK
- (D) INTERMEDIATE PUMP TRACK
- (E) BEGINNER & INTERMEDIATE FLOW TRAILS
- (F) BEGINNER & INTERMEDIATE JUMP LINES
- (G) DUAL SLALOM COURSE
- (H) WATER QUALITY TREATMENT AREA
- (I) SPECTATOR VIEWING AREA
- (J) MAINTENANCE ACCESS GATE

N W E S

0 30 60 120 Feet

Source: RJM Design Group, December 2021

Conceptual Plan for Bike Park

Exhibit 4

Veterans Memorial Park

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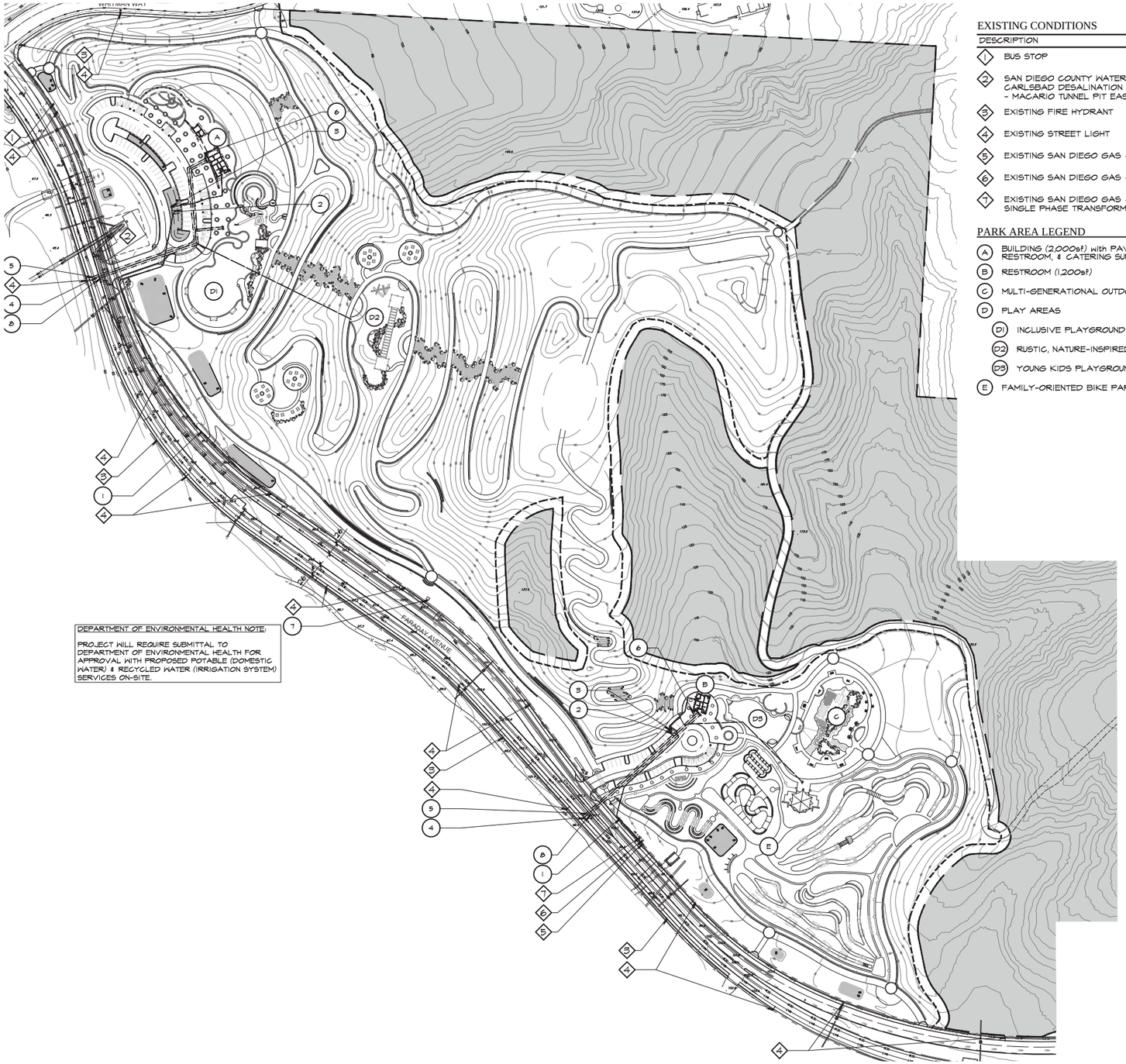

EXISTING CONDITIONS

	DESCRIPTION
1	BUS STOP
2	SAN DIEGO COUNTY WATER AUTHORITY CARLSBAD DESALINATION CONVEYANCE PIPELINE – MACARIO TUNNEL PIT EASEMENT
3	EXISTING FIRE HYDRANT
4	EXISTING STREET LIGHT
5	EXISTING SAN DIEGO GAS & ELECTRIC VAULT
6	EXISTING SAN DIEGO GAS & ELECTRIC METER PEDESTAL
7	EXISTING SAN DIEGO GAS & ELECTRIC SINGLE PHASE TRANSFORMER

PARK AREA LEGEND

- (A) BUILDING (2,000sf) with PAVILION, RESTROOM, & CATERING SUPPORT ROOM
- (B) RESTROOM (1,200sf)
- (C) MULTI-GENERATIONAL OUTDOOR FITNESS AREA
- (D) PLAY AREAS
  - (D1) INCLUSIVE PLAYGROUND
  - (D2) RUSTIC, NATURE-INSPIRED PLAYGROUND
  - (D3) YOUNG KIDS PLAYGROUND
- (E) FAMILY-ORIENTED BIKE PARK

UTILITY CONSTRUCTION LEGEND

	DESCRIPTION
	ELECTRICAL
1	PRIMARY ELEC. LINE PER SAN DIEGO GAS & ELECTRIC REQUIREMENTS
2	NEW SAN DIEGO GAS & ELECTRIC TRANSFORMER & CONCRETE PAD
3	NEW TERMINAL ENCLOSURE
	WATER / FIRE / RECYCLED WATER (IRRIGATION)
4	NEW 2" SERVICE CONNECTION TO 1½" WATER METER PER CMWD STANDARD W-4 FOR DOMESTIC SERVICE. INSTALL BACKFLOW ASSEMBLY PER CMWD STANDARD W-20
5	NEW 6" CONNECTION TO 8" WATER MAIN FOR FIRE SERVICE INCLUDING BACKFLOW ASSEMBLY PER CMWD STANDARD W-22
6	PROPOSED FIRE HYDRANT
7	NEW 2" CONNECTION TO 12" RECYCLED WATER MAIN FOR IRRIGATION SYSTEM INCLUDING BACKFLOW ASSEMBLY & 2" RECYCLED WATER METER PER CMWD STANDARD W-20
	SEWER
8	NEW 8" CONNECTION TO 12" SEWER MAIN

CITY PLANNING NOTE:

PRIOR TO CONSTRUCTION, A LIGHTING PLAN SHALL BE PREPARED THAT PROVIDES THE TYPE & LOCATION OF PROPOSED EXTERIOR LIGHTING & SIGNAGE, WHICH WOULD BE SUBJECT TO THE REVIEW & APPROVAL OF THE CITY'S PLANNING DEPARTMENT. ALL NEW LIGHTING SHALL BE SHIELDED & DOWN-CAST, SUCH THAT THE LIGHT IS NOT CAST ONTO ADJACENT PROPERTIES OR VISIBLE FROM ABOVE, & ALL NEW LIGHTING SHALL BE REVIEWED TO ENSURE COMPLIANCE WITH THE STANDARDS CODIFIED IN THE CITY'S HMP ADJACENCY STANDARDS AS WELL AS OTHER APPLICABLE POLICIES.

DEPARTMENT OF ENVIRONMENTAL HEALTH NOTE:

PROJECT WILL REQUIRE SUBMITTAL TO DEPARTMENT OF ENVIRONMENTAL HEALTH FOR APPROVAL WITH PROPOSED POTABLE (DOMESTIC WATER) & RECYCLED WATER (IRRIGATION SYSTEM) SERVICES ON-SITE.

Source: RJM Design Group, December 2021

Streets and Utilities Plan

Exhibit 5

Veterans Memorial Park

N W E S

0 100 200 400 Feet

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The north parking area would be accessed from a new driveway to be constructed off Faraday Avenue that would have 72 spaces, including 12 ADA stalls, eight EV charging stations, and a drop-off area. The south parking area would be accessed from a second new driveway that would be constructed off Faraday Avenue. The south parking area would have 37 stalls including two ADA stalls, four EV charging stations, and a drop-off area. Overall. the Project would provide 109 off-street parking spaces. In addition, approximately 100 on-street parking spaces are located near the Project along Faraday Avenue. Approximately 380-feet of the on-street parking would be removed south of the new northern driveway, and approximately 275-feet of parking would be removed south of the new southern driveway to provide adequate sight distance for the Project's new driveways. Additionally, curb extensions would be constructed to extend each of the new Project's driveways to the edge of the existing on-street parking.

Pedestrian and Bicycle Trails: The Project proposes internal facilities for pedestrians and cyclists, including a system of ADA -compliant access paths to connect the different areas of the park. Existing sidewalks and bike lanes along Faraday Avenue would remain in place and continue to provide pedestrian and bicycle access to the site. An existing multi-use trail located within the Project site would be extended as part of the Project, which is located along the southern and eastern boundaries of the Project site. The trail would be extended along the northeast, northern, and western edges of the Project site to provide a perimeter loop trail and connectivity to existing off-site trails adjacent to the park. The Project would generally maintain the existing public trails within the Project site, which is identified as Segment 8.5 in the City's Final Trails Master Plan (Carlsbad 2019b). Improvements to the existing trail would be limited to maintenance only.

Transit Access: As part of the Project, a 5-foot wide, level concrete pad for passenger boarding and alighting would be constructed at the bus stop on the east side of Faraday Avenue, immediately adjacent to the Project site. A bench would also be installed at the same bus stop.

Hardscape and Landscape: Post and rail or similar style fencing would be installed between the park and multi-use trail as shown in Exhibit 3. Three-wire fencing would be installed between the multi-use trail and adjacent habitat preserve areas. Taller (e.g., 6-foot tall) security fencing would also be installed around the bike park to control access to this area of the park.

Project landscaping would consist primarily of native, drought tolerant species as shown in the Streets and Utilities Plan provided as Exhibit 6.

Retaining walls would be constructed at various locations throughout the Project site as shown in Exhibit 7, Conceptual Grading Plan.

Construction Activities: Construction of the Project would occur in one phase that would last approximately 20 months and is planned to begin in Summer 2023. Grading and excavation work would occur on approximately 37.1 acres and would involve 216,250 cubic yards of cut, 173,200 cubic yards of fill, and export of 8,300 cubic yards of soil[4], as shown in Exhibit 7, Conceptual Grading Plan (civTEC 2022a).

[4] The amount of export does not add up precisely to the amount of cut versus the amount of fill as the export quantity accounts for variables including shrinkage and subsidence.

TREES

PARKING / PLAZA AREAS (CIRCULATION) (75)

- CASSIA LEPTOPHYLLA (M)
- PLATANUS ACER. 'COLUMBIA' (M)
- QUERCUS AGRIFOLIA* (VL)
- QUERCUS ILEX (L)
- ULMUS PARVIFLORA (M)
- GOLD MEDALLION TREE (SMALL)
- LONDON PLANE TREE (PERIMETER)
- COAST LIVE OAK (PERIMETER)
- HOLLY OAK (PERIMETER)
- CHINESE ELM (PERIMETER)

PLAY / EXERCISE AREAS (ACTIVE) (105)

- CERCIS CAN. 'FOREST PANSY' (M)
- METROSIDEROS EXCELSUS (M)
- PLATANUS RACEMOSA* (M)
- QUERCUS ENGELMANII* (VL)
- STENOCARPUS SINUATUS (M)
- PURPLE-LEAF EASTERN REDBUD (SMAL
- NEW ZEALAND XMAS TREE (SMALL)
- CALIFORNIA SYCAMORE (PERIMETER)
- ENGELMANN OAK (PERIMETER)
- FIREWHEEL TREE (SMALL)

MEMORIAL / GARDEN AREAS (PASSIVE) (14)

- ARBUTUS MARINA* (L)
- HYMENOSPORUM FLAVUM (M)
- POPULUS FREMONTII* (M)
- SAMBUCUS RAC. MELANOCARPA* (L)
- SPATHODEA CAMPANULATA (M)
- STRAWBERRY TREE (SMALL)
- SWEETSHADE (SMALL)
- WESTERN COTTONWOOD (PERIMETER)
- BLUE ELDERBERRY (SMALL)
- AFRICAN TULIP TREE (PERIMETER)

BIO-SWALE / DETENTION AREAS (82)

- POPULUS FREMONTII* (M)
- SAMBUCUS RAC. MELANOCARPA* (L)
- UMBELLULARIA CALIFORNICA* (L)
- WESTERN COTTONWOOD (PERIMETER)
- BLUE ELDERBERRY (SMALL)
- CALIFORNIA BAY LAUREL (SMALL)

SHRUBS/ACCENTS/GROUNDCOVERS

BIOSWALE / DETENTION BASIN PLANTS

- CAREX PANSA* (M)
- CAREX PRAEGRACILIS* (M)
- CHONDRAPETALUM ELEPHANTIUM (L)
- FESTUCA RUBRA* (H)
- JUNCUS PATENS* (L)
- MUHLENBERGIA RIGENS* (L)
- CALIFORNIA MEADOW SEDGE
- WESTERN MEADOW SEDGE
- LARGE CAPE RUSH
- RED FESCUE
- CALIFORNIA GRAY RUSH
- DEER GRASS

FLOWERING / ACCENT / MASSING - SMALL (1'-5' H & W)

- ACHILLEA SP. (L)
- ALOE STRIATA (L)
- ARISTIDA PURPUREA* (VL)
- BACCHARIS 'PIGEON POINT'* (L)
- BOUTELOUA 'BLONDE AMBITION'* (L)
- CEANOTHUS 'HURRICANE POINT'* (L)
- CISTUS 'SUNSET' (L)
- EPILOBIUM CANUM 'CATALINA'* (VL)
- LEYMUS COND. 'CANYON PRINCE'* (L)
- MIMULUS AURANTICUS* (VL)
- NASSELLA PULCHRA* (VL)
- OENOTHERA BER. 'SISKIYOU' (L)
- SENECIO MANDRALISCAE (L)
- SPHAERALCEA AMBIGUA* (L)
- TRICHOSTEMA LANATUM* (VL)
- YARROW (VARIETIES)
- CORAL ALOE
- PURPLE THREE-AWN
- DWARF COYOTE BRUSH
- BLUE GRAMA GRASS
- DWARF CALIFORNIA LILAC
- DWARF ROCKROSE
- CALIFORNIA FUCHSIA
- GIANT WILD RYE
- BUSH MONKEY FLOWER
- PURPLE NEEDLE GRASS
- BERLANDIER'S SUNDROPS
- BLUE CHALK STICKS
- DESERT MALLOW
- WOOLLY BLUE CURLS

FLOWERING / ACCENT / MASSING - MEDIUM (3'-6' H & W)

- AGAVE ATTENUATA (L)
- ALOE ARBORESCENS (L)
- ALOE STRIATULA (L)
- ALYOGYNE HUEGELII (L)
- ASCLEPIAS SUBULATE* (VL)
- BACCHARIS 'CENTENNIAL'* (L)
- BUDDLEIA SP. (M)
- CISTUS x PURPUREUS (L)
- ECHIUM CANDICANS (L)
- ERIOGONUM FASCICULATUM* (VL)
- FURCRAEA MACDOUGALII (L)
- GAURA SP.* (L)
- HESPERALOE PARVIFLORA (VL)
- JUSTICIA CALIFORNICA* (VL)
- MUHLENBERGIA RIGENS* (L)
- PENSTEMON PALMERI* (L)
- PHLOMIS FRUTICOSA (L)
- RHAMNUS CALIFORNICA* (VL)
- RHUS LENTII* (VL)
- ROMNEYA COULTERI* (VL)
- SALVIA APIANA* (VL)
- SALVIA CLEV. 'WIN. GILMAN'* (VL)
- FOXTAIL AGAVE
- SHRUB ALOE
- HARDY ALOE
- BLUE HIBISCUS
- RUSH MILKWEED
- CENTENNIAL DESERT BROOM
- BUTTERFLY BUSH (VARIETIES)
- ORCHID ROCKROSE
- PRIDE OF MADEIRA
- COMMON BUCKWHEAT
- NCN
- GAURA (VARIETIES)
- RED YUCCA
- GHUPAROSA
- DEER GRASS
- SCENTED PENSTEMON
- JERUSALEM SAGE
- CALIFORNIA COFFEEBERRY
- PINK FLOWERING SUMAC
- MATILIJA POPPY
- WHITE SAGE
- CLEVELAND SAGE

FLOWERING / ACCENT - LARGE (6'-10' H & W)

- CEANOTHUS 'RAY HARTMAN'* (L)
- FREMONT. CAL. GLORY* (VL)
- HETEROMELES ARBUTIFOLIA* (VL)
- RHUS INTEGRIFOLIA* (VL)
- RHUS OVATA* (VL)
- CALIFORNIA LILAC
- CALIFORNIA FLANNELBUSH
- TOYON
- LEMONADE BERRY
- SUGAR BUSH

HYDROSEED MIXES (S#S SEEDS)
TO BE SUPPLEMENTED WITH 1 GAL. (MIN.) NATIVE PLANTS

- BASIC NATIVE EROSION CONTROL MIX
- CALIFORNIA COASTAL NATIVE WILDFLOWER MIX
- CALIFORNIA POPPY SEED MIX
- CHAPARRAL SAGE SCRUB MIX
- COASTAL SAGE SCRUB MIX
- FLOWERING MEADOW MIX
- NATIVE FESCUE MIX
- ORNAMENTAL, LOW GROWING NATIVE MIX

HMP BUFFER AREA

- ARTEMESIA CALIFORNICA* (VL)
- ERIOGONUM FASCICULATUM* (VL)
- NASSELLA PULCHRA* (VL)
- ORNITIA LITTORALIS* (VL)
- SALVIA MELLIFERA* (VL)
- COASTAL SAGEBRUSH
- COMMON BUCKWHEAT
- PURPLE NEEDLE GRASS
- COAST FRIGALLY FEAR
- BLACK SAGE

PRELIMINARY HABITAT MITIGATION AREAS

PLANTING PALETTE TO BE DETERMINED BY ENVIRONMENTAL ENGINEERS
AREAS TO RECEIVE TEMPORARY IRRIGATION TO ESTABLISH

TURF

MARATHON II DWARF TALL FESCUE (SOD) (H)

MULCH COVERED AREAS

AREAS TO BE USED FOR FUTURE PASSIVE USES, PUBLIC ART OR MAINTENANCE PURPOSES

Source: RJM Design Group, February 2022

Conceptual Landscape Plan

Veterans Memorial Park

Exhibit 6

N W E S

0 100 200 400 Feet

PSOMAS

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PARK AREAS LEGEND

- (A) VETERANS MEMORIAL PLAZA
- (B) COMMUNITY GATHERING AREA
- (C) BUILDING (2,000sf) with PAVILION, RESTROOM, & CATERING SUPPORT ROOM
- (D) PLAY AREAS
  - (D1) INCLUSIVE PLAYGROUND
  - (D2) RUSTIC, NATURE-INSPIRED PLAYGROUND
  - (D3) YOUNG KIDS PLAYGROUND
- (E) YOGA & PASSIVE RELAXATION AREA
- (F) NATIVE GARDENS
- (G) PICNIC AREAS
- (H) ADA PATHWAY
- (I) NORTH PARKING AREA (112 TOTAL STALLS, 12 ADA)
- (J) NOT USED
- (K) PUBLIC ART
- (L) INTERPRETIVE GARDEN
- (M) RESTROOM (1,200sf)
- (N) FAMILY-ORIENTED BIKE PARK
- (O) MULTI-GENERATIONAL OUTDOOR FITNESS AREA
- (P) OUTDOOR EDUCATION AREA
- (Q) SOUTH PARKING AREA (81 TOTAL STALLS, 2 ADA)
- (R) FITNESS CLIMB
- (S) FITNESS RUN
- (T) ENTRY PLAZA TO BIKE PARK
- (U) DESAL RECEIVER PIT
- (V) BUS STOP
- (W) MAINTENANCE AREA
- (X) OVERLOOK AREA
- (Y) BIKE PARK SPECTATOR AREA
- (Z) FARADAY ROAD UNDERCROSSING

EARTHWORK

AREA DISTURBED:	37.1±	ACRES
CUT	216,250	CUBIC YARDS
SHRINKAGE (13%±)	(28,100)	CUBIC YARDS
FILL	173,200	CUBIC YARDS
SHRINKAGE (O/E) (13%±)	650	CUBIC YARDS
SUBSIDENCE (0.1'±)	6,000	CUBIC YARDS
EXPORT	8,300	CUBIC YARDS
OVER-EXCAVATION *	5,000	CUBIC YARDS

THIS CALCULATION DOES NOT INCLUDE SOILS FROM BUILDING OR WALL FOOTINGS, NOR ANY UTILITY TRENCHING. THIS CALCULATION ASSUMES:

- SHRINKAGE OF 10% TO 16% - USE 13%
- SUBSIDENCE OF 0.1-FEET
- REMOVALS PER THE SOILS REPORT INCLUDE 5-FEET BELOW THE BUILDINGS AND 1-FOOT BELOW THE SIDEWALKS

CONTRACTOR SHALL REFER TO THE SOILS REPORT FOR STATEMENTS CONCERNING GRADING REQUIREMENTS.

FLOOD ZONE INFORMATION

FLOOD ZONE DESIGNATION:	ZONE X (AREAS OUTSIDE OF 0.2% ANNUAL CHANCE FLOODPLAIN)
MAP NO.:	06073C0768G
PANEL NO.:	768 OF 2375
EFFECTIVE DATE:	MAY 16, 2012

NOTE:

EXISTING TOPOGRAPHY PROVIDED BY PSOMAS BY AERIAL TOPOGRAPHY AND FIELD SURVEY.

BENCHMARK

THE ELEVATIONS SHOWN HEREON ARE BASED UPON THE CALIFORNIA ORTHOMETRIC HEIGHTS OF 1988 (NAVD88) IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8890-8902; SAID ELEVATIONS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWING CALIFORNIA SPATIAL REFERENCE NETWORK, OR EQUIVALENT STATIONS:

REFERENCED STATIONS CONNECTED PER ROS 17271:
105,109,58,57,56,130

THE CITY OF CARLSBAD LOCAL GEODETIC CONTROL FROM RECORD OF SURVEY 17271 INDICATES THAT NAVD88 MINUS NGVD29 IN THE AREA OF THIS PROJECT EQUALS 2.17 FEET.

BASIS OF BEARINGS

THE COORDINATES SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 6, (EPOCH 1999.92) IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819; SAID COORDINATES ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWING CALIFORNIA SPATIAL REFERENCE NETWORK, OR EQUIVALENT STATIONS:

REFERENCED STATIONS CONNECTED PER ROS 17271:
105,109,58,57,56,130

Source: civTEC, February 2022

Conceptual Grading Plan

Exhibit 7a

Veterans Memorial Park

N W E S

0 60 120 480 Feet

PSOMAS

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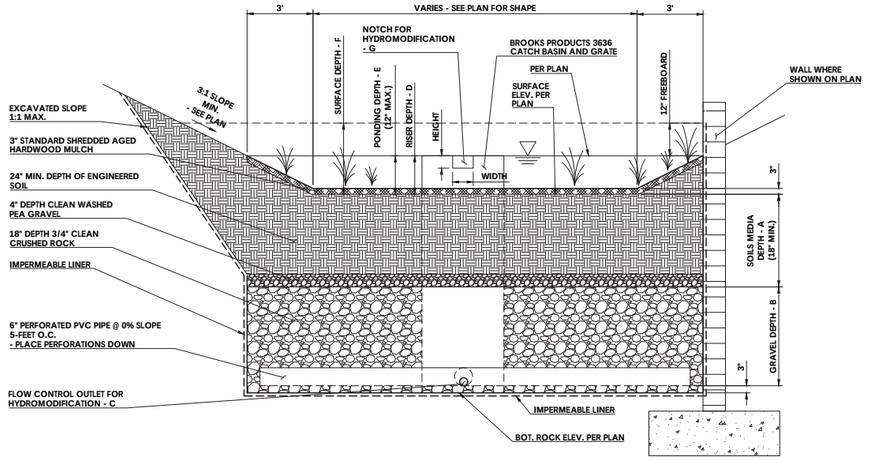


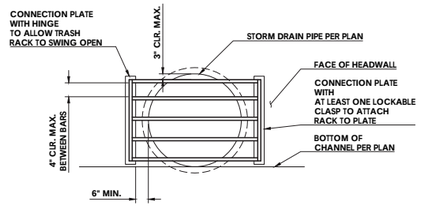
BMP SUMMARY TABLE

BMP	TRIBUTARY AREA (ACRES)	DIMENSIONS							
		BMP AREA (SQUARE FEET)	SOILS MEDIA DEPTH - A (INCHES)	GRAVEL DEPTH - B (INCHES)	LOWER ORIFICE DIAMETER - C (INCHES)	RISER DEPTH - D (INCHES)	PONDING DEPTH - E (INCHES)	SURFACE DEPTH - F (INCHES)	RISER NOTCH DIMENSIONS [WIDTH X HEIGHT] - G (INCHES)
A	1.30	599	24	18	1.00	12	12	24	8 X 4
B	0.46	250	24	18	0.65	12	12	24	8 X 4
C	0.44	582	36	24	0.42	12	12	24	8 X 4
D	0.56	1,080	30	30	0.45	12	12	24	8 X 4
E	8.30	4,028	36	36	2.00	12	12	24	8 X 4
F	4.48	2,111	36	24	1.50	12	12	24	8 X 4
G	5.19	2,081	30	18	1.50	12	12	24	8 X 4
H	10.60	4,710	36	30	2.50	12	12	24	8 X 4
I	0.29	140	24	18	0.50	12	12	24	8 X 4
J	0.27	89	24	18	0.50	12	12	24	8 X 4
K	1.39	760	30	18	0.60	12	12	24	8 X 4
L	0.21	80	18	18	2.00	12	12	24	8 X 4

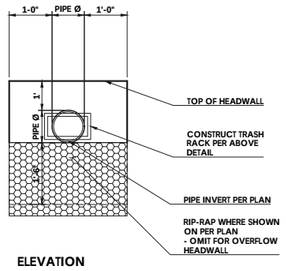
BIOFILTRATION AREA WITH UNDERDRAIN

NOTES:

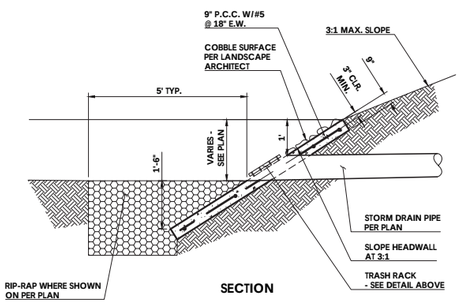
1. TRASH RACKS SHALL BE CONSTRUCTED WITH RECTANGULAR SMOOTH STEEL TUBE WITH A MIN. 1-INCH BY 0.5-INCH BY 16 GA CROSS SECTION. THE TUBE STEEL SHALL MEET THE ASTM A513 REQUIREMENTS.
2. THE HEADWALL CONNECTION PLATES SHALL BE ¼-INCH X 6-INCH PLATE AND SHALL BE A36 STEEL. THE HEADWALL CONNECTION BOLTS SHALL BE ⅜-INCH RED HEAD WEDGE ANCHOR BOLTS (ICC-ES AC193) AND SHALL BE DRIVEN TO A MIN. DEPTH OF 4-INCHES INTO CONCRETE.
3. ALL TRASH RACK COMPONENTS SHALL HAVE A CORROSION PROTECTIVE FINISH (HOT-DIPPED GALVANIZED).
4. ALL WELDS SHALL BE ¼-INCH WELDS.
5. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO THE CITY FOR APPROVAL PRIOR TO CONSTRUCTION.



TRASH RACK



ELEVATION



SECTION

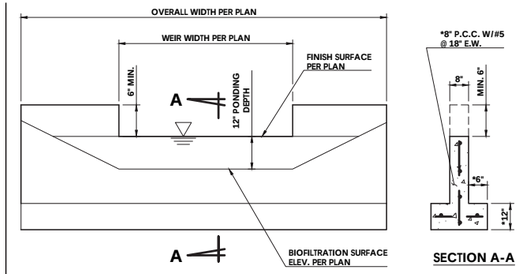
NOTE TO CONTRACTOR:

ALL CONC. FLATWORK AND VISIBLE DRAINAGE STRUCTURES TO BE FINISHED AND COLORED CONSISTENTLY PER SPECIFICATIONS. HEADWALL TO BE FINISHED WITH NATINA STAIN. VERIFY COLOR AND FINISH WITH LANDSCAPE ARCHITECT AND SUBMIT SAMPLE FOR APPROVAL PRIOR TO CONSTRUCTION.

SPECIFICATIONS:

1) CONCRETE: F_C = 3,250 p.s.i., TYPE V
2) STEEL: ASTM A615, Gr60
3) POUR FOOTING AGAINST UNDISTURBED OR COMPACTED SOIL

CONCRETE HEADWALL (INLET) W/TRASH RACK



SECTION A-A

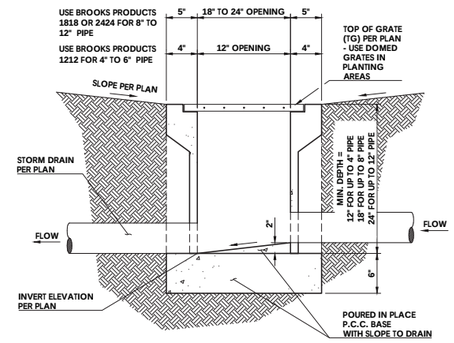
NOTE TO CONTRACTOR:

ALL CONC. FLATWORK AND VISIBLE DRAINAGE STRUCTURES TO BE FINISHED AND COLORED CONSISTENTLY PER SPECIFICATIONS. HEADWALL TO BE FINISHED WITH NATINA STAIN. VERIFY COLOR AND FINISH WITH LANDSCAPE ARCHITECT AND SUBMIT SAMPLE FOR APPROVAL PRIOR TO CONSTRUCTION.

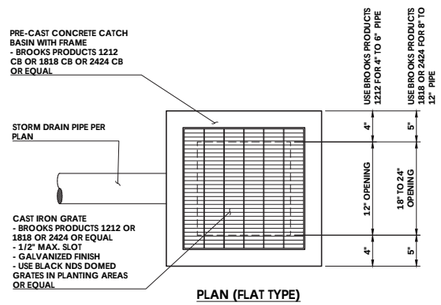
SPECIFICATIONS:

1) CONCRETE: F_C = 3,250 p.s.i., TYPE V
2) STEEL: ASTM A615, Gr60
3) POUR FOOTING AGAINST UNDISTURBED OR COMPACTED SOIL
4) * CONC. DIMENSIONS AND REINF. TO BE CONFIRMED BY STRUCTURAL ENGINEER

CONCRETE WEIR DETAIL



ELEVATION



PLAN (FLAT TYPE)

NOTE:

- USE DOMED GRATE IN FLAT AREAS.
- GRATES LOCATED IN ACCESSIBLE AREAS ARE TO BE HEEL PROOF AND HAVE ADA COMPLIANT OPENINGS.
- USE 3,250 p.s.i., TYPE V CONCRETE

CATCH BASIN & GRATE

Source: civTEC, February 2022

Conceptual Grading Plan

Veterans Memorial Park

Exhibit 7b

PSOMAS

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10. ENVIRONMENTAL SETTING/SURROUNDING LAND USES:

EXISTING PROJECT SITE CONDITIONS:

The parcel containing the Project site has a land use designation of O-S and is zoned as O-S. The City's Municipal Code permits a maximum building height of 25 feet within the O-S zone (Carlsbad 2021a).

The Project site consists of a single parcel located in the City of Carlsbad, San Diego County (Assessor Parcel Number 212-271-0300). The Project site is approximately 93.70[5] acres, of which approximately 43.37-acres are located within the Macario Canyon, Veterans Memorial Park and P61 Mitigation Area hardline preserves (Macario Canyon/Veterans Memorial Park preserve) of the City's HMP, as described in more detail in Section IV, Biological Resources. As shown in Exhibit 2, Project Location Map, the Project site is generally undeveloped with the exception of an existing receiver pit for the Carlsbad desalination project pipeline located approximately 430 feet southeast of Whitman Way. The City actively abates weeds within the areas of the Project site that are outside of the HMP Hardline preserve. The Project site is located within the coastal foothills of the San Marcos Mountains and, specifically, includes areas of Section 15 and Section 16, T 12S/R 04W, as depicted on the San Luis Rey, CA 7.5-minute series United States Geological Survey topographic maps. Project site elevations range from approximately 52 to 326 feet above mean sea level.

SURROUNDING AREA CONDITIONS:

As shown in Exhibit 2, Project Location Map, the Project site is located south/southeast of the existing Pacific View Apartment Homes multifamily residences, which are zoned as Multiple Family Residential (R-3-Q) and are accessible from Whitman Way. Also, the Project site is adjacent to a single-family residential neighborhood off of Twain Avenue, which is located to the east. The Project site is located across Faraday Avenue from a golf course, The Crossings at Carlsbad, which is located to the south and is connected to the Project site via an existing subterranean pedestrian culvert. Commercial buildings are located northeast of the Project site on both sides of Faraday Avenue leading to an area of the City zoned as C-M (Heavy Commercial-Limited Industrial Zone).

Private vehicular access for maintenance vehicles is provided via one existing driveway from Faraday Avenue which leads to the existing receiver pit. This driveway is located approximately 430 feet southeast of Whitman Way.

In the Project vicinity, Faraday Avenue has one lane in each direction, with Class II bike lanes on both sides of the roadway and parallel parking on the east side of the roadway. Faraday Avenue has two roadway segments adjacent to the Project site that are physically divided with raised planters in the center of the roadway. Faraday Avenue curves around the Project site on the western, southern, and eastern sides as it connects from Cannon Road in the north and meanders towards College Boulevard in the south.

[5] Acreages presented in the Biological Technical Report do not add to the Record of Survey area of 93.70 due to the base mapping used and calculations generated in GIS.

11. OTHER REQUIRED AGENCY APPROVALS (e.g., permits, financing approval, or participation agreements):

This Initial Study (IS)/Mitigated Negative Declaration (MND) is intended to serve as the primary environmental document for all actions associated with the Project, including all discretionary approvals requested or required to implement the Project. In addition, this is the primary reference document for the formulation and implementation of a mitigation monitoring and reporting program for the Project.

The actions and/or approvals that the City needs to consider for the Project include but are not limited to the following:

- Adoption of the Veterans Memorial Park IS/MND and Mitigation Monitoring and Reporting Program.
- Approval of the final park plan by City Council.
- Issuance of a Conditional Use Permit by the Planning Commission, in accordance with the findings, conditions, and development standards and special regulations contained in Carlsbad Municipal Code Chapter 21.42, including special standards and regulations in CMC 21.42.140(B)(100) relating to public parks.
- Issuance of a Hillside Development Permit, per Chapter 21.95 of the CMC due to the topography of the Project site, modifications to the hillside development and design standards may be needed. Per Section 21.95.160(E) of the CMC, the decision-making body or official may approve encroachments to slopes of twenty-five percent grade and over to preserve natural habitats required by the City's HMP, provided that the required amount of preservation could not be achieved by strict adherence to the requirements of Sections 21.95.140(A) and (B).
- Issuance of an HMP permit due to the Project's potential impacts to sensitive habitat.
- Issuance of a minor amendment to the HMP for impacts within the HMP's hardline conservation areas consistent with Zoning Ordinance Section 21.210.080 A.3, which allows for minor amendments for "essential public works projects". A minor amendment to the City's HMP to revise the HMP hardline boundary, including an equivalency finding, would be required to approve the exchange of 3.36 acres in the HMP preserve near the bike park for equal or better habitat and acreage. The footprint of the proposed park would partially overlap with the existing Hardline of the HMP (Macario Canyon/Veterans Memorial Park preserve). An existing Hardline area is an area that was already dedicated as open space when the HMP was developed. As summarized below in Table 1, the Project would directly impact 3.36 acres of the existing 43.37 acres of Hardline area within the Project site by incorporating these areas into the park. In exchange, the Project would add 12.86 acres of the Project site to the HMP Hardline. This would result in a net increase of 9.50 acres of Hardline area to the City's HMPs preserve. In order to process this boundary adjustment, the Project would require a minor amendment to the City's HMP, including an equivalency finding. The proposed revisions to the Hardline would result in the net increase of 9.50 acres of additional land to the Macario Canyon/Veterans Memorial Park preserve. More information and mapping showing these proposed impacts are provided in Section IV of this IS/MND, which contains the biological resources analysis.

TABLE 1
PROJECT AREA CALCULATIONS

Area	Acres
Project Site	93.70
Portions of Project site not in HMP Hardline (Existing)	50.33
Portions of Project site in HMP Hardline (Existing)	43.37
Portions of Project site proposed to be included in HMP Hardline (Proposed)	52.87
Proposed Increase in HMP Hardline Area	9.50
Portions of Project site that would be impacted by the Project	38.82*
Portions of the Project site that would be avoided by the Project	54.88
Portions of the Project site within the existing HMP Hardline that would be impacted by the Project	3.36

Note: Some totals do not add due to rounding.

* The impact footprint used for biological resources analyses includes trails and indirect impact buffers. Therefore, the biological resources impact is 38.82 acres, slightly larger than the actual grading footprint, which is 37.1 acres.

Source: Psomas 2022.

- Issuance of a Coastal Development Permit (CDP) by the City, due to the Project's location in the Mello II segment of the City's Local Coastal Program (Carlsbad 2019a).

Subsequent approvals (which would require separate processing through the City) would include a grading permit, building permits, street improvement plans, and utility plans.

12. CALIFORNIA NATIVE AMERICAN TRIBES CONSULTATION.

a. Have California Native American Tribes traditionally and culturally affiliated with the project area requested consultation pursuant to public resources code section 21080.3.1?

☒ Yes **☐ No**

b. If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

☒ Yes **☐ No**

The City sent preliminary tribal consultation letters to the San Luis Rey Band of Mission Indians, Rincon Band of Luiseño Indians, Mesa Grande Band of Diegueno Mission Indians, and the Torres Martinez Desert Cahuilla Indians. Both the San Luis Rey Band of Mission Indians and Rincon Band of Luiseño Indians requested consultation meetings. A teleconference meeting was held between the City and San Luis Rey Band of Mission Indians on August 6, 2019, and Rincon on July 15, 2019. San Luis Rey Band of Mission Indians and the Rincon noted that there have been numerous discoveries within the vicinity and provided guidance on appropriate avoidance, minimization, and mitigation measures including tribal monitoring. The analysis and mitigation measures contained in this IS/MND reflect the results of these preliminary tribal consultations.

Formal tribal consultation began on October 26, 2021 with letters being sent to the San Luis Rey Band of Mission Indians, the Rincon Band of Luiseño Indians, Mesa Grande Band of Diegueno Mission Indians, and the Torres Martinez Desert Cahuilla Indians. An additional

closing notice went out on November 22, 2021. On November 30, 2021 the San Luis Rey Band of Missions Indians sent a formal request for consultation with requests that the City has incorporated into this IS/MND. The Rincon Band of Luiseño Indians submitted a letter on December 21, 2021, and on March 7, 2022 the City of Carlsbad provided a response with updated mitigation measures in that letter. The results of that response are reflected in the mitigation measures incorporated into this IS/MND, specifically **MM CUL-1** through **MM CUL-16**.

13. PREVIOUS ENVIRONMENTAL DOCUMENTATION:

No previous environmental documentation has been prepared for this Project. Related environmental documentation from City and other agency's planning documents are referenced where applicable in this IS/MND.

14. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The summary of environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" or "Less Than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

15. PREPARATION: The Initial Study for the subject project was prepared by:

Psomas	3/3/2022
Consultant	Date

16. DETERMINATION: *(to be completed by Lead Agency)*

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 the mitigation measures described herein have been added to the project. 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(s)" on the environment, but at least one potentially significant impact 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 herein. 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, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project. Therefore, nothing further is required.

17. **ENVIRONMENTAL DETERMINATION:** The initial study for this project has been reviewed and the environmental determination, indicated above, is hereby approved.

Don Neu — 3/7/2022

Don Neu, City of Carlsbad City Planner — Date

18. **APPLICANT CONCURRENCE WITH MITIGATION MEASURES:** This is to certify that I have reviewed the mitigation measures in the Initial Study and concur with the addition of these measures to the project.

Kyle Lancaster — 3/9/22

Signature — Date

Kyle Lancaster

Print Name

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 a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, 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. "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 from "Earlier Analyses," as described in (5) below, may be cross-referenced).
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. 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 significant.

9. Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation.

Section 2 – Impact Analysis

I. AESTHETICS Except as provided in Public Resources Code Section 21099, 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 and glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Discussion

a) Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact. A scenic vista is generally defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. A substantial adverse effect to a scenic vista is one that degrades the view from a designated viewing location. A substantial adverse effect to scenic vistas could occur if the Project were to introduce physical features that obstruct an identified public scenic vista, impairs scenic views from other properties, or has a substantial change to the natural landscape. The Pacific Ocean is among the City's principal visual features along with the City's three lagoons, open space areas, and scenic corridors, which are also distinctive aspects of the City's visual character (Carlsbad 2015c). Agua Hedionda Lagoon and adjacent open space areas are visible from the Project site.

With implementation of the Project, the Project site would be developed with improvements including areas for passive and active recreation and community gatherings; landscaping; infrastructure; and maintenance facilities. The Project would not introduce any large or otherwise view-obscuring elements that would have the potential to impede scenic vistas from nearby publicly-accessible vantage points such as roadways (e.g., Faraday Avenue), public trails, or the City-owned public golf course across Faraday Avenue. Two structures are proposed on lower elevations of the Project Site, which would not substantially alter public views of Agua Hedionda or adjacent open space areas. The north and south buildings are conceptually designed to be compatible with the existing visual character of the surrounding area, which would include exterior materials such as stone siding over concrete masonry unit concrete block walls, vertical shiplap siding, shiplap soffit finishes, steel framed windows, and metal roofing. The Project's structures are also designed to not exceed the 25-foot maximum building height, which is required consistent with Section 21.33.060 of the Carlsbad Municipal Code (Carlsbad 2021a). Also, the Project has been designed to maintain much of the natural hillside character of the site by minimizing the amount of Project grading and by incorporating contour grading into manufactured slopes. A

modification to the hillside development and design standards would be required for several areas that propose retaining walls over 6' vertical height on manufactured perimeter slopes over 40 percent gradient. The retaining walls are necessary to construct city-wide multi-use trails, to minimize impacts to the surrounding habitat areas, and to stay within acceptable grading volumes. Trees and shrubs would be used to screen and soften the appearance of retaining walls and the retaining walls have curved shapes (rather than straight lines) to naturally transition into the undulating topography and create an aesthetically pleasing and natural appearance. The Project includes the installation of landscaping as shown in the Conceptual Landscape Plan provided as Exhibit 6. Also, the Project's two structures have been designed and sited to be visually compatible with the surrounding environment. The Project would adhere to the applicable development standards for the O-S zone, as well as with other Citywide policies and requirements. Furthermore, the Project would increase public access and use on a Project site that provides scenic vistas of the Agua Hedionda Lagoon, and view of the rolling hills, the golf course, and distant views of the coast. Thus, effects to scenic vistas would be less than significant, and no mitigation is required.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

Less Than Significant Impact. There are no designated State scenic highways in the City. I-5 is eligible for designation in the California Scenic Highway System; however, the City has not nominated the area of I-5 that occurs within the City for official designation as a scenic route (Caltrans 2020); however, visibility of the Project site from I-5 is limited and distant and confined to the vicinity of Agua Hedionda Lagoon. The Project involves the removal of a limited number of trees; however, a landscape plan would be implemented to compensate for tree removals. Moreover, the Project would not substantially damage scenic resources such as trees, rock outcroppings, or historic buildings. Therefore, the Project would result in a less than significant impact related to this threshold, and no mitigation is required.

c) Would the project 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?

Less than Significant Impact. The area surrounding the Project site is surrounded by a combination of single-family and multi-family residential communities, commercial/office buildings, and a City-owned golf course. Given that the Project site is located in an urbanized area, the analysis for this threshold focuses on whether the Project would conflict with applicable zoning and other regulations governing scenic quality. The Project site is zoned as O-S and is partially located within the City's HMP. During the City's design review process, the Project has been reviewed to ensure compliance with the requirements for development within the O-S Zone, including maximum building heights (Carlsbad 2021a).

The Project has been designed to maintain much of the natural hillside character of the site by minimizing the amount of Project grading, by incorporating contour grading into manufactured slopes, and by avoiding nearly all on-site sensitive habitat and steep slope areas. Several areas require retaining walls that exceed 6' vertical height; however, the retaining walls are necessary to construct city-wide multi-use trails, to minimize impacts to the surrounding habitat areas, and

to stay within acceptable grading volumes. Retaining walls over 6' height require a modification to the Hillside Development Standards.

A Hillside Development Permit would be required for the Project, including a modification to standards for over-height retaining walls. As part of that process, the Project would be reviewed by the City for consistency with Chapter 21.95 of the Municipal Code, which contains hillside development standards. One of the purposes of the City's Hillside Development Permit is to preserve and/or enhance the aesthetic qualities of natural hillsides and manufactured slopes by designing projects which relate to the slope of the land, minimizing the amount of project grading, and incorporating contour grading into manufactured slopes which are located in highly visible public locations (Carlsbad 2021a).

The Project includes the installation of landscaping as shown in the Conceptual Landscape Plan provided as Exhibit 6. Also, the Project's two structures have been designed and sited to be visually compatible with the surrounding environment. The Project would adhere to the applicable development standards for the O-S zone, as well as with other Citywide policies and requirements.

Trails within the Project have been designed in compliance with the Trail Standards and Design Guidelines in the Final Trails Master Plan regarding aesthetic qualities such as trail layout and location, edging and fencing, lighting, and signage (Carlsbad 2019b). Also, given the Project's location within the Coastal Zone, the Project is designed to comply with the regulations of the City of Carlsbad LCP. Further analysis of Project consistency with applicable land use plans, policies, and regulations is provided in response to threshold XI(b).

Given that the Project is consistent with existing zoning and given that the City would review Project design for compliance with regulations governing scenic quality during the design review process, less than significant impacts would result related to this threshold, and no mitigation is required.

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

Less than Significant Impact. The Project would not generally require substantial nighttime lighting during construction because construction activities would occur during the daytime as required by the Carlsbad Municipal Code, Title 8, Chapter 8.48.010, Construction Hours Limitations, which does not allow for construction after 6:00 PM on any day, or before 7:00 AM Monday through Friday, or before 8:00 AM on Saturday. Any temporary construction lighting needed would be confined to active work areas, and would be hooded and directed onto the area of construction.

To accommodate use of the park in the evenings, limited areas of the Project site would be lit including the parking lots, two buildings, pathways, and the bike park. Prior to construction, a lighting plan shall be prepared that provides the type and location of proposed exterior lighting and signage, which would be subject to the review and approval of the City's Planning Department. All new lighting shall be shielded and down-cast, such that the light is not cast onto adjacent properties or visible from above, and all new lighting shall be reviewed to ensure compliance with the standards codified in the City's HMP Adjacency Standards as well as other applicable policies. The design of all internal pathways within the Project site are intended to include lighting for the comfort, safety, and convenience of park users. Lighting would not be

installed where nighttime use is not expected or allowed, adjacent to sensitive wildlife habitat areas, or in areas proximate to residential uses unless shielded.

Consistent with the City's Final Trails Master Plan, no lighting would be provided for the existing Type 2 Recreational Trails within the Project site, which are typically located in natural open space that would be more sensitive to the introduction of new sources of light (Carlsbad 2019b).

Glare is caused by light reflections from pavement, vehicles, and building materials (e.g., reflective glass and polished surfaces). During daylight hours, the amount of glare depends on intensity and direction of sunlight. Glare can create hazards to motorists and nuisances for pedestrians and other viewers. Project elements would be constructed with materials and finishes that complement the natural environment and are not highly-reflective. In addition, glare from automobile headlights would be minimal since the average typical peak weekday visitation is estimated at 305 park visitors with the peak visitation at 800 park users for special events. Furthermore, as discussed above, all light fixtures would be directed downward and shielded or recessed in such a manner so that light trespass is minimized and light from the Project is not perceptible at or beyond the property line. Furthermore, the Project's compliance with General Plan exterior lighting policies (Carlsbad 2015a) and the City's HMP's Adjacency Standards related to shielded and down-cast lighting (Carlsbad 2004) related to lighting, would ensure that Project impacts resulting from new sources of light and glare would be less than significant, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to aesthetics; therefore, no mitigation measures are required.

II. AGRICULTURE AND FORESTRY RESOURCES*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), or timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒

Impact Discussion

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project site is not located on land designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance according to the San Diego County Important Farmland 2016 Map of the California Department of Conservation, Farmland Mapping and Monitoring Program (DOC 2018). Therefore, the Project would not convert farmland to a nonagricultural use, there would be no impact related to this threshold, and no mitigation is required.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is zoned as O-S per the City of Carlsbad General Plan's Land Use and Community Design Element (Carlsbad 2015a) and is designated Urban and Built-Up Land according to the San Diego County Important Farmland 2016 Map of the California Department of Conservation, Farmland Mapping and Monitoring Program. Part of the purpose of the O-S Zone is to provide for "open space and recreational uses which have been deemed necessary for the

aesthetically attractive and orderly growth of the community" and to "protect and encourage such uses wherever feasible." No portion of the Project site is covered by a Williamson Act Contract. Therefore, the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract, there would be no impact related to this threshold, and no mitigation is required.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code, Section 12220[g]), timberland (as defined by Public Resources Code, Section 4526), or timberland zoned Timberland Production (as defined by Government Code, Section 51104[g])?

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project site does not contain designated forest land or timberland as defined in the California Public Resources Code (§§12220[g] and 4526, respectively) (OLC 2020). Furthermore, the Project site is not zoned for forest land or timberland. Therefore, no impacts to forest land or timberland would result from the Project, and no mitigation is required.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. According to a review of aerial imagery, there are no agricultural land uses in immediate proximity to the Project (Google Earth 2021). The Project site is approximately 1.34 miles east and 1 mile northeast of existing farmlands as referenced in Section 3.14 of the Final Program Environmental Impact Report for the Carlsbad General Plan Update (Carlsbad 2015c). Construction and operation of the Project would not affect the maintenance, operations, or visitor experience of these existing farmlands. Furthermore, the Project would not cause the conversion of farmland to non-agricultural use. The Project has no forestry land uses and does not contain a significant number of trees that would be useful for forestry purposes. Therefore, no impacts to farmlands would result from the Project, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to agriculture and forestry resources; therefore, no mitigation measures are required.

III. AIR QUALITY* 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 in 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?	☐	☐	☒	☐

***** 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 determinations in this section.

Environmental Setting

Local Air Quality:

An area is designated in attainment when it is in compliance with the National Ambient Air Quality Standards (NAAQS) (federal) and/or California Ambient Air Quality Standards (CAAQS) (State). These standards are set by the Environmental Protection Agency (EPA) or the California Air Resources Board (CARB) for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. The criteria pollutants of primary concern that are considered in an air quality assessment include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter (PM_{10}, and $PM_{2.5}$), and lead. Volatile organic compounds (VOC) and NO_x, are precursors to the formation of ground-level O_3. Toxic air contaminants are also considered.

Table 2, Attainment Status of Criteria Pollutants in San Diego County, shows the San Diego County designations for criteria pollutants:

TABLE 2
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN SAN DIEGO COUNTY

Criteria Pollutant	Federal Designation (NAAQS)	State Designation (CAAQS)
Ozone (8-Hour)	Nonattainment-Serious/Moderate[a]	Nonattainment
Ozone (1-Hour)	Attainment[a]	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM_{10}	Unclassifiable[b]	Nonattainment
$PM_{2.5}$	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified

NAAQS: National Ambient Air Quality Standards; CAAQS: California Ambient Air Quality Standards; PM_{10}: respirable particulate matter 10 microns or less in diameter; $PM_{2.5}$: fine particulate matter 2.5 microns or less in diameter.

a. San Diego County is designated Serious Nonattainment for the 2008 O_3 standard and Moderate Nonattainment for the 2015 O_3 standard,

b. The federal 1-hour standard of 12 parts per hundred million (pphm) was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

c. At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

Source: SDAPCD 2021, USEPA 2021

As of August 2021, the San Diego Air Basin is designated in attainment for all criteria pollutants under the NAAQS with the exception of O_3 (8-Hour) and PM_{10}, which is listed as unclassifiable. The SDAB is currently designated nonattainment for O_3, particulate matter, PM_{10}, and $PM_{2.5}$, under the CAAQS. It is designated as attainment under CAAQS for CO, NO_2, SO_2, lead and sulfates.

Impact Discussion

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

No Impact. As shown in Table 2, San Diego County is currently designated as a Serious Nonattainment Area for the 2008 ozone NAAQS (75 parts per billion [ppb]), and a Moderate Nonattainment Area for the 2015 ozone NAAQS (70 ppb). Accordingly, the San Diego County Air Pollution Control District (SDAPCD) was required to prepare and submit to the EPA, via CARB, two ozone State Implementation Plans (SIPs) identifying control measures and associated emissions reductions necessary to demonstrate attainment of the 75 ppb standard by July 20, 2021 (2020 attainment year) and attainment of the 70 ppb standard by August 3, 2024 (2023 attainment year). The 2020 Plan for Attaining the NAAQS for Ozone in San Diego County (2020 Attainment Plan) addresses all requirements for both ozone standards (SDAPCD 2020). The 2020 Attainment Plan was approved by CARB on November 19, 2020, and submitted by CARB on January 8, 2021, for EPA's consideration as a revision to the California SIP.

Emission inventories, projections, and trends in the 2020 Attainment Plan are based on the latest ozone precursor emissions data compiled and maintained by CARB. Supporting data were jointly developed by CARB, SDAPCD, and the San Diego Association of Governments (SANDAG), which each play a role in collecting and reviewing the data necessary to generate comprehensive emission inventories. The supporting data include socio-economic projections, industrial and travel activities, emission factors, and emission speciation profiles.

The Project relates to the SIP and the 2020 Attainment Plan through the land use and growth assumptions that are incorporated into the air quality planning documents. These growth assumptions are based on each city's and the County's general plan. The Project is consistent with the O-S designation for the site in Carlsbad's General Plan used to develop the supporting data for the 2020 Attainment Plan and SIP. As shown in question b) below, operation of the Project would result in less emissions than would occur without the Project and therefore would not exceed emissions anticipated as a part of the SANDAG and 2020 Attainment Plan growth projections. As such, the Project would not conflict with either the 2020 Attainment Plan or the SIP. There would be no impact related to this threshold, and no mitigation is required.

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

Less than Significant Impact. The SDAPCD operates a network of ambient air monitoring stations throughout San Diego County. Due to its proximity to Carlsbad with similar geographic and climatic characteristics, the Camp Pendleton monitoring station concentrations of O_3, NO_2, and $PM_{2.5}$ are considered most representative of the concentrations of these pollutants in Carlsbad. The San Diego – Kearny Villa Road monitoring station is the nearest location where PM_{10} concentrations are monitored. Monitoring data from the years 2017–2019 at the Camp Pendleton Station are shown in Table 3, Air Quality Monitoring Data for 2017–2019 Camp Pendleton Station. Federal and State air quality standards are presented with the number of times those standards were exceeded.

Thresholds of Significance

Appendix G of the State California Environmental Quality Act (CEQA) Guidelines states that the significance criteria established by the applicable air quality management district may be relied upon to make significance determinations. The SDAPCD has not established specific CEQA significance thresholds. As part of its air quality permitting process, the SDAPCD has established "trigger levels" in Rule 20.2 for the preparation of Air Quality Impact Assessments (SDAPCD 2019). These trigger levels are used in this analysis as CEQA significance thresholds for both construction and operational impacts, as shown in Table 3. The Rule 20.2 trigger levels do not include a value of volatile organic compounds (VOC). The Threshold for VOC shown in Table 3, Air Quality Significance Thresholds, is used by the County of San Diego.

TABLE 3
AIR QUALITY MONITORING DATA FOR 2017–2019
CAMP PENDLETON STATION

Pollutant	California Standard	National Standard	Year	Max. Level[a]	State Standard Days Exceeded[b]	National Standard Days Exceeded[b,]
O_3 (1 hour)	0.09 ppm	None	2017	0.094	0	NA
			2018	0.084	0	NA
			2019	0.075	0	NA
O_3 (8 hour)	0.070 ppm	0.070 ppm	2017	0.082	5	4
			2018	0.069	0	0
			2019	0.065	0	0
NO_2 (1 Hour)	0.18 ppm	0.100 ppm	2017	0.063	0	0
			2018	0.048	0	0
			2019	0.053	0	0
NO_2 (AAM)	0.030 ppb	0.053 ppb	2017	0.006	No	No
			2018	—	—	—
			2019	0.005	No	No
$PM_{2.5}$ (24 Hour)	None	35 µg/m^3	2017	26.0	N/A	—
			2018	30.5	N/A	—
			2019	13.8	N/A	—
$PM_{2.5}$ (AAM)	12 µg/m^3	15 µg/m^3	2017	—	No	—
			2018	—	No	—
			2019	—	No	—

O_3: ozone; ppm: parts per million; NO_2: nitrogen dioxide; AAM: annual arithmetic mean; ppb: parts per billion; $PM_{2.5}$: fine particulate matter 2.5 microns or less in diameter; µg/m^3: micrograms per cubic meter.

"—" indicates that the data are not reported or there is insufficient data available to determine the value. N/A indicates that there is no applicable standard.

State and national data may differ because of differing methods for selecting hours for averaging.

[a] California maximum levels were used.

[b] For annual averaging times, a "Yes" or "No" response is given if the annual average concentration exceeded the applicable standard.

There were no exceedances of federal or State PM_{10} standards at the San Diego – Kearny Villa Road monitoring station.

Source: CAPCOA 2021

TABLE 4
AIR QUALITY SIGNIFICANCE THRESHOLDS

Pollutant	Construction and Operation
NOx	250 lbs/day
VOC	75 lbs/day
PM_{10}	100 lbs/day
$PM_{2.5}$	67 lbs/day
SOx	250 lbs/day
CO	550 lbs/day
Lead	3.2 lbs/day

NOx: nitrogen oxides; lbs/day: pounds per day; VOC: volatile organic compound; PM_{10}: respirable particulate matter with a diameter of 10 microns or less; $PM_{2.5}$: fine particulate matter with a diameter of 2.5 microns or less; SOx: sulfur oxides; CO: carbon monoxide.

Source: SDAPCD 2019; County of San Diego 2007

Grading and Construction

The Project involves grading of the Project site and subsequent construction of park facilities, as described in Section 1 above. Construction activities would generate air pollutant emissions through the use of diesel-powered equipment, trucks bringing materials to the site, and vehicles bringing workers to and from the site. Pollutants would also be emitted from paving and painting. Emissions were calculated using the California Emissions Estimator Model™ (CalEEMod™), version 2020.4.0 (CAPCOA 2021). The purpose of this model is to calculate construction-source and operational-source pollutants (NO_x, VOC, PM_{10}, $PM_{2.5}$, SO_x, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures.

The construction emissions analysis assumes that construction would begin in July 2023 and be completed in April of 2025, a period of 20 months. It was assumed that dust emissions would be reduced by watering or similar methods as required by SDAPCD Rule 55 and that diesel-powered heavy equipment would be Tier 3 or better to limit NOx emissions. Additional model input data are shown in the CalEEMod data included in Appendix A.

Table 5, Estimated Maximum Daily Construction Emissions, presents the estimated maximum daily emissions occurring during construction of the Project and compares the estimated emissions with the SDAPCD thresholds. As shown in Table 5, all pollutant emissions would be below the respective thresholds. Please note that after the air quality analysis was conducted, Project grading was revised from 14,100 cubic yards of import to 8,300 cubic yards of export. Given that less soil would need to be moved from the Project site, this would reduce the air quality emissions associated with haul trucks during the grading period of construction. As such, the analysis contained herein is more conservative than what is currently proposed in the current grading plan provided as Exhibit 7.

TABLE 5
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS

Year	Emissions (lbs/day)					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
2023	2	30	37	<0.5	6	3
2024	2	30	37	<0.5	6	3
2025	3	11	18	<0.5	1	1
Maximum Emissions	**3**	**30**	**37**	<0.5	**6**	**3**
Significance Thresholds (Table 4)	*75*	*250*	*550*	*250*	*100*	*67*
Exceeds Thresholds?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NO_x: nitrogen oxides; CO: carbon monoxide; SO_x: sulfur oxides; PM_{10}: respirable particulate matter 10 microns or less in diameter; $PM_{2.5}$: fine particulate matter 2.5 microns or less in diameter.

Values are higher of summer or winter.

See Appendix A for CalEEMod model outputs.

Operations

Operational emissions are comprised of area and mobile source emissions. Area source emissions are based on CalEEMod assumptions for the specific land uses and size and include emissions from landscaping equipment and the use of consumer products. The Project would generate an estimated 893 average daily trips (ADT) on weekdays and 1,099 ADT on weekend days (Psomas 2021a, Fehr & Peers 2021). However, as described in the Project's Vehicle Miles Traveled (VMT) Assessment memorandum, many, or most of the trips are redistributed trips from traveling to existing parks to the new Veterans Memorial Park assuming the proposed park is the closest location to their home (Fehr & Peers 2021). Thus, the Project, when compared to the No Project scenario, would result in a reduction in regional VMT and therefore a reduction in air pollutant emissions from mobile sources. The peak daily Project long-term operational emissions are summarized below in Table 6, Peak Daily Operational Emissions. The mobile emissions are negative values representing the reduction in emissions resulting from reduced VMT. As shown in Table 6, the reduction in emissions due to mobile sources are greater than the estimated emissions from area sources; thus, the Project would result in a long-term reduction in emissions of all the analyzed pollutants.

TABLE 6
PEAK DAILY OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)*					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area sources	0.1	<0.05	0.1	0.0	<0.05	<0.05
Mobile sources	-2.2	-1.7	-15.2	-<0.05	-3.1	-0.8
Total Operational Emissions	**-2.1**	**-1.7**	**-15.2**	**-<0.05**	**-3.1**	**-0.8**
Significance Thresholds (Table 4)	*75*	*250*	*550*	*250*	*100*	67
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NO_x: nitrogen oxides; CO: carbon monoxide; SO_x: sulfur oxides; PM_{10}: respirable particulate matter 10 microns or less in diameter; $PM_{2.5}$: fine particulate matter 2.5 microns or less in diameter.

* Some totals do not add due to rounding.

See Appendix A for CalEEMod model outputs.

As shown in Table 2, San Diego County is designated as nonattainment for O_3, PM_{10}, and $PM_{2.5}$. Short-term construction emissions of PM_{10}, $PM_{2.5}$, and O_3 precursors VOC and NOx would be substantially less than the significance thresholds, as shown in Table 5, and therefore would not be cumulatively considerable and contribute to the nonattainment within the air basin. Long-term operational emissions of PM_{10}, $PM_{2.5}$, and O_3 precursors VOC and NOx would be less than for the No Project scenario, and therefore would not be cumulatively considerable. The impacts would be less than significant related to this threshold, and no mitigation is required.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Sensitive receptors include schools, hospitals, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, or other facilities that house individuals with health conditions that would be adversely impacted by changes in air quality. The nearest sensitive receptors are the multi-family residences approximately 100 feet north of the Project site, on the north side of Whitman Way.

Criteria Pollutants

As shown in Table 5 above, maximum daily construction emissions would be substantially less than the significance thresholds, nor has representative monitored air quality exceeded federal or State standards since 2017. Therefore, construction phase emissions would not expose sensitive receptors to substantial pollutant concentrations. Operational emissions would be limited to area source emissions, which, as shown in Table 6, would be negligible, and local mobile source emissions from the vehicles driven by park users on Faraday Avenue and Cannon Road. The primary concern from criteria pollutant mobile operations is CO hotspots, which can occur at congested, high-volume intersections. The County of San Diego has published the following guideline for analysis (County of San Diego 2007):

> "CO concentrations tend to be higher in urban areas where there are many mobile-source emissions. CO "hotspots" or pockets where the CO concentration exceeds the NAAQS and/or CAAQS, have been found to occur only at signalized intersections that operate at or below level of service (LOS) E with peak-hour trips for that intersection exceeding 3,000 trips. Therefore, any project that would place

> receptors within 500 feet of a signalized intersection operating at or below LOS E (peak-hour trips exceeding 3,000 trips) must conduct a "hotspot" analysis for CO. Likewise, projects that would cause road intersections to operate at or below a LOS E (with intersection peak-hour trips exceeding 3,000) would also have to conduct a CO "hotspot" analysis."

The Project Transportation Impact Study (Psomas 2021a) shows that projected 2024 intersection peak hour trips at the Faraday Avenue/Cannon Road intersection would be less than 3,000 and that future operations would be acceptable. Therefore, based on the County's guideline, the CO hotspot impact would be less than significant.

Toxic Air Contaminants

Construction activities would result in short-term, Project-generated emissions of diesel particulate material (DPM) from the exhaust of off-road, heavy-duty diesel equipment used for site preparation; paving; building construction; and other miscellaneous activities. CARB identified DPM as a toxic air contaminant (TAC) in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer time. According to the Office of Environmental Health Hazard Assessment, health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 40-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

There would be relatively few pieces of off-road, heavy-duty diesel equipment in operation, and the total construction period of approximately 20 months would be relatively short when compared to a 40-year exposure period and occur over approximately 38.82 acres[6] of the Project site. Combined with the highly dispersive properties of DPM over the large Project area and additional reductions in particulate emissions from newer construction equipment, as required by U.S. Environmental Protection Agency (USEPA) and CARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant related to this threshold, and no mitigation is required.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact. Project construction would use equipment and activities that could result in odors. However, these odors would be typical of construction sites and not extraordinarily objectionable. Potential construction odors include on-site construction equipment's diesel exhaust emissions as well as roofing, painting, and paving operations. There may be situations where construction activity odors may be noticed. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. These odors would not be of such magnitude to cause a public nuisance. Therefore, the impacts would be short-term; would not affect a substantial number of people; and would be less than significant.

Examples of land uses and industrial operations that are commonly associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing facilities,

[6] The impact footprint used for biological resources analyses includes trails and indirect impact buffers. Therefore, the biological resources impact is 38.82 acres, slightly larger than the actual grading footprint, which is 37.1 acres.

chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project does not include any of these uses nor would the park contain equipment that would emit objectionable odors. In addition, the Project uses are regulated from nuisance odors or other objectionable emissions by SDAPCD Rule 51, Nuisance. Rule 51 prohibits discharge from any source whatsoever of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property. The impact would be less than significant related to this threshold, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to air quality; therefore, no mitigation measures are required.

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

Impact Discussion

a) Would the project 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?

Less Than Significant With Mitigation Incorporated. A Biological Technical Report was prepared for the Project, which is provided as Appendix B (Psomas 2022). This report details the known and potential biological resources within and adjacent to the Project site based on review of existing data on sensitive biological resources known to occur in the City, including special status species records, sensitive natural communities mapping, wetlands mapping, and field surveys.

The Project would result in direct and indirect impacts to special status species. Direct impacts include the removal of habitat or direct impacts to individuals during construction. Indirect impacts would include construction noise, dust, vibration, and runoff, which could affect individuals and habitat outside of the Project's direct impact footprint.

Special Status Wildlife Species

A variety of special status wildlife species have been reported from the vicinity of the Project site based on the results of the literature review.

Surveys were conducted for coastal California gnatcatcher as described in the Coastal California Gnatcatcher Report provided as Appendix C. A total of three coastal California gnatcatcher (federally Threatened; HMP-Covered Species) territories were present on the Project site during the surveys (Exhibit 8). All three territories observed during the surveys consisted of gnatcatcher pairs, which exhibited behavior consistent with breeding. Two of the three pairs had active nests which were documented with nestlings during the first focused survey. One nest was located in a black sage shrub, in the southeastern portion of the Project site and the other nest was located in a California sagebrush shrub approximately 300 feet outside of the northeast boundary of the Project site. While this nest location was outside of the Project site boundary, the territory of the pair extended into the Project site and included the coastal sage scrub habitat located just within the northeastern boundary. All three territories were located within the existing HMP hardline.

In addition, one other special status wildlife species was observed during the field survey: loggerhead shrike (California Species of Special Concern). Attachment A of the Biological Technical Report (Appendix B) provides a list of special status wildlife species reported from the vicinity of the Project site, their general habitat requirements, and their potential to occur on the Project site.

Thirty special status wildlife species have been reported from the Project region and may occur on the Project site as a resident or as a visitor during foraging activities. Those species that are expected to occur primarily in the scrub/chaparral communities and may occur onsite include the southern California legless lizard (*Anniella stebbinsi)*, California glossy snake (*Arizona elegans occidentalis)*, orange-throated whiptail (*Aspidoscelis hyperythra* (State Watch List; HMP-Covered Species), coastal whiptail (*Aspidoscelis tigris stejnegeri)*, red-diamond rattlesnake (*Crotalus ruber)*, coast horned lizard (*Phrynosoma blainvillii)*, Coronado skink (*Plestiodon skiltonianus interparietalis)*, coast patch-nosed snake *(Salvadora hexalepis virgultea)*, southern California rufous-crowned sparrow (*Aimophila ruficeps canescens)* (State Watch List; HMP-Covered Species), coastal California gnatcatcher, Bell's sage sparrow (*Artemisiospiza belli belli),* Dulzura pocket mouse (*Chaetodipus californicus femoralis),* northwestern San Diego pocket mouse (*Chaetodipus fallax fallax)*, San Diego black-tailed jackrabbit (*Lepus californicus bennettii)*, and San Diego desert woodrat (*Neotoma lepida intermedia)*. Due to the limited amount of scrub/chaparral habitat that would be impacted by the Project that could support these species (approximately 0.94 acre), these potential impacts would be considered adverse, but not significant.

The Project would impact approximately 35 acres of potential habitat for species that primarily occur in grassland areas and may occur onsite including the western spadefoot (*Spea hammondii)*, burrowing owl (*Athene cunicularia)*, northern harrier (*Circus hudsonius)*, and California horned lark (*Eremophila alpestris actia)*. Potential impacts to these species are considered potentially significant. Implementation of **MM BIO-1**, which specifies compensatory mitigation for impacts to non-native grasslands, would reduce these impacts to less than significant levels.

The following special status species may occur onsite primarily for foraging or winter roosting in eucalyptus trees include monarch (*Danaus plexippus)*, golden eagle (*Aquila chrysaetos)*, and

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Biological Resources

Veterans Memorial Park

Exhibit 8

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Swainson's hawk (*Buteo swainsoni).* The loss of potential habitat for these species is considered an adverse impact; however, this loss is not expected to reduce populations of these species below self-sustaining levels in the Project region. Therefore, this impact would be considered less than significant, and no mitigation would be required.

The Cooper's hawk (*Accipiter cooperii*) (State Watch List; HMP-Covered Species), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), and loggerhead shrike may occur onsite for nesting. The loss of an active migratory bird nest would be considered a violation of the MBTA and Sections 3503, 3503.5, and 3513 of California Fish and Game Code. The MBTA and California Fish and Game Code prohibits the taking of migratory birds, nests, and eggs. The potential loss of an active nest would be considered adverse but not significant because the impact does not meet the significance criteria identified above. However, implementation of **MM BIO-4** has been included, which addresses the time frame in which construction could occur to avoid active nests and includes a requirement to flush birds away from the impact areas to prevent direct impacts to individual animals. In addition, if other construction activities cannot be avoided during the nesting season, the Project shall implement the requirements contained in **MM BIO-5** to avoid and/or reduce potential impacts, which include requirements for lighting, Project site cleanliness, and measures to keep pets and exotic species out of the Project site. With implementation of **MM BIO-4** and **MM BIO-5**, potentially significant impacts to migratory birds, nests, and eggs would be reduced to a less than significant level.

The remaining special status wildlife species that may occur onsite are roosting bats: pallid bat (*Antrozous pallidus)*, Townsend's big-eared bat (*Corynorhinus townsendii)*, western mastiff bat (*Eumops perotis californicus)*, hoary bat (*Lasiurus cinereus)*, and Yuma myotis (*Myotis yumanensis)*. During the bat maternity season, bats are known to form colonial maternity roosts where multiple pregnant females give birth to flightless pups and rear the young. Impacts to active maternity roosts are considered potentially significant under CEQA as some roosts can be considered native wildlife nursery sites. Bat species are considered non-game mammals and are afforded protection by State law from take (Fish and Game Code, § 4150). Conflicts with State law resulting from project-related impacts to native bat species are considered significant. However, **MM BIO-5** has been included that addresses actions to avoid and/or reduce potential impacts to roosting bat species, including a required survey for tree roosting bats prior to trees being removed. With implementation of **MM BIO-5,** potentially significant impacts to roosting bats would be reduced to a less than significant level.

Special Status Plant Species

A variety of special status plant species have been reported from the vicinity of the Project site based on the results of the literature review. Three special status plant species were observed during the field survey: California adolphia (CRPR 2B.1), summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*) (CRPR 1B.2), and Nuttall's scrub oak (*Quercus dumosa*) (CRPR 1B.1; HMP-Covered Species). The former was located throughout the eastern half of the Project site and the other two are shown on Exhibit 8. An additional two species have been reported from the Project area but were not located during focused survey efforts: Wiggins' cryptantha (*Cryptantha wigginsii*) (CRPR 1B.2; CDFW 2021, 2013 record) and Palmer's grapplinghook (*Harpagonella palmeri*) (CRPR 4.2; CDFW 2021, 1981 record). Attachment A of the Biological Technical Report (Appendix B) provides a list of special status plant species reported from the vicinity of the Project site, their general habitat requirements, and their potential to occur on the Project site.

The special status plant species observed on the Project site (California adolphia, summer holly, and Nuttall's scrub oak) are located in the preserved areas of the Project site and would not be impacted by the Project. Therefore, no mitigation is required for direct impacts. To protect the specials status plant species in the preserved areas, standard measures addressed in the Carlsbad HMP would provide adequate protection. Specifically, potential indirect impacts to special status plant species shall be reduced to a less than significant level with incorporation of **MM BIO-3**, which requires a training session for Project personnel, delineation of the Project boundaries, implementation of a SWPPP, biological monitoring and reporting during construction, and other related requirements. With implementation of **MM BIO-3**, potentially significant impacts related to special status plant species would be reduced to less than significant levels.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Less Than Significant With Mitigation Incorporated. The CDFW Vegetation Classification and Mapping Program provides a list of Vegetation Alliances, Associations, and Special Stands that are considered to be "Sensitive Natural Communities" based on their rarity and threat (CDFW 2020). The CDFW considers some, but not all, Coastal Sage Scrub Associations to be sensitive. According to this CDFW standard, areas dominated by California sagebrush, California buckwheat, black sage, and coyote brush would not be considered sensitive. The remainder of the vegetation in the Project site is not considered sensitive by the CDFW.

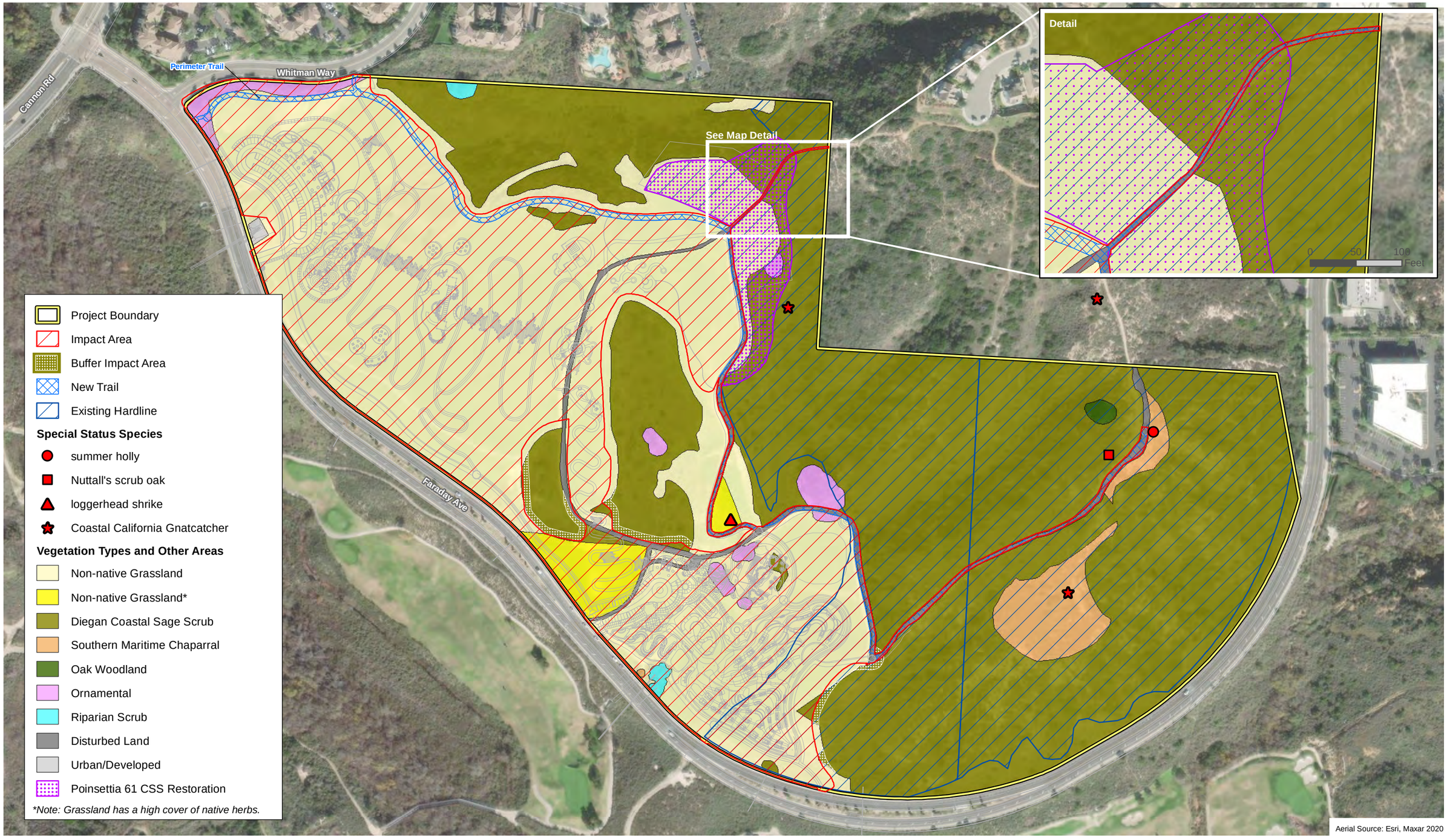
However, based on the Habitat Management Plan for Natural Communities in the City of Carlsbad (City of Carlsbad 2004), the following vegetation communities observed onsite are considered sensitive: non-native grassland, Diegan coastal sage scrub, southern maritime chaparral, and riparian scrub.

As shown in Exhibit 9, the Project would impact the following sensitive vegetation communities:

Non-native grassland - A total of 35.29 acres of non-native grasslands would be impacted by Project implementation Impacts to this vegetation community are considered adverse and would need to be mitigated as required in the HMP. **MM BIO-1**, which specifies compensatory mitigation for impacts to non-native grasslands, would reduce these impacts to less than significant levels.

Diegan Coastal Sage Scrub - The Project would impact a total of 0.94 acre of Diegan coastal sage scrub. This vegetation community is considered sensitive by the HMP and provides potential habitat for the coastal California gnatcatcher. Therefore, this impact is considered significant and would need to be mitigated pursuant to the HMP. **MM BIO-2** would be implemented as part of the Project, which requires restoration to compensate for impacts to Diegan coastal sage scrub. **MM BIO-3** would also be implemented as part of the Project, which requires a training session for Project personnel, delineation of the Project boundaries, implementation of a SWPPP, biological monitoring and reporting during construction, and other related requirements. With implementation of **MM BIO-2** and **MM BIO-3**, potentially significant impacts related to the removal of Diegan coastal sage scrub would be reduced to less than significant.

Southern Maritime Chaparral - A total of 0.01 acre of southern maritime chaparral would be impacted by Project implementation. Impacts on this vegetation community is considered adverse and would need to be mitigated as required in the HMP. **MM BIO-2** would be implemented as part



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Project Impacts to Biological Resources

Veterans Memorial Park

Exhibit 9

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of the Project, which requires restoration to compensate for impacts to southern maritime chaparral. **MM BIO-3** would also be implemented as part of the Project, which requires a training session for Project personnel, delineation of the Project boundaries, implementation of a SWPPP, biological monitoring and reporting during construction, and other related requirements. With implementation of **MM BIO-2** and **MM BIO-3**, potentially significant impacts related to the removal of southern maritime chaparral would be reduced to less than significant.

Riparian Scrub - Approximately 0.1 acre of riparian scrub that supports willows would be impacted on the Project site. Impacts on this vegetation community is considered adverse and would need to be mitigated as required in the HMP. **MM BIO-2** would be implemented as part of the Project, which requires restoration to compensate for impacts to riparian scrub. **MM BIO-3** would also be implemented as part of the Project, which requires a training session for Project personnel, delineation of the Project boundaries, implementation of a SWPPP, biological monitoring and reporting during construction, and other related requirements. With implementation of **MM BIO-2** and **MM BIO-3**, potentially significant impacts related to the removal of riparian scrub would be reduced to less than significant.

c) Would the project 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?

Less Than Significant With Mitigation Incorporated. A variety of areas supporting potential jurisdictional resources on the Project site were evaluated; however, none of the areas evaluated were found to be subject to the jurisdiction of the USACE, the RWQCB, or the CDFW. One small area of riparian scrub along Faraday Avenue appears to collect surface runoff from the adjacent slopes, concrete ditches, and the adjacent road drain into the pipe culvert leading under Faraday Avenue. This man-made area has resulted in the establishment of 0.1 acre of riparian vegetation. This area may meet the definition of wetland by the CCC. As described above, impacts on this vegetation community is considered adverse and would need to be mitigated as required in the HMP. **MM BIO-2** would be implemented as part of the Project, which requires restoration to compensate for impacts to riparian scrub, which is considered a State and Federally protected wetland. **MM BIO-3** would also be implemented as part of the Project, which requires a training session for Project personnel, delineation of the Project boundaries, implementation of a SWPPP, biological monitoring and reporting during construction, and other related requirements. With implementation of **MM BIO-2** and **MM BIO-3**, potentially significant impacts related to the removal of wetlands would be reduced to less than significant.

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

Less Than Significant With Mitigation Incorporated. The Project site generally occurs in a pocket of approximately 200 acres of contiguous habitat surrounded by residential development, local arterials, golf course, and natural open space. The development of Veterans Park has been planned by the City since at least the 1990s, and possibly earlier. The eastern portion of the Project site was set aside as HMP hardline (Macario Canyon/Veterans Park Preserve) prior to adoption of the HMP in 2004 to ensure continued north-south wildlife movement in anticipation of the park being built. The removal of 3.36 acres of HMP hardline would not significantly affect movement in this area (Exhibit 6). The addition of 12.86 acres to the HMP hardline to compensate for the loss would connect the large central island of coastal sage scrub to the Macario

Canyon/Veterans Park to the east, incorporate the smaller island into the preserve, and protect additional habitat on the north side. Therefore, the change in HMP hardline boundary is not expected to significantly impact wildlife movement.

However, the land use change from an open field to a developed park may have a significant potential impact to wildlife movement. **MM BIO-6** would be implemented as part of the Project, which requires consistency with the City's HMP Adjacency Standards, including the requirement for park signage to deter entry into the native habitat by people and pets as well as other measures. With implementation of **MM BIO-6**, potentially significant impacts related to wildlife movement would be reduced to a less than significant level.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant With Mitigation Incorporated. The Project has been designed to comply with the policies of the Carlsbad LCP and HMP, including no net loss of upland or riparian habitat. With the implementation of **MM BIO-1** through **MM BIO-8**, the Project would not conflict with any local policies or ordinances protecting biological resources. A less than significant impact, with implementation of mitigation measures, would result from the Project related to this threshold.

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

Less Than Significant With Mitigation Incorporated. The Project's consistency with the Carlsbad HMP and Local Coastal Program are discussed below.

Carlsbad HMP

The Carlsbad HMP was adopted by the City of Carlsbad's City Council in November 2004. The HMP outlines specific conservation, management, facility siting, land use, and other measures to be implemented by the City to preserve and protect sensitive biological resources and habitat within the City, while also allowing for growth and development as anticipated under the General Plan. All future development projects would be required to comply with the conditions of the City's HMP, including compliance with the established mitigation ratios, avoidance and minimization measures for special-status species and sensitive vegetation, adherence to the Coastal Zone Standards, Recreation and Public Access recommendations, and Adjacency Standards.

The Project would impact sensitive HMP species and habitat. Implementation of **MM BIO-1** through **MM BIO-8** would ensure that the avoidance, minimization, and compensatory mitigation efforts are implemented consistent with the City's HMP requirements.

However, the Project disturbance footprint does falls within the existing hardline of the HMP (Macario Canyon/Veterans Memorial Park preserve). In total, the Project would directly impact 3.36 acres of habitat in the hardline area including 0.20 acre of Diegan coastal sage scrub, 0.17 acre of disturbed areas, and 2.99 acres of non-native grassland. To compensate for this loss, a total of 12.86 acres within the Project site would be added to the HMP Hardline resulting in a net increase of 9.50 acres of coastal sage scrub habitat. Also, the proposed revisions to the Hardline would result in the preservation of substantially higher quality habitat than what is currently preserved in the 3.36 acres proposed for impacts, which consists primarily of non-native

grassland with some minor slivers of Diegan coastal sage scrub. The 12.86 acres proposed to be added to the Hardline consists of higher value, larger patches of Diegan coastal sage scrub in addition to smaller areas of non-native grassland.

Carlsbad Local Coastal Program

The Project is located in the Coastal Zone. The HMP is part of the implementation plan for Carlsbad's Local Coastal Program. With implementation of **MM BIO-8**, the Project would be consistent with the HMP's Coastal Zone Standards and would therefore not conflict with the Carlsbad Local Coastal Program or any other local policies or ordinances protecting biological resources.

Mitigation Measures

MM BIO-1: Mitigation for impacts to non-native grasslands will be mitigated by debiting the appropriate acreage from the city's Lake Calavera Mitigation Parcel. The Lake Calavera parcel was identified in the City HMP as a public project mitigation parcel for municipal projects, including Veterans Memorial Park. The mitigation parcel is available to mitigate for habitat impacts from City projects on an acre-for-acre basis regardless of the type being impacted, except for gnatcatcher occupied coastal sage scrub, southern maritime chaparral, maritime succulent scrub, and wetlands.

The Table below identifies the vegetation communities, impacted areas, City HMP required mitigation ratios, and mitigation required from the Lake Calavera Mitigation Parcel.

LAKE CALAVERA MITIGATION PARCEL

Vegetation Communities and Other Areas	Impacted (Acres)	Mitigation Ratio (From Table 11 of HMP)	Mitigation Required (Acres)
Non-native Grassland	35.29	0.5 to 1	17.65

BIO-2: The Project shall restore (i.e., create) 1.88 acres of Diegan coastal sage scrub and 0.03 acre of southern maritime chaparral onsite. The Habitat Restoration Plan for upland mitigation areas shall be reviewed and approved by the City in consultation with the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the California Coastal Commission (CCC). The 0.10 acre impact to willow dominated riparian scrub will be mitigated with unused wetland creation credits the city previously purchased from the North County Habitat Bank. According to Barry Jones, credit manager (January 2022), the North County Habitat Bank has met 5 year success criteria, per the Bank Enabling Instrument; therefore, projects should be allowed to mitigate at a 1:1 mitigation ratio instead of the standard 3:1 mitigation ratios typically required. Each of the city's pre-purchased credits has an effective "mitigation value" of up to 3 acres of typical permittee-responsible mitigation, subject to agency approval. The City shall submit a final Habitat Restoration Plan to the agencies for review at least 30 days prior to initiating Project impacts. The Habitat Restoration Plan shall be prepared and implemented consistent with the Multiple Habitat Conservation Program, Appendix C (Revegetation Guidelines), and Volume III; Habitat Management Plan

for Natural Communities in the City of Carlsbad (City of Carlsbad 2004, pp. F-8 to F-11); and Components of a Conceptual Restoration Plan (City of Carlsbad 2018). At a minimum, the Habitat Restoration Plan should include an evaluation of restoration suitability specific to proposed habitat types, soil and plant material salvage/translocation information, planting and seeding lists, a discussion of irrigation, a maintenance and monitoring program, and success criteria. All areas should be monitored for five years to ensure establishment of intended plant communities or until Year 5 success criteria have been met.

Restoration techniques, as specified in the Habitat Restoration Plan, may include planting, hydroseeding, hand-seeding, imprinting, and soil and plant salvaging. The Habitat Restoration Plan shall also include criteria to measure success and describe how monitoring of revegetation efforts shall be implemented. At the completion of Project construction, all construction materials and temporary irrigation shall be removed from the site.

Additionally, if deemed necessary, any topsoil located in areas to be restored shall be conserved and stockpiled during the excavation process for use in the restoration process.

The Table below identifies the vegetation communities, impacted areas, City HMP required mitigation ratios, and mitigation required as part of the Habitat Restoration Plan.

HABITAT RESTORATION PLAN

Vegetation Communities and Other Areas	Impacted (Acres)	Mitigation Ratio (From Table 11 of HMP)	Mitigation Required (Acres)
Diegan Coastal Sage Scrub	0.94	2 to 1	1.88
Southern Maritime Chaparral	0.01	3 to 1	0.03
Willow Dominated Riparian Scrub	0.10	3 to 1	0.3
Total	**1.05**		**2.21**

* Because the North County Habitat Bank has met 5 year success criteria, per the Bank Enabling Instrument, projects should be allowed to mitigate at a 1:1 mitigation ratio instead of standard 3:1 mitigation ratios typically required for projects. Each of the city's pre-purchased credits has an effective "mitigation value" of up to 3 acres of typical permittee-responsible mitigation, subject to agency approval (Barry Jones, North County Habitat Bank, Pers. Comm, January 2022).

BIO-3: The potential for significant indirect impacts during construction shall be mitigated through implementation of the standard measures stated in the City's Guidelines for Biological Studies (2008), as revised below.

(a) A qualified biologist shall conduct a training session for Project personnel prior to Project activities. At a minimum, the training shall include a description of the target species of concern and its habitats; the general provisions of the federal and state Endangered Species Acts and the Habitat Management Plan (HMP); the need to adhere to the provisions of the act and the HMP; the penalties associated with violating the provisions of the act; and the general measures that are being implemented to conserve the target species of

concern as they relate to the Project, access routes, and Project site boundaries within which the Project activities must be accomplished.

(b) The footprint of disturbance shall be specified in the construction plans. Prior to construction, the Project's limits of disturbance would be delineated with orange fencing, and in areas potentially subject to project-related runoff, silt fencing would be used to delineate the impact footprint consistent with the Project's Storm Water Pollution Prevention Plan (SWPPP). All fencing would be reviewed by the Project biologist prior to the initiation of work. All fencing would be maintained until the completion of Project construction activities, at which time all fencing would be removed. All construction personnel and associates shall be instructed that their activities, vehicles, equipment, and construction materials are restricted to the project footprint, designated staging areas, and routes of travel. If any impacts occur beyond the approved impact footprint, all work in the immediate vicinity shall cease until the disturbance limit breach has been addressed to the satisfaction of the City of Carlsbad and resource agencies.

(c) A water pollution and erosion control plan shall be developed that describes sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and other factors deemed necessary by reviewing agencies. Erosion control measures shall be monitored on a regularly scheduled basis, particularly during times of heavy rainfall. Corrective measures would be implemented in the event erosion control strategies are inadequate. Sediment/erosion control measures would be continued at the Project site until such time as the revegetation efforts are successful at soil stabilization. *(See responses to thresholds X (a) through (e) for more information).*

(d) The qualified Project biologist shall review grading plans (e.g., all access routes and staging areas) and monitor construction activities throughout the duration of grading/ground disturbance associated with the Project to ensure that all practicable measures are being employed to avoid incidental disturbance of habitat and any target species of concern outside the Project footprint.

(e) Construction monitoring reports shall be completed and provided to the City summarizing how the Project is in compliance with applicable conditions. The Project biologist should be empowered to halt work activity if necessary and to confer with City staff to ensure the proper implementation of species and habitat protection measures.

(f) Any habitat that is impacted that is not in the identified Project footprint shall be disclosed immediately to the City, USFWS, CDFW, and California Coastal Commission and shall be compensated at a minimum ratio of 5:1, to be negotiated with the agencies.

(g) Construction access to and from the site would be located along existing access routes or disturbed areas to the greatest extent possible. All access routes outside of existing roads or construction areas would be clearly marked.

(h) Construction employees shall limit activities and storage of vehicles, equipment, and construction materials to the fenced Project footprint.

(i) Equipment storage, fueling, and staging areas shall be located on disturbed upland sites at least 100 feet from waters of the United States and with minimal risk of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. All necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. All project-related spills of hazardous materials shall be reported to the City and shall be cleaned up immediately, and contaminated soils shall be moved to approved disposal areas.

(j) Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.

(k) Fugitive dust shall be avoided and minimized through watering and other appropriate measures.

BIO-4: Clearing and grubbing and other construction activities are prohibited on site during the bird-breeding season (February 15–August 31), if feasible. If the breeding season cannot be avoided, the following measures shall be taken:

a) Since coastal California gnatcatchers (*Polioptila californica californica*) have the potential to occur on site, a qualified biologist shall conduct a pre-construction nest clearance survey within 500 feet surrounding the Project site within suitable habitat no more than three days prior to construction.

b) Surveys shall be conducted by a qualified biologist in appropriate habitat for coastal California gnatcatchers, nesting raptors and migratory birds and within a 500-foot survey buffer within three days initiation of construction or vegetation removal.

c) The USFWS shall be notified immediately of any federally listed species that are located during pre-construction surveys within the adjacent areas.

d) If nests of listed birds, migratory birds, raptors, or other special-status species are located, they shall be fenced with a protective buffer of 500 feet from active nests of listed species or raptors, and an appropriate width for other special-status bird species, to be determined by qualified biologist. All construction activity shall be prohibited within this area until the birds have fully fledged, or the nest is determined to no longer be active.

e) During the breeding season, construction noise shall be measured by the Project biologist regularly to maintain a threshold at or below 60 A-weighted decibels (dBA) hourly equivalent level (Leq) within 500 feet of breeding habitat occupied by listed species. The site is currently affected by roadway noise. If ambient levels are greater than 60 dBA, a modified threshold should be evaluated with the City of Carlsbad. If noise levels exceed the threshold, the construction array shall be changed, such as using different construction equipment, or noise attenuation measures shall be implemented, such as noise blankets, to achieve a construction noise level of less than 60 dBA.

BIO-5: The following wildlife impact avoidance measures shall be implemented during construction of the Project site.

a) Lighting in or adjacent to the preserve shall not be used, except where essential for roadway, facility use, and safety. If nighttime construction lights are necessary, all lighting adjacent to natural habitat shall be shielded and/or directed away from habitat.

b) If dead or injured listed species are located, initial notification must be made within three working days, in writing, to the USFWS and CDFW.

c) Exotic species that prey on or displace target species of concern shall be permanently relocated from the site by a qualified biologist to an appropriate open space area to be coordinated with the City.

d) To avoid attracting predators of the target species of concern, the Project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site. Pets of construction personnel shall not be allowed on the Project site where they may come into contact with any listed species.

e) Prior to any tree removal, a qualified bat biologist will survey the trees proposed for removal for potential to support tree-roosting bat species. If determined that tree roosting bats may be present within a tree to be removed, tree removal shall only occur between September 1 and February 28, outside of the maternity roosting season when young bats are present but are yet ready to fly out of the roost (March 1 to August 31). Trees to be removed shall be pushed down using heavy machinery rather than felling with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, trees should be pushed lightly two or three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree should then be pushed to the ground slowly and remain in place until it is inspected by a bat specialist. Trees that are known to be bat roosts should not be bucked or mulched immediately. A period of at least 24 hours shall elapse prior to such operations to allow bats to escape.

BIO-6: In order to prevent indirect impacts to the preserve areas adjacent to the construction site, the Project shall comply with the HMP Adjacency Standards. Prior to the issuance of the first grading permit, the Project plans shall reflect the Adjacency Standards as follows:

a) Fire Management - There are no habitable structures on the park site; therefore, fuel modification zones will not be required.

b) Erosion Control - Standard best management practices (BMPs) shall be implemented to slow surface flow and dampen initial precipitation flow in the development area. In addition, no new surface drainage shall be directed into the open space areas.

c) Landscaping Restrictions - Landscape planting palettes for the Project shall not use non-native, invasive plant species in the areas adjacent to native habitat or adjacent to the Carlsbad HMP preserve. Irrigation of landscaping shall be designed and scheduled to avoid runoff into the adjacent HMP

preserve areas. The upland buffers shall be restored with native habitat per the concept plan.

d) Fencing, Signs, and Lighting **-** To deter entry into the native habitat by people and pets, the area shall be fenced as appropriate. Signs shall be attached to the fence at intermittent intervals to alert the residents of the sensitive nature of the open space preserve area. Fencing shall preclude people from passing beyond the trail into the native habitat. Other than safety lighting, no lighting that shall intrude into the habitat and shall be shielded or directed away from the open space area.

e) Predator and Exotic Species Control - During operation of the Project, the City shall alert the park users to the potential effects that domestic animals may have on the native fauna and flora. The native habitat areas shall be fenced to discourage the entry of domestic animals into the open space. All dogs will be required to remain leashed at all times when at the park.

BIO-7: The Project will add 12.86 acres to the HMP Hardline to compensate for the loss of 3.36 acres of Hardline that would be impacted by the Project, resulting in a net increase of 9.50 acres of Hardline. To formally amend the HMP Hardline boundary, the City shall process an HMP Minor Amendment to the City's HMP, by providing written notice of the Equivalency Findings to the USFWS and CDFW. Unless the agencies object within thirty days of notification, the change shall be considered automatically approved. If objections are raised, the City shall meet with the agencies to resolve the objection and written approval of the change from the agencies shall be required.

BIO-8: The Project site shall comply with the following HMP Coastal Zone Conservation Standards as they relate to resources within the Project site, as described below: Environmentally Sensitive Habitat Areas, as defined in Section 30107.5 of the Coastal Act, will be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

a) Properties containing coastal sage scrub located in the Coastal Zone will conserve a minimum 67 percent of the coastal sage scrub and 75 percent of the gnatcatchers onsite. This has been accomplished through Project design by conserving 47.17 acres (98 percent) of the coastal sage scrub onsite.

b) Mitigation in the form of creation for impacts to coastal sage scrub (at a 2:1 ratio) and southern maritime chaparral (at a 3:1 ratio) will be provided within the coastal zone in order to have no net loss of habitat within the coastal zone.

c) Riparian habitat impacts will be mitigated offsite using pre-purchased wetland creation credits from the North County Habitat Bank, which is located within the coastal zone in the City of Carlsbad.

d) Upland habitat impacts will be mitigated onsite within the city owned HMP hardline area. All mitigation areas will be added to the city's existing Preserve Management Plan and placed under long-term management.

e) A 20-foot buffer between developed park and native habitat within HMP hardline areas has been incorporated into the project design. Although not required, the 20-foot buffer was counted as an impact wherever the project had

to encroach upon existing coastal sage scrub habitat (encroachment plus buffer is counted as impact in these areas). No development, grading, or alterations, including clearing of vegetation, will occur in the buffer area, except for recreation trails within the first 15 feet of the buffer closest to the development.

V. CULTURAL RESOURCES **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 archeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Environmental Setting

Information in this section is based on the Phase I Archaeological and Paleontological Resources Inventory, prepared by Psomas in August 2021 (Appendix D, Psomas 2021b), which was prepared to provide an overview of available information regarding documented cultural and paleontological resources near the Project site, as well as an assessment of the archaeological and paleontological sensitivity of the area. The Phase I Archaeological and Paleontological Resources Inventory was prepared in accordance with the Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines and included an archaeological literature and records search, which was conducted at the South Coastal Information Center (SCIC) (Carlsbad 2017a). The literature search review revealed that 125 cultural resource studies have been conducted within 1 mile of the Project site, 5 of which were conducted within the study area or along the border of the study area. These five studies consist of archaeological record searches and field studies, data recovery, and an Environmental Impact Report (EIR), prepared for the City of Carlsbad. The remaining 120 studies include archaeological surveys, data recovery projects, mitigation monitoring, and general overview studies for the region. The 2019 SCIC archaeological records search identified 69 cultural resources within the 1-mile search radius of the study area. Two of the cultural resources are located within the study area. Sixty-four of the 69 resources recorded within the 1-mile search radius are of prehistoric context, consisting of shell middens, habitation debris (e.g., pottery and dark midden soils), lithic scatters, and a milling feature. Three resources consist of historic-era resources, including an industrial building, single-family residence, and a commercial structure. The remaining two resources are unknown prehistoric resources with no associated site records.

As part of the Phase I Archaeological and Paleontological Resources Inventory, Psomas submitted a request to the Native American Heritage Commission (NAHC) to review the Sacred Lands File database regarding the possibility of Native American cultural resources and/or sacred places in the project vicinity that are not documented on other databases. The NAHC completed its Sacred Lands File search on May 2, 2019. The results were positive for Tribal Cultural Resources and/or sacred sites. The NAHC recommended consulting with the San Luis Rey Band of Mission Indians for additional details regarding any resources considered sacred by the Tribe.

The NAHC also provided a contact list of Native American groups and individuals who may have knowledge of Native American resources not formally listed on any database. As described in response to threshold XVIII(a) through (b), the City conducted tribal consultation with the Rincon Band of Luiseño Indians and the San Luis Rey Band of Mission Indians for this Project.

The Phase I Archaeological and Paleontological Resources Inventory included a site survey conducted by a Psomas archaeologist and paleontologist using methods developed in accordance with the Office of Historic Preservation guidelines. Fieldwork occurred on April 26, 2019. During the survey, Psomas relocated one archaeological site (CA-SDI-8303), a portion of which is located within the southeast portion of the Project site extending just north of Faraday Avenue. The archaeological site exhibits the characteristics of a large lithic scatter and is an extension of CA-SDI-8303, a habitation site originally recorded in 1980. Since its initial recordation, there have been several updates to CA-SDI-8303, with the most recent update in 2007. Multiple updates to the site have confirmed that archaeological site CA-SDI-8303 is a habitation site dating back to the Late Prehistoric Period. A previously recorded prehistoric isolate, P-37-016262, was previously collected from within the Project site, and was therefore not relocated during the survey. No other new archaeological resources or new fossil localities were identified as part of the field survey.

Impact Discussion

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant With Mitigation Incorporated. Based on the results of the Phase I Archaeological and Paleontological Resources Inventory (Appendix D, Psomas 2021b), which included a records search and survey of the Project site, there are no known historical resources within the Project site. However, there is the potential for previously undiscovered archaeological and/tribal cultural resources to occur within the Project site that have a potential to yield information important in prehistory or history. Therefore, consistent with Section 15064.5 of the State CEQA Guidelines, the Project may have a significant impact on a historic resource. With implementation of **MM CUL-1** through **MM CUL-16** requiring archaeological and tribal monitoring, and specifying communication protocols and the steps to follow in case an archaeological or tribal cultural resource is discovered during grading, as well as compliance with the Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines (Carlsbad 2017a), the Project would result in less than significant impacts related to historical resources.

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant With Mitigation Incorporated. A Phase I Archaeological and Paleontological Resources Inventory was prepared for the Project (Appendix D, Psomas 2021b), which included a records search and survey of the Project site. The 2019 SCIC archaeological records search identified 69 cultural resources within the 1-mile search radius of the Project site. Sixty-four of the 69 resources recorded within the 1-mile search radius are of prehistoric context, consisting of shell middens, habitation debris (e.g., pottery and dark midden soils), lithic scatters, and a milling feature. Three resources consist of historic-era resources, including an industrial building, single-family residence, and a commercial structure. The remaining two resources are unknown prehistoric resources with no associated site records (CA-SDI-8695 and P-37-014379).

Two of the 69 cultural resources are located within the Project site. These include CA-SDI-8303, identified as the remnants of prehistoric habitation debris, and P-37-016262, an isolated prehistoric lithic tool. The previously recorded prehistoric isolate, P-37-016262, was collected in 1998 by Gallegos and Associates and is no longer located on the Project site. The limits of CA-SDI-8303 occur partially within the Project site, but are not within the grading footprint that would be developed as part of the Project.

The NAHC Sacred Lands File search was positive for sacred sites. Consultation between the City of Carlsbad and tribal representatives from the Rincon Band of Luiseño Indians and the San Luis Rey Band of Mission Indians identified the area as extremely sensitive for cultural resources important to California tribes.

The 2019 field survey updated the SCIC record for the portions of CA-SDI-8303 that are located within the Project site. As of 2019, the surface expression of the site exhibits the characteristics of a large lithic scatter; however, the site was originally recorded in 1979 by Gallegos and Associates as a long-term habitation site. Since its initial recordation, there have been several updates to CA-SDI-8303, with the most recent update in 2007. Multiple updates to the site have confirmed that archaeological site CA-SDI-8303 is a habitation site dating back to the Late Prehistoric Period. It should also be noted that during consultation between the City and the San Luis Rey Band of Mission Indians, tribal representatives shared information that identified an archaeological site near Faraday Avenue and extending into the Project site. No additional archaeological resources beyond CA-SDI-8303 were observed as part of the 2019 field study.

All data considered, the results from the SCIC record searches, NAHC Sacred Lands File, tribal consultation, and the archaeological field survey indicate past human activities dating to the Prehistoric periods of Southern California took place within the Project site, from the extraction, processing, and subsequent use of raw materials, to long-term occupation and sense of established community. Therefore, there the Project could significantly impact archaeological resources pursuant to Section 15064.5 of the State CEQA Guidelines. With implementation of **MM CUL-1** through **MM CUL-16** requiring archaeological and tribal monitoring, and specifying communication protocols and the steps to follow in case an archaeological or tribal cultural resource is discovered during grading and **MM BIO-3** requiring the temporary fencing/delineation of the Project's temporary impact areas, as well as compliance with the Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines (Carlsbad 2017a), the Project would result in less than significant impacts related to archaeological resources.

c) Would the project disturb any human remains, including those interred outsides of formal cemeteries?

Less Than Significant With Mitigation Incorporated. Although not expected, human remains, particularly those interred outside formal cemeteries, have the potential to be disturbed during ground-disturbing activities associated with the Project. In accordance with Health and Safety Code 7050.5, CEQA 15064.5(e), Public Resources Code 5097.98, and **MM CUL-2** if any human remains are discovered during future Project construction activities, all work would be halted in the vicinity of the discovery, the County Medical Examiner would be notified, and standard procedures for the respectful handling of human remains would be adhered to. Therefore, impacts associated with the disturbance of human remains would be less than significant with implementation of **MM CUL-2**.

Mitigation Measures

In addition to complying with the requirements and preferred treatment options contained in the Carlsbad Tribal, Cultural, and Paleontological Resources Guidelines (Carlsbad 2017a), the following measures would also be implemented to mitigate for cultural and tribal cultural resources.

MM CUL-1 **Cultural Resource Sensitivity Training.** All construction personnel and monitors who are not trained archaeologists and paleontologists shall be trained regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic resources, and paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. The City shall retain a qualified cultural resources consultant to serve as Project Archaeologist to oversee the training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of archaeological materials, including Native American burials, and paleontological resources.

All personnel shall be instructed that unauthorized collection or disturbance of artifacts or other cultural materials is not allowed. Violators will be subject to prosecution under the appropriate state and federal laws, and violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. Supervisors shall also be briefed on the consequences of intentional damage to cultural resources.

Upon discovery of the potential for buried cultural materials by archaeologists, monitors, or construction personnel, work in the immediate area of the find shall be diverted and the Project Archaeologist and Tribal Representative notified. Once the find has been inspected and a preliminary assessment made, the Project Archaeologist in consultation with the Tribal Representative will make the necessary plans for evaluation and treatment of the find(s) or mitigation of adverse impacts to the resource.

On behalf of the City, the construction contractor shall maintain a list of construction personnel who have completed the cultural resources sensitivity training prior to start of construction, and this list shall be updated by the construction contractor as required when new personnel start work.

MM CUL-2 **Archaeological Resources Monitoring.** Under the direction of the Project Archaeologist, the City will provide archaeological monitor(s) that shall be present for all ground disturbing activities associated with the project in the event that unanticipated discoveries are made. If human remains are discovered, the procedures described under **MM CUL-10** would be implemented.

MM CUL-3 **Tribal Cultural Resources Monitoring Agreement.** Prior to the commencement of any ground disturbing activities, the City shall enter into a Pre- Excavation Agreement, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement, with the San Luis Rey Band of Mission Indians or other Luiseño tribe. Also, this agreement will contain provisions to address the proper

treatment of any tribal cultural resources and/or Luiseño Native American human remains inadvertently discovered during the course of the project. The agreement will outline the roles and powers of the Luiseño Native American monitor and the Project Archaeologist, and archaeological monitors. This agreement shall not modify any condition of approval or mitigation measure. A copy of said Pre-Excavation Agreement shall be provided to the City of Carlsbad prior to the issuance of a grading permit.

MM CUL-4 **Native American Monitor.** A Luiseño Native American monitor shall be present during all ground disturbing activities. Ground disturbing activities may include, but are not limited to, archaeological studies, geotechnical investigations, clearing, grubbing, trenching, excavation, preparation for utilities and other infrastructure, and grading activities.

MM CUL-5 **Uncovered Artifacts of Luiseno Native Americans.** Any and all uncovered artifacts of Luiseño Native American cultural importance shall be treated with dignity and respect and be reburied on-site within an appropriate location protected by open space or easement, etc., where the cultural items shall not be disturbed in the future. Any cultural and heritage material/artifacts identified and collected during construction grading activities are to be kept in situ or collected and stored in a secure location agreed upon by Tribal Representatives from the San Luis Rey Band of Mission Indians or other Luiseño tribe for later reburial on the project site. Upon completion of all ground-disturbing and grading activities on the project site, the Tribal Representatives from the San Luis Rey Band of Mission Indians or other Luiseño tribe will rebury any resources recovered from the project site in an open space area that will remain free from any active recreational uses or any further excavation or ground disturbance. Any reburial site shall be culturally appropriate and explicitly approved in writing by Tribal Representatives from the San Luis Rey Band of Mission Indians or other Luiseño tribe. The reburial location will be covered first by a layer of geomat and then backfilled with clean fill dirt. Once reburial activities are completed, the site will be incorporated as a part of the Macario Canyon/Veterans Park HMP preserve.

MM CUL-6 **Preconstruction Meeting.** Tribal Representatives from the San Luis Rey Band of Mission Indians or other Luiseño tribe as well as the Luiseño Native American Monitor and Project Archaeologist shall be present at the project's on-site preconstruction meeting to consult with grading and excavation contractors concerning excavation schedules and safety issues, as well as consult with the Project Archaeologist concerning the proposed archaeologist techniques and/or strategies for the project.

MM CUL-7 **Authority to Divert and/or Halt Construction Activities.** The Luiseño Native American monitor and archaeological monitor shall have joint authority to temporarily divert and/or halt construction activities. If tribal cultural resources are discovered during construction, all earth moving activity within and around the immediate discovery area must be diverted until the Luiseño Native American monitor and the archaeological monitors or Project Archaeologist can assess the nature and significance of the find.

MM CUL-8 **Inadvertent Discovery of Significant Cultural Resources.** If a significant tribal cultural resource(s) and/or unique archaeological resource(s) are discovered during ground disturbing activities for this project, the San Luis Rey Band of Mission Indians or other Luiseño tribe shall be notified and consulted regarding the respectful and dignified treatment of those resources. Pursuant to California Public Resources Code Section 21083.2(b) avoidance is the preferred method of preservation for archaeological and tribal cultural resources. If however, the Applicant is able to demonstrate that avoidance of a significant and/or unique cultural resource is infeasible and a data recovery plan, is authorized by the City of Carlsbad as the lead agency, the San Luis Rey Band of Mission Indians or other Luiseño tribe shall be consulted regarding the drafting and finalization of any such recovery plan.

MM CUL-9 **Communication Protocols.** When tribal cultural resources are discovered during the project, the City will be contacted immediately. If the Project Archaeologist or archaeological monitors collect such resources, a Luiseño Native American monitor must be present during any collection and/or cataloging of those resources. All tribal cultural resources that are unearthed during the ground disturbing activities, are to be kept in situ or collected and stored in a secure location agreed upon by the San Luis Rey Band of Mission Indians or other Luiseño tribe.

MM CUL-10 **Inadvertent Discovery of Native American Cemeteries.** If suspected Native American human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the San Diego County Medical Examiner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. Suspected Native American remains shall be examined in the field and kept in a secure location at the site. A Luiseño Native American monitor shall be present during the examination of the remains. If the San Diego County Medical Examiner determines the remains to be Native American, the Native American Heritage Commission (NAHC) must be contacted by the Medical Examiner within 24 hours. The NAHC must then immediately notify the "Most Likely Descendant" about the discovery. The Most Likely Descendant shall then make recommendations within 48 hours and engage in consultation concerning treatment of remains as provided in Public Resources Code 5097.98.

MM CUL-11 **Monitoring of Fill Material for Tribal Cultural Resources.** In the event that fill material is imported into the project area, the fill shall be clean of tribal cultural resources and documented as such. If fill material is to be utilized and/or exported from areas within the project site, then that fill material shall be analyzed and confirmed by an archeologist and Luiseño Native American monitor that such fill material does not contain tribal cultural resources. Methods to ensure that fill material does not contain tribal cultural resources will involve archaeological monitoring, tribal monitoring, as well as spot sampling of fill material by the archeological monitors.

MM CUL-12 **Invasive and/or Non-Invasive Testing.** No testing, invasive or non-invasive, shall be permitted on any recovered tribal cultural resources without the written

permission of the San Luis Rey Band of Mission Indians, or any other Luiseño Native American consulting tribe.

MM CUL-13 **Cultural Resources Monitoring Report.** Prior to the completion of project construction, a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis and conclusions of the monitoring program shall be submitted by the Project Archaeologist, along with the Luiseño Native American monitor's notes and comments, to the City of Carlsbad for approval, and shall be submitted to the South Coastal Information Center. Said report shall be subject to confidentiality as an exception to the Public Records Act and will not be available for public distribution. A copy of the final monitoring report is to be provided to the San Luis Rey Band of Mission Indians, Rincon Band of Luiseño Indians, and any other Luiseño Native American consulting tribe.

MM CUL-14 **Curation of Non-Tribal Archaeological Resources.** In the event that non-tribal, archaeological resources are discovered at the project site, they would be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement by the Project Archaeologist. Subsequent to analysis and reporting, these artifacts would be subjected to curation or returned to the property owner, as deemed appropriate in consultation with the City.

MM CUL-15 **Avoidance of SDI-8303.** The site SDI-8303 reaches into the project site but will be preserved in situ and in perpetuity with no construction-related impacts occurring during project development. This area shall be considered an Environmentally Sensitive Area (ESA) and denoted as such on all development plans. Prior to any ground disturbance within 100 feet of SDI-8303, protective ESA fencing and temporary signage will be placed at least twenty-five feet outside of the identified site boundaries. The archaeological and tribal monitor will be present to monitor the fence installation if conducted by a separate consultant or participate in the installation if required. Upon completion of all ground disturbing activities within 100 feet of SDI-8303, the archaeological monitor, tribal monitor, and construction manager shall observe or conduct the removal of the fencing and signage as applicable, then oversee the planting of any approved barrier plants as agreed upon per the landscaping plans.

MM CUL-16 **Landscaping Plans Near SDI-8303.** Any landscaping plans for disturbance areas within 50-feet of SDI-8303 will be developed in consultation with San Luis Rey Band of Mission Indians or other Luiseño tribe.

Implementation of **MM CUL-1** through **MM CUL-16** would reduce potentially significant impacts to archaeological and historic resources to less than significant levels.

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

Impact Discussion

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6 of the CCR) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The current 2019 Standards, effective January 1, 2020, are projected to result in a 30 percent improvement in energy efficiency for nonresidential buildings over the 2016 standards (CEC 2018).

The 2019 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen code, contains mandatory requirements and voluntary measures for new residential and nonresidential buildings (including buildings for hotel, retail, office, public schools, and hospitals) throughout California (CBSC 2019). The development of the CALGreen Code is intended to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the following construction practices: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental quality. In short, the code is established to reduce construction waste; make buildings more efficient in the use of materials and energy; and reduce environmental impact during and after construction.

Construction

Project Construction-related energy demand includes energy and fuel used by construction equipment, construction worker vehicles, and construction vendor/hauling vehicles. The construction equipment, use of electricity, and fuel for the Project would be typical for grading, landscaping, and parking lot construction because there are no aspects of the proposed construction process that are unusual or more energy intensive than typical construction-related activities. Construction equipment would conform to applicable CARB emissions standards, which promote equipment fuel efficiencies. Construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Gasoline and diesel fuel would be supplied by local and regional commercial vendors. It should be noted that fuel efficiencies are

improving for on- and off-road vehicle engines due to more stringent government requirements. Construction energy consumption would represent a "single-event" demand and would not require ongoing or permanent commitment of energy resources. The Project would also not necessitate the use of construction equipment or processes that are less energy efficient than at comparable construction sites. Thus, construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary. Project impacts related to this threshold would be less than significant, and no mitigation measures are required.

Operations

The Project would generate an estimated 893 ADT on weekdays and 1,099 ADT on weekend days (Psomas 2021a, Fehr & Peers 2021). However, as described in the Project's VMT Assessment memorandum, many, or most of the trips are redistributed trips from traveling to existing parks to the new Veterans Memorial Park assuming the proposed park is the closest location to their home (Fehr & Peers 2021). Thus, the Project, when compared to the No Project scenario, would result in a reduction in regional VMT. This reduction in VMT would result in a reduction in the use of transportation fuels. In addition, the Project would install electric vehicle charging stations that would assist in the promotion of energy efficient electric vehicles. Furthermore, the Project would be subject to all relevant provisions of the California Building Energy Efficiency Standards (Title 24) and CALGreen Code. Compliance with these standards would ensure that the building energy use associated with the Project would not be wasteful, inefficient, or unnecessary. Project impacts in this regard would be less than significant, and no mitigation measures are required.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The Project would comply with the mandatory energy efficiency measures of the California Building Code and the CALGreen Code. The Project would also include the applicable voluntary energy efficiency measures from the CALGreen Code consistent with the requirements of the Carlsbad Climate Action Plan (Carlsbad 2020a). In addition, the Project would result in a reduction in transportation fuels for park visitors through a reduction in vehicle miles traveled as detailed in the VMT Assessment Memorandum (Fehr & Peers 2021). The Project would not conflict with or obstruct applicable State and City plans. Therefore, the Project would have no impact related to this threshold, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to energy; therefore, no mitigation measures are required.

VII. GEOLOGY AND SOILS **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 soils, as defined in Section 1803.5.3 of the California Building Code (2016), 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?	☐	☒	☐	☐

Impact Discussion

a) Would the project 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?

Less than Significant Impact. There are no active faults that occur directly within the City of Carlsbad. Also, the California Geologic Survey does not include the City of Carlsbad on its list of cities affected by Alquist-Priolo Earthquake Fault Zones. The nearest fault to the City is the Newport-Inglewood-Rose Canyon Fault, which runs offshore of the western edge of the City and is considered active (Carlsbad 2015a).

According to the Geotechnical Investigation prepared for the Project, which is provided as Appendix E, the possibility of significant fault rupture on the site is considered to be low (SoCalGeo 2020a). Therefore, impacts would be less than significant, and no mitigation is required.

ii) Strong seismic ground shaking?

Less than Significant Impact. The Project site, as with the entire Southern California region, is subject to secondary effects from earthquakes. Fault activity has the potential to result in ground shaking, which can be of varying intensity depending on the intensity of earthquake activity, proximity to that activity, and local soils and geologic conditions. Although there are no active faults within Carlsbad, the City is located within a seismically active region and earthquakes have the potential to cause ground shaking of significant magnitude (Carlsbad 2015a).

Implementation of the Project would not change the intensity of ground shaking that would occur on the Project site during a seismic event, but it would increase exposure of additional people. The two proposed buildings would be designed in accordance with the current CBC (CBSC 2019). The CBC contains minimum standards regulating the design and construction of excavations, foundations, retaining walls, and other building elements to control the effects of seismic ground shaking and adverse soil conditions. The CBC includes provisions for earthquake safety based on factors such as occupancy type, the types of soil and rock on-site, and the strength of ground motion that may occur at the Project site. Compliance with the applicable regulations would ensure that impacts that may result from strong seismic ground shaking at the Project site would be less than significant; therefore, no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction describes a phenomenon in which earthquake-induced cyclic stresses create excess pore pressure in cohesionless soils. As a result, the soils may acquire a high degree of mobility, which can lead to lateral spreading; consolidation and settlement of loose sediments; ground oscillation; flow failure; loss of bearing strength; ground fissuring; and sand boils. As discussed in the City's General Plan, seismic shaking levels in the San Diego region, including in Carlsbad, have not historically been sufficient enough to trigger liquefaction, and as such, the City generally has a low liquefaction risk (Carlsbad 2015a). However, there are areas of the City that have a higher risk of liquefaction due to the presence of hydric soils or soils that are often saturated or characteristic of wetlands. These areas are limited to the immediate vicinity of the Buena Vista, Agua Hedionda, and Batiquitos Lagoons. Agua Hedionda is the only one of these areas located in the vicinity of the Project Site, approximately 400 feet west of and at a lower elevation than the Project Site. Furthermore, the City of Carlsbad General Plan indicates that the Project site is not located in an area designated as having potential for liquefaction (Carlsbad 2015a). Therefore, less than significant impacts would result, and no mitigation is required.

iv) Landslides?

No Impact. Earthquake-induced land sliding often occurs in areas where previous landslides have occurred and in areas where the topographic, geologic, geotechnical, and subsurface groundwater conditions are conducive to permanent ground displacements. According to the California Earthquake Hazards Zone Application maintained by the California Department of Conservation, the Project site and adjacent properties have not been evaluated by California Geological Survey (CGS) for seismic landslide hazards (DOC 2021). Slopes are present within and adjacent to the Project site; however, based on the surficial geologic mapping and Geotechnical Investigation prepared for the Project, which is provided as Appendix E, there is no evidence of surface expressions resulting from landslides at the Project site. In addition, there were no mapped landslides at the Project site and there were no indicators of landslides during

the aerial photograph review conducted by the Project's geotechnical engineer (SoCalGeo 2020a). Therefore, no impact would result, and no mitigation is required.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The Project would grade and develop the site with new impervious surfaces and new pervious landscaped areas. Project construction would expose soils on the site, which could result in soil erosion and the loss of topsoil if not implemented consistent with regulatory requirements. A primary source of erosion and topsoil loss is uncontrolled drainage during construction. As discussed in more detail in Section X, Hydrology and Water Quality, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into "waters of the U.S.". Construction activities shall be conducted in compliance with the statewide NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2012-0006-DWQ, NPDES No. CAS000002), adopted by the State Water Resources Control Board (SWRCB) on July 17, 2012. In compliance with the NPDES permit, erosion potential during construction of the Project would be managed with BMPs implemented on the Project site as part of an SWPPP during construction activities in accordance with NPDES requirements.

Also, once built, the Project would increase impervious surface coverage on the Project site by approximately 3.80 acres, which could lead to erosion and loss of topsoil if stormwater is not conveyed and dissipated appropriately. A Preliminary Storm Water Quality Management Plan (SWQMP) has been prepared for the Project, which provided measures to mitigate potential water quality impacts that might result from Project operations (civTEC 2022c, Appendix G). These operational BMPs have been incorporated into the grading plan and include a network of 24-inch concrete v-ditches, catch basins with grates, drainage inlets and outlets with trash screens and headwalls, and a series of twelve bioretention areas with underdrains, as shown on Exhibit 7, the Conceptual Grading Plan. These facilities would convey stormwater through the park and would provide stormwater treatment and retention before the stormwater would be allowed to outlet into existing storm water facilities. The SWQMP included an analysis of the potential for erosion and sedimentation to result from the Project related to the presence of Potential Critical Coarse Sediment Yield Areas (PCCSYA) within and immediately down slope from the Project site. The analysis and calculations contained in the SWQMP determined that the Project would not negatively impact downstream conditions and that no mitigation measures for protection of PCCSYAs were necessary (civTEC 2022c). With implementation of a SWPPP during construction as well as construction and maintenance of the BMPs specified in the grading plan and SWQMP, impacts related to erosion would be less than significant.

c) Would the project 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?

Less Than Significant Impact. As discussed above under threshold VII(a)(iii) and (iv), the Project site is not located in an area subject to on- or off-site landslides, liquefaction, or lateral spreading. Land subsidence and collapse can occur with the loss of surface elevation from the removal of subsurface support, usually due to the withdrawal of groundwater, oil, or natural gas. The Project proposes no activities which would remove subsurface support; therefore, impacts related to this threshold would be less than significant, and no mitigation is required.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1004), creating substantial direct or indirect risks to life or property?

Less Than Significant With Mitigation Incorporated. Expansive soils are materials that when subject to a constant load are prone to expand when exposed to water. The hazard associated with expansive soils is that they can overstress and cause damage to the foundation of buildings set on top of them. According to the Project's Geotechnical Investigation, the Project site is generally underlain by medium expansive alluvial and colluvial soils that possess low to moderate strengths and a potential for hydrocollapse. Therefore, due to the presence of expansive soils, overexcavation, compaction, and other recommendations are provided in the Geotechnical Investigation, which must be implemented to mitigate for potential impacts to proposed structures and users of the Project. With implementation of **MM GEO-1**, which requires the recommendations of the Project's Geotechnical Investigation be incorporated into the Project and verified by the City, less than significant impacts would result from the Project.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. Project development would be connected to the municipal sewer system for wastewater disposal. The Project does not require the development of either septic tanks or alternative wastewater systems. No related impacts would result, and no mitigation is required.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation Incorporated. As a part of the development of the Phase I Archaeological and Paleontological Resources Inventory, prepared by Psomas in August 2021 (Appendix D, Psomas 2021b), the San Diego Natural History Museum was queried, which identified 41 fossil localities within a 1-mile radius surrounding the Project site. These localities are within the Members B and C of the Santiago Formation that underlies much of the region. A search of the PaleoBiology online database and the University of California Museum of Paleontology online database, which include institutional records and published references, indicates that no additional previously recorded fossil localities have been identified within a 1-mile radius of the Project site. As described in the Phase I Archaeological and Paleontological Resources Inventory, although no paleontological resources were identified during the 2019 field survey conducted for the Project, the Project site is considered sensitive for previously unrecorded paleontological resources and the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature represents a significant impact. Implementation of **MM GEO-2** requiring paleontological monitoring of ground disturbance activities during Project construction as well as recovery and curation of fossils inadvertently encountered would reduce impacts to a less than significant level.

Mitigation Measures

MM GEO-1 Prior to approval of final plans and specifications for the Project, the City shall review the Project plans to confirm that all recommendations in the Geotechnical Investigation (prepared by SCG in 2020) and any future geotechnical reports have been fully and appropriately incorporated.

MM GEO-2 The City shall retain a professional Paleontologist for the Project prior to the issuance of grading permits. The task of the Paleontologist shall be to monitor ground disturbance within the Project site for the unearthing of previously unknown paleontological resources. Selection of the paleontologist shall be subject to the approval of the City, and no grading activities shall occur within the Project site until the Paleontologist has been approved by the City. The Paleontologist shall be responsible for maintaining daily field notes and a photographic record and for reporting all finds to the City in a timely manner. The Paleontologist shall be equipped to record and salvage paleontological resources that may be unearthed during grading activities. The Paleontologist shall be empowered to temporarily halt or divert grading equipment to allow recording and removal of the unearthed resources.

In the event that potential paleontological resources are discovered during ground-disturbing activities, work shall stop in that area and within 30 feet of the find until a qualified Paleontologist can assess the significance of the find and, if necessary, develop appropriate treatment measures. Recovered specimens shall be prepared to a point of identification and permanent preservation, including washing of sediments to recover small invertebrates and vertebrates. Specimens shall be curated into a professional, accredited museum repository with permanent retrievable storage such as the San Diego Natural History Museum. A report of findings, with an appended itemized inventory of specimens, shall be prepared and shall signify completion of the mitigation.

The Paleontologist shall retain the option to reduce monitoring, with concurrence from the City, if it is determined that the sediments were previously disturbed. Monitoring may also be reduced with concurrence from the City if potentially fossiliferous units are not present or, if present, are determined to have a low potential to contain fossil resources.

VIII. GREENHOUSE GAS EMISSIONS **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 purposes of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Discussion

Global climate change refers to changes in average climatic conditions on Earth as a whole, including temperature, wind patterns, precipitation, and storms. Global temperatures are moderated by naturally occurring atmospheric gases, including water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), ozone, and certain hydro-fluorocarbons. These gases, known as GHGs, allow solar radiation (sunlight) into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. GHGs are emitted by both natural processes and human activities. The accumulation of GHGs in the atmosphere regulates the Earth's temperature. Emissions of GHGs in excess of natural ambient concentrations are thought to be responsible for the enhancement of the greenhouse effect and contribute to what is termed "global warming", the trend of warming of the Earth's climate from anthropogenic activities. Global climate change impacts are by nature cumulative; direct impacts from individual sources cannot be evaluated because the impacts themselves are global rather than localized impacts.

California Health and Safety Code Section 38505(g) defines GHGs to include the following compounds: CO_2, CH_4, N_2O, ozone, chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). As individual GHGs have varying heat-trapping properties and atmospheric lifetimes, GHG emissions are converted to carbon dioxide equivalent (CO_2e) units for comparison. The CO_2e is a consistent methodology for comparing GHG emissions because it normalizes various GHG emissions to a consistent measure. The most common GHGs related to the project are those primarily related to energy usage: CO_2, CH_4, and N_2O.

City of Carlsbad Climate Action Plan and Related Ordinances

In September 2015, the City of Carlsbad adopted a Climate Action Plan (CAP) that outlines actions that the City will undertake to achieve its proportional share of state GHG emissions reductions (Carlsbad 2015b). The CAP is a plan for the reduction of GHG emissions in accordance with CEQA Guidelines Section 15183.5. Pursuant to CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of the CAP. CAP Amendment No. 1, adopted in May 2020, revised the greenhouse gas inventory, reduction targets and forecast, updated reductions from existing measures, and incorporated Community Choice Energy as a new reduction measure (Measure P).

In March 2019, the City Council adopted several ordinances aimed at reducing GHG emissions in new construction and alterations to existing buildings. Projects requiring building permits would be subject to these ordinances, which address the following:

- Energy efficiency (Ord. No. CS-347);
- Solar photovoltaic systems (Ord. No. CS-347);
- Water heating systems using renewable energy (Ord. Nos. CS-347 and CS-348);
- Electric vehicle charging (Ord. No. CS-349); and
- Transportation demand management (Ord. No. CS-350).

The CAP, as amended, established a screening threshold of 900 metric tons carbon dioxide equivalent ($MTCO_2e$) per year for new development projects in order to determine if a project would need to demonstrate consistency with the CAP through the Consistency Checklist and/or a self-developed GHG emissions reduction program (Self-developed Program). Projects that are projected to emit less than 900 $MTCO_2e$ annually would not make a considerable contribution to the cumulative impact of climate change, and therefore, do not need to demonstrate consistency with the CAP. Regardless of this screening threshold, all projects requiring building permits are subject to the above-referenced CAP ordinances. Such projects are therefore required to show compliance with the ordinances through submittal of a completed Consistency Checklist and site plans and building plans.

The City's CAP contains a baseline inventory of GHG emissions for 2012, a projection of emissions to 2035 (corresponding to the General Plan horizon year), a calculation of the city's targets based on a reduction from the 2012 baseline, and emission reductions with implementation of the CAP.

The City emitted a total of 977,000 $MTCO_2e$ in 2012. The CAP sets a goal of 468,960 MTCO2e for 2035, which represents a 52 percent reduction from 2012 emissions.

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact. Project GHG emissions were calculated using CalEEMod™, version 2020.4.0 (CAPCOA 2021). The purpose of this model is to calculate construction-source and operational-source criteria pollutants (NOx, VOC, PM_{10}, $PM_{2.5}$, SO_x, and CO) and GHG emissions from direct and indirect sources; as well as quantify applicable air quality and GHG reductions achieved from mitigation measures.

The principal source of construction-phase GHG emissions would be internal combustion engines of construction equipment, on-road construction vehicles, and construction workers' commuting vehicles. The construction emissions analysis assumes that construction would begin in July 2023 and be complete in April of 2025, lasting a period of 20 months. Additional model input data are shown in the CalEEMod data included in Appendix A. The estimated construction GHG emissions for the Project would be 616 $MTCO_2e$, as shown in Table 7, Estimated Greenhouse Gas Emissions from Construction. Please note that after the air quality and greenhouse gas emissions analysis was conducted, Project grading was revised from 14,100 cubic yards of import to 8,300 cubic yards of export. Given that less soil would need to be moved from the Project site than was previously assumed to be imported, the air quality emissions associated with haul trucks during

the grading period of construction would be reduced. As such, the analysis contained herein is more conservative than what is currently proposed in the current grading plan provided as Exhibit 7.

TABLE 7
ESTIMATED GREENHOUSE GAS EMISSIONS FROM CONSTRUCTION

Year	Emissions ($MTCO_2e$)
2023	200
2024	373
2025	43
Total	616

$MTCO_2e$: metric tons of carbon dioxide equivalent

Notes:
- Detailed calculations in Appendix A.
- As noted in the text above, the greenhouse gas emissions from construction shown in this table are conservative and represent the movement of 14,100 cubic yards of soil compared to the 8,300 cubic yards currently proposed in the grading plan.

Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. It is accepted practice to amortize construction emissions over a 30-year project lifetime so that GHG reduction measures address construction GHG emissions as part of the operational GHG analysis. The Project's amortized construction emissions are 21 $MTCO_2e$.

Operational GHG emissions typically come primarily from vehicle trips; other sources include purchased electricity; water supply and treatment; solid waste disposal; and fossil-fueled landscaping and maintenance equipment. The Project would generate an estimated 893 ADT on weekdays and 1,099 ADT on weekend days (Psomas 2021a, Fehr & Peers 2021). However, as described in the Project VMT Assessment, many, or most of the trips are redistributed trips from traveling to existing parks to the new Veterans Memorial Park assuming the proposed park is the closest location to their home (Fehr & Peers 2021). Thus, the Project, when compared to the No Project scenario, would result in a reduction in regional VMT and therefore a reduction in GHG emissions from mobile sources. Table 8, Estimated Annual Operational and Total Greenhouse Gas Emissions*,* shows the annual GHG emissions from the Project's operations. The mobile emissions are negative values representing the reduction in emissions resulting from reduced VMT. As shown in Table 8, the reduction in GHG emissions due to mobile sources are greater than the estimated emissions from all other sources; thus, the Project would result in a long-term reduction in GHG emissions.

TABLE 8
ESTIMATED ANNUAL OPERATIONAL AND TOTAL GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e$/yr)
Area	<1
Energy	10
Mobile	-416
Waste	2
Water	42
Total Operational Emissions	**-362**
Amortized Construction Emissions	21
Total GHG Emissions	**-341**

$MTCO_2e$/yr: metric tons of carbon dioxide equivalent per year
Notes:
- Calculations in Appendix A.

The Project's estimated GHG emissions of -341 $MTCO_2e$/year would be less than the CAP screening threshold of 900 $MTCO_2e$/year. Therefore, the Project would not only not make a considerable contribution to the cumulative impact of climate change, but the Project would also make a beneficial contribution to climate change by developing additional local park resources which would reduce transportation fuel consumed by local residents.

The Project is consistent with the existing General Plan land use and zoning designations and based on the above analysis does not need to demonstrate consistency with the CAP. However, the Project is required to show compliance with the ordinances through submittal of a completed Consistency Checklist and shown on site plans and building plans. The completed Consistency Checklist has been transmitted separately to the City for review and approval. The Project would result in less than significant impacts related to this threshold, and no mitigation is required

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purposes of reducing the emissions of greenhouse gases?

Less than Significant Impact. As stated above, the City of Carlsbad adopted a CAP in 2015, which was amended in 2020, that outlines actions that the City will undertake to achieve its proportional share of state GHG emissions reductions. The CAP demonstrates that, with implementation of applicable General Plan goals and policies, coupled with State and federal actions, and execution of CAP measures and actions, the City will reduce GHG emissions in alignment with state goals established by Assembly Bill 32 and Senate Bill 32, and maintain a trajectory to meet its proportional share of the 2050 state target identified in Executive Order S-3-05. As described in response (a) above, the Project is consistent with applicable General Plan goals and policies, and includes design features consistent with the adopted CAP. Because the Project would develop local park resources, there would be a reduction in the use of transportation fuels and associated GHG emissions by residents to meet their recreational needs. As such, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs. The Project's impact would be less than significant, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to greenhouse gas emissions; therefore, no mitigation measures are required.

IX. HAZARDS AND HAZARDOUS MATERIALS 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 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 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?	☐	☐	☒	☐

Impact Discussion

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The Project would not involve the routine use, transport, handling, or storage of hazardous materials on-site. The proposed land use for the Project is a public park. The Project would result in the on-site handling of materials that are common in similar developments, such as commercial cleansers, solvents, and other janitorial or industrial-use materials; paints; and landscape fertilizers/pesticides. While these common materials are technically labeled as “hazardous”, the presence of such materials is common in most proposed developments and their transport and use is considered a less than significant impact with compliance with existing federal, State, and local regulations regarding hazardous material use, storage, disposal, and transport. The proposed land use would not generate hazardous

emissions, nor would daily park operation involve hazardous materials that would create a hazard to the public or environment. Less than significant impacts would result related to this threshold, and no mitigation is required.

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

Less Than Significant Impact. Project construction activities routinely involve the use and handling of limited volumes of commonly used hazardous materials, such as petroleum (fuel), paints, adhesives, and solvents. During construction, there is a limited risk of spills and/or accidental release of hazardous materials that are used for the operation and maintenance of construction equipment. The on-site temporary handling, storage, and usage of these materials would be subject to applicable local, State, and/or federal regulations. Any hazardous materials used during construction would also be transported, used, stored, and disposed of according to any applicable local, State, and/or federal regulations. Specifically, compliance with standard State and local construction requirements would reduce the risk of any damage or injury from any potential spill hazards to a less than significant level, and no mitigation is required.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. One school (Carlsbad Country Day School) is located within 0.25 mile of the Project site. However, as discussed above under Threshold IX(a), the Project would not develop land uses that involve the use, storage, or transport of hazardous materials that represent a significant hazard to the public or the environment. During Project operations, the Project would result in the routine on-site handling of materials that are common in similar developments, such as commercial cleansers, solvents, and other janitorial or industrial-use materials; paints; and landscape fertilizers/pesticides. Less than significant impacts would result related to this threshold, and no mitigation is required.

d) Would the project 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?

No Impact. Section 65962.5 requires the development of a hazardous waste and substances site list, also known as the Cortese List, which provides the location of known hazardous materials release sites. The Phase I Environmental Site Assessment Report prepared for the Project, which is provided as Appendix F, included a search of selected government databases for potential environmental concerns in the vicinity of the Project site (e.g., “listed sites”) and a review of records, aerial photographs, and other documentation that illustrates the history of site use and site reconnaissance. The Phase I Environmental Site Assessment Report was prepared based on national record review requirements in accordance with the USEPA Standards and Practices for All Appropriate Inquiries (40 Code of Federal Regulations [CFR] Part 312), as described in the American Society for Testing and Materials E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The Phase I Environmental Site Assessment Report revealed no evidence of any recognized environmental conditions (RECs) that could affect site development (SCS Engineers 2019).

The Project site and adjacent sites were not identified on any databases reviewed. Given that the Project does not occur on a Cortese List property or contain other hazardous materials of concern that would create a significant hazard to the public or environment, no impact would result from implementation of the Project, and no mitigation is required.

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?

Less Than Significant Impact. The McClellan-Palomar Airport, located in Carlsbad, serves the northern part of San Diego County. The airport, owned and operated by the County of San Diego, is defined by the Federal Aviation Administration (FAA) as a commercial service airport that, in addition to private aircraft, has regularly scheduled commercial flights to Los Angeles International Airport (LAX). The McClellan-Palomar Airport Land Use Compatibility Plan (ALUCP) was prepared in 2011 according to FAA requirements and adopted by the San Diego County Regional Airport Authority acting as the Airport Land Use Commission for the County of San Diego. The ALUCP provides measures to minimize the public's exposure to excessive noise and safety hazards within areas around the airport, and identifies areas likely to be impacted by noise and flight activity created by aircraft operations at the airport. These impacted areas include the Airport Influence Area (AIA), the Clear Zone, and the Flight Activity Zone. The AIA includes a large portion of the City of Carlsbad including the Project site, as well as portions of the cities of Vista, San Marcos, and Escondido. Within the AIA, the ALUCP establishes six safety zones for the purpose of evaluating safety compatibility of new/future land use actions. The safety zone boundaries depict relative risk of aircraft accidents occurring near the airport and are derived from general aviation aircraft accident location data and data regarding the airport's runway configuration and airport operational procedures. The ALUCP limits development intensities in these zones by imposing floor area and lot coverage maximums, by incorporating risk reduction measures in the design and construction of buildings, and/or by restricting certain uses altogether. Generally, allowable uses and development intensities range from most restrictive in Safety Zone 1 to least restrictive in Safety Zone 6. The Project site is located within Safety Zone 6 (the "Zone 6 – Traffic Pattern Zone"). The Project has been designed to be compatible with the requirements for Zone 6 of the ALUCP (San Diego County Regional Airport Authority 2011) related to land uses, building height, and development intensity. According to the "Compatibility Policy Map: Noise" contained in the ALUCP, portions of the Project site are located within an area that is anticipated to have airport noise of approximately 60 to 65 decibel community noise equivalent level (CNEL). According to the noise compatibility criteria and policies presented in Section 3.3 of the ALUCP, the recreational use proposed for the Project would be compatible with the noise expected to result from the airport. The Project would therefore not result in a safety hazard or excessive noise for people residing or working in the project area. Less than significant impacts would result related to this threshold, and no mitigation is required.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. The Unified San Diego County Emergency Services Organization Operational Area Emergency Plan was prepared in 2010 by the San Diego County Office of Emergency Services to evaluate hazards that the County is susceptible to and to describe a comprehensive emergency management system which provides for a planned response to disaster situations. The Emergency Plan identifies primary evacuation routes as the major interstates,

highways, and prime arterials within San Diego County, which would include Cannon Road. Also, the San Diego County Office of Emergency Services has identified Cannon Road as a tsunami evacuation route (County of San Diego 2021) As discussed in detail in the Transportation Impact Study prepared by Psomas in September 2021, the LOS for vehicle, pedestrian, and bicycle facilities currently operate at an acceptable LOS and would continue to do so in the future with or without the Project. Furthermore, the Project would not conflict with any of the policies or provisions of the Unified San Diego County Emergency Services Organization Operational Area Emergency Plan. Based on these considerations, there would be a less than significant impact related to this threshold, and no mitigation is required.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less Than Significant Impact. As discussed in response to threshold XX(b), the Project is located on a site with hillside slopes with natural vegetation. The Project site is located north and northwest of, and outside of, an area designated as a Very High Hazard Fire Severity Zone (VHFHSZ). As such, the Project site and surrounding areas are at risk of wildland fires under existing conditions. The Project would introduce new structures, irrigated landscaping, and other improvements to the Project site, and would increase the amount of people that utilize the Project site when compared to existing conditions. Project structures would be constructed in compliance with the 2019 California Fire Code as well as the California Building Code, which contain regulations for safeguarding life and property from fire (ICC 2019; CBSC 2019). Furthermore, although additional occupants would utilize the site and new buildings would be constructed, the park would be closed during a wildfire event which would minimize the potential for injury or death from wildfire. Therefore, less than significant impacts would result from the Project related to this threshold, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to hazards and hazardous materials; therefore, no mitigation measures are required.

X. HYDROLOGY AND WATER QUALITY **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 ground water 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 offsite;	☐	☐	☒	☐
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?	☐	☐	☒	☐

Impact Discussion

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact.

Construction-Related Water Quality Impacts

The Project may result in short-term construction impacts to surface water quality from grading and other construction-related activities. Storm water runoff from the Project site during construction may contain soils and sediments from these activities. Spills or leaks from heavy equipment and machinery, construction staging areas, and/or building sites may also enter runoff and would typically include petroleum products such as fuel, oil and grease, and heavy metals.

The SWRCB has issued the Statewide NPDES General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities (Order No 2012-0006-DWQ, NPDES No. CAS000002, adopted by the SWRCB on July 17, 2012). Under this Construction General Permit, individual NPDES permits or Construction General Permit coverage must be obtained for discharges of storm water from construction sites with a disturbed area of one or

more acres. Since the Project site would result in ground disturbance to approximately 38.82 acres, coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity is required. To obtain coverage, the City would require the contractor to retain the services of a certified Qualified SWPPP Developer to prepare a SWPPP for the Project. The City, or the contractor if specifically delegated, would electronically submit permit registration documents prior to beginning construction activities in the Storm Water Multi-Application Report Tracking System, which would consist of a Notice of Initiation, Risk Assessment, Post-Construction Calculations, a site map, the SWPPP, a signed certification statement, and the first annual fee. Project construction would also adhere to the San Diego Air Pollution Control District rules and regulations, including Rule 51 (Nuisance), Rule 54 (Dust and Fumes), and Rule 55 (Fugitive Dust Control) to avoid and minimize dust from leaving the site.

Also, as required by the City's Municipal Code (Title 15, Chapter 15.16, Grading and Erosion Control) each grading permit issued shall be accompanied by a SWPPP prepared in accordance with City standards and approved by the City engineer (Carlsbad 2021a).

Construction activities are not anticipated to encounter groundwater, as levels are anticipated to be approximately 43 feet below ground surface at the Project site (civTEC 2022b), which is well below the depth of proposed excavation.

With development and implementation of a SWPPP and adherence to applicable regulatory requirements in the City of Carlsbad Municipal Separate Storm Sewer System (MS4) Permit, Project short-term impacts to surface water quality during construction would be less than significant, and no mitigation is required.

Operational Water Quality Impacts

The Project site drains to the west via existing culverts beneath Faraday Avenue to a tributary to Agua Hedionda Creek, which then flows north towards Agua Hedionda Lagoon and Agua Hedionda Creek downstream of the Cannon Road bridge. Both Agua Hedionda Creek and Agua Hedionda Lagoon are impaired water bodies as listed in the SWRCB 303(d) impaired waters list, which are affected by the following pollutants/stressors: Enterococcus, Fecal Coliform, Manganese, Phosphorus, Selenium, Total Dissolved Solids, Total Nitrogen as N, and Toxicity. These water bodies are also covered by Total Maximum Daily Loads including Eutrophic and Indicator Bacteria (civTEC 2022c).

As required to comply with the NPDES permit, a SWQMP has been prepared for the Project based on the standards set forth in the 2016 Model BMP Design Manual – San Diego Region (BMP Design Manual), which would be implemented during Project operations (civTEC 2022c). As described in the SWQMP (civTEC 2022c), Project operations would result in the generation and potential runoff of additional pollutants/stressors to these water bodies, including sediment, nutrients, heavy metals, trash and debris, oxygen demanding substances, oil and grease, and pesticides.

The SWQMP requires implementation of water quality BMPs to ensure that water quality standards are met and that stormwater runoff from construction areas does not result in degradation of water quality in receiving water bodies. Consistent with the recommendations of the SWQMP, the Project includes a network of 24-inch concrete v-ditches, catch basins with grates, drainage inlets and outlets with trash screens and headwalls, and a series of twelve bioretention areas with underdrains, as shown in Exhibit 7, the Conceptual Grading Plan. These

facilities would convey stormwater through the park and provide stormwater treatment and retention before the stormwater discharges into existing storm water facilities. Flows from the Project site would be conveyed to two existing storm drain pipes that convey flows west beneath Faraday Avenue and then near the adjacent golf course. The SWQMP included an analysis of the potential for erosion and sedimentation to result from the Project related to the presence of Potential Critical Coarse Sediment Yield Areas (PCCSYA) within the Project site. The analysis and calculations contained in the SWQMP determined that the Project would not negatively impact downstream conditions and that no mitigation measures for protection of PCCSYAs were necessary. The improvements described in the SWQMP and detailed in the grading plan would ensure that water quality would not be substantially degraded. Project operational water quality impacts would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. The Project would not involve direct or indirect withdrawals of groundwater. Domestic water service would be provided by the City for potable uses. Reclaimed water would be utilized for irrigation. Additionally, the Project would not interfere substantially with groundwater recharge as the Project Site has limited infiltration potential. Although aa portion of the Project site would be developed with approximately 3.80 acres of new impervious surfaces, the Project site is sloped and drains quickly to Agua Hedionda Creek under existing conditions due to the presence of bedrock and clays as well as very moist soils beneath the Project site (SoCalGeo 2020b, civTEC 2022c). Therefore, there would be less than significant impacts to groundwater recharge when compared to existing conditions, and no mitigation is required.

c) Would the project 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 offsite?

Less Than Significant Impact. As described above in response to threshold X(a), the Project has the potential to result in erosion and siltation during construction. Development and implementation of a SWPPP for the Project would ensure potential effects related to erosion and siltation are reduced to less than significant levels during construction. Also, as discussed above under threshold X(a), ten bioretention areas with underdrains and associated drainage infrastructure have been incorporated in the Project's design, which would reduce potential for erosion and siltation during Project operations. Given these considerations, less than significant impacts would result from the Project and no mitigation is required.

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 storm water drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The Project would result in the addition of approximately 3.80 acres of new impervious surface within the Project site, which has the potential to permanently

increase the runoff potential from the Project site relative to existing conditions. However, given the sloped topography and lack of soils that are able to infiltrate stormwater, as described in more detail in the Results of Infiltration Testing memorandum prepared for the Project (SoCalGeo 2020b), there is limited infiltration ability within the Project site and most stormwater runs off rather than infiltrates in existing conditions. As described in response to threshold X(a), the Project has incorporated stormwater drainage systems and bioretention basins, which would convey, retain, and treat stormwater prior to it being conveyed off-site along the same flow paths that exist in the pre-Project condition to Agua Hedionda Creek. Therefore, the Project would not result in on- or off-site flooding nor would it exceed the capacity of the existing stormwater system. Therefore, less than significant impacts would result related to these thresholds, and no mitigation is required.

iv. Impede or redirect flood flows?

Less Than Significant Impact. The Project site is not located in an area identified as a 100-year flood area (FEMA 2012). There is also no risk of flooding from inundation from dams, as the nearest dam inundation area, the Calavera Lake Inundation Zone, is approximately 0.5-mile away from the Project site downslope north of Cannon Road (Carlsbad 2015c). Minor ephemeral drainages, which flow only in direct response to precipitation and for short periods of time, traverse the Project Site in the existing condition. The Project would provide drainage improvements to receive, convey, detain, and treat these drainages and other stormwater generated within the Project site. Therefore, the Project would provide adequate drainage and conveyance within the site and impacts to flood flows would be less than significant; no mitigation is required.

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

No Impact. The Project is not located in a flood zone (FEMA 2012). According to the California Department of Conservation's San Diego County Tsunami Inundation Map for the Oceanside-San Luis Rey quadrangle, the Project site is not located in a Tsunami Inundation Area (DOC 2009).

Dam inundation can be caused by the release of impounded water from structural failure or overtopping of a dam. The San Diego County HAZMIT Plan identifies dam-failure risk levels based on dam inundation map data. There are four dams and a reservoir located within or adjacent to the City of Carlsbad, which include the Calavera, Maerkle, San Marcos, and Bressi dams, and the Stanley A Mahr reservoir. The Calavera and Maerkle dams and Stanley A Mahr reservoir have been assigned high hazard ratings, San Marcos dam has a significant hazard rating, and the Bressi dam has a low hazard rating. All four dams and the reservoir have emergency action plans in place. These facilities are periodically inspected by the State of California Division of Dam Safety. According to the Dam Inundation Areas figure (Figure 6-2) in the City's General Plan (Carlsbad 2015a), the Project site is not located within the dam inundation areas for any of these dams or reservoirs.

Seiches are defined as wave-like oscillatory movements in enclosed or semi-enclosed bodies of water (e.g., lakes of reservoirs). Potential effects from seiches include flooding damage and related hazards in surrounding areas from spilling or sloshing waves, as well as increased pressure on containment structures. The Agua Hedionda Lagoon is the closest body of water that could potentially result in a seiche; however, the Project site is located at elevations of 48 feet and greater which are well upslope of Agua Hedionda and outside of the risk area for a seiche.

Therefore, the Project is not located in a flood hazard, tsunami, or seiche zones and no impacts would result from Project implementation.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The RWQCB prepares and maintains the Water Quality Control Plan for the San Diego Basin (Basin Plan). The Basin Plan sets water quality standards in the San Diego Basin by establishing beneficial uses for specific water bodies and designating numerical and narrative water quality objectives. The Basin Plan sets water quality objectives for the Project site and its surrounding areas. Water quality thresholds identified in the Basin Plan are intended to reduce pollutant discharge and ensure that water bodies are of sufficient quality to meet their designated beneficial uses (Carlsbad 2015c). Agua Hedionda Lagoon is located in Carlsbad between Tamarack Avenue and Cannon Road and is comprised of three inter-connected lagoons that are divided by the I-5 freeway and a railroad bridge. Cabrillo Power LLC owns the lagoon water body and Poseidon Water serves as lagoon steward. A small portion along the eastern edge of the lagoon is protected by CDFW and designated as a Marine Protected Area under the Marine Life Protection Act. The Agua Hedionda Ecological Reserve was acquired in 2000 by CDFW and consists of 186 acres of wetland at the eastern end of the lagoon. The Agua Hedionda Lagoon is not listed as impacted on the EPA's 2008 303(d) list; however, Agua Hedionda Creek, which feeds into Agua Hedionda Lagoon, is listed as impaired for indicator bacteria, phosphorus, Total Nitrogen toxicity, manganese, and selenium on the EPA's 2008 303(d) list.

The Project would not conflict with the water quality standards outlined in the Basin Plan or worsen water quality conditions in any 303(d)-listed water body, including Hedionda Creek. As discussed above in response to threshold X(a), pollutant discharge during construction would be avoided through compliance with the Construction General Permit including the preparation and implementation of a SWPPP. Once the Project is constructed, the Project would consist of a public park. Pollutants generated during Project operations would be treated using a series of ten bioretention areas with underdrains that are designed to treat storm water flows prior to discharge. Therefore, the Project would not be a source of pollutants for downstream water bodies and the Project would thereby not conflict with the Basin Plan.

In San Diego County, the State has designated three of the county's basins as medium- or high-priority and subject to the Sustainable Groundwater Management Act: Borrego Valley (Borrego Springs Subbasin), San Luis Rey Valley (Upper San Luis Rey Valley Subbasin), and San Pasqual Valley. None of these groundwater basins underlie the City of Carlsbad; therefore, the Project is not subject to any sustainable groundwater management plans and would not conflict with any such plans. Since the Project would not conflict with or obstruct implementation of any water quality control or sustainable groundwater management plans, the Project would result in less than significant impacts related to this threshold, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to hydrology and water quality; therefore, no mitigation measures are required.

XI. LAND USE AND PLANNING **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?	☐	☒	☐	☐

Impact Discussion

a) Would the project physically divide an established community?

No Impact. As shown on Exhibit 2, Project Location, the Project site is currently undeveloped except for a desalination pump station that would remain in place, and adjacent to existing neighborhoods to the north and east. The Project consists of a publicly-accessible park with internal circulation pathways that would connect to existing trails and sidewalks adjacent to the Project site. As such, development of the Project would not physically divide an established community. Instead, the Project's additional trails would result in enhanced non-motorized connectivity through the Project site. No impact would occur, and no mitigation is required.

b) Would the project 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?

Less Than Significant With Mitigation Incorporated. There are several applicable land use-related plans, policies, and regulations that were adopted for the purpose of avoiding or mitigating environmental effects, which are discussed below. The City's standard review process for proposed developments has been developed to review projects for compliance with applicable plans, policies, and regulations. General responses related to each plan, policy, and regulation are provided below.

Zoning

According to the City of Carlsbad General Plan, the Project site is located in the O-S land use designation, which is described below (Carlsbad 2015a).

> Open Space (O-S). This designation includes natural resource areas (e.g. habitat, nature preserves, wetlands, floodplains, beaches, bluffs, natural steep slopes, and hillsides); areas for production of resources (e.g., agriculture, aquaculture, and water reservoirs); and recreation and aesthetic areas (e.g., parks, beaches, greenways, trails, campgrounds, golf courses, and buffers between land uses).

The City's Zoning Ordinance, Carlsbad Municipal Code, Title 21, implements the General Plan by regulating the distribution and intensity of land uses. Regulations establish standards for minimum lot size; building height and setback limits; fence heights; parking; and other

development parameters within each land use (Carlsbad 2021a). The Project has been designed to comply with the applicable zoning for the Project site.

General Plan

The Project has been designed to be consistent with the goals and policies in the Land Use & Community Design section of the City's General Plan as listed below (Carlsbad 2015a). The Project has been designed to minimize grading, while also providing a community space that enhances the quality of life for residents.

- Goal 2-G.17: Ensure that the scale and character of new development is appropriate to the setting and intended use. Promote development that is scaled and sited to respect the natural terrain, where hills, public realm, parks, open space, trees, and distant vistas, rather than buildings, dominate the overall landscape.
- Goal 2-G.18: Ensure that new development fosters a sense of community and is designed with the focus on residents, including children, the disabled and the elderly, by providing: safe, pedestrian-friendly, tree-lined streets; walkways to common destinations such as schools, bikeways, trails, parks, and stores; homes that exhibit visual diversity, pedestrian-scale, and prominence to the street; central gathering places; and recreation amenities for a variety of age groups.
- Goal 2-G.21: Ensure that adequate public facilities and services are provided in a timely manner to preserve the quality of life of residents.
- Policy 2-P.37: Require new development located in the Airport Influence Area (AIA) to comply with applicable land use compatibility provisions of the McClellan–Palomar Airport Land Use Compatibility Plan (ALUCP) through review and approval of a site development plan or other development permit. Unless otherwise approved by City Council, development proposals must be consistent or conditionally consistent with applicable land use compatibility policies with respect to noise, safety, airspace protection, and overflight notification, as contained in the McClellan-Palomar ALUCP. Additionally, development proposals must meet Federal Aviation Administration (FAA) requirements with respect to building height as well as the provision of obstruction lighting when appurtenances are permitted to penetrate the transitional surface (a 7:1 slope from the runway primary surface). Consider San Diego County Regional Airport Authority Airport Land Use Commission recommendations in the review of development proposals.
- Policy 2-P.41: Ensure that the review of future projects places a high priority on the compatibility of adjacent land uses along the interface of different residential density and non-residential intensity categories. Special attention should be given to buffering and transitional methods, especially, when reviewing properties where different residential densities or land uses are involved.
- Policy 2-P.42: Ensure that development on hillsides, where permitted pursuant to the hillside development regulations of the Zoning Ordinance, is designed to preserve and/or enhance the visual quality of the preexisting topography.
- Policy 2-P.44: Encourage clustering of development to preserve natural terrain and maximize open space areas around developments.

The Open Space, Conservation, and Recreation Element of the City's General Plan contains a number of goals and policies relating to the Project, identified below (Carlsbad 2015a). The

Project consists of a park with trails and a variety of recreational uses, which would further the City's open space and recreation goals. The Project design was also developed to minimize biological resource impacts, consistent with the City's conservation goals.

- Goal 4-G.1: Develop a balanced and integrated open space system reflecting a variety of considerations—resource conservation, production of resources, recreation, and aesthetic and community identity—and ensuring synergies between various open space components and compatibility with land use planning.
- Goal 4-G.3: Protect environmentally sensitive lands, wildlife habitats, and rare, threatened, or endangered plant and animal communities.
- Goal 4-G.4: Promote conservation of hillsides and ridgelines.
- Goal 4-G.5: Maintain a diversified, comprehensive system of open space for outdoor recreation, including, but not limited to: parks; beaches; areas for organized sports; connecting corridors containing trails; water recreation areas (beaches, lagoons, lakes); unique conservation areas for nature study; and, semi-developed areas for camping.
- Goal 4-G.6: Offer a wide variety of recreational activities and park facilities designed to encourage educational benefits and active or passive participation by users of all ages and interests.
- Goal 4-G.7: Operate a financially self-supportive system of recreational facilities and programs.
- Goal 4-G.8: Coordinate the planning of park facilities and trails with other recreation-oriented land uses such as open space.
- Goal 4-G.11: Utilize greenways and trails to connect the city's open space network.
- Policy 4-P.6: Require that adjustment of the boundaries of any open space area shown on the Land Use Map be allowed only if all of the following criteria are met:
    a) The proposed open space area is equal to or greater than the area depicted on the Land Use Map; and
    b) The proposed open space area is of environmental quality equal to or greater than that depicted on the Land Use Map; and
    c) The proposed open space area is contiguous or within close proximity to open space shown on the Land Use Map. The City Council may also adjust the boundary of any open space area shown on the Land Use Map if it finds that the adjustment is necessary to mitigate a sensitive environmental area that is impacted by development, provided the open space boundary modification preserves open space at a 2 to 1 ratio (proposed acreage to existing acreage) and is within close proximity to the original area of open space. Additionally, the City Council may exempt public rights-of-way from the open space boundary adjustment requirements. However, environmental analysis shall be performed for all proposed public right-of-way improvements, and if determined that there are significant adverse impacts to the value of the open space system, those impacts shall be mitigated. The adjustment of open space boundaries shall not result in the exchange of environmentally constrained lands that are designated open space on the Land Use Map for lands that are not environmentally constrained.

- Policy 4-P.9: Maintain and implement the city's HMP, including the requirement that all development projects comply with the HMP and related documents. Require assessments of biological resources prior to approval of any development on sites with sensitive habitat, as depicted in Figure 4-3 [of the General Plan].
- Policy 4-P.11: Ensure that the improvements recommended for open space areas are appropriate for the type of open space and the use proposed. No improvements (excluding necessary infrastructure) shall be made in environmentally sensitive areas, except to enhance the environmental value of the areas.
- Policy 4-P.14: Assure that development or grading on hillsides (if allowed) relates to the slope of the land in order to preserve the integrity and appearance of natural hillsides and other landforms wherever possible.
- Policy 4-P.18: Require that, at the time of any discretionary approval, any land identified as open space for its habitat or scenic value shall have an appropriate easement and/or land use and zoning designation placed on it for resource protection.
- Policy 4-P.19: Require a city permit for any grading, grubbing, or clearing of vegetation in undeveloped areas, with appropriate penalties for violations.
- Policy 4-P.25: Consider accessibility, housing density, proximity to schools, general public access, local resident access, adjacent residential area traffic impacts, safe pedestrian access, and compatible use with the surrounding environment when determining park locations. Wherever possible, park sites should be located near schools or natural areas.
- Policy 4-P.30: Consider the following during the development/re-development of parkland: protection and enhancement of sensitive natural habitat by expanding minimum buffers around sensitive resources; utilizing native plant species in park projects; incorporating plant species that provide food such as seeds, nuts, and berries for wildlife and bird species; protecting and buffering drinking water sources such as small ponds and wetland areas; and limiting turf grass use to recreational areas. Use the Carlsbad Landscape Manual in landscape refurbishment and new park development projects.
- Policy 4-P.31: Design parks to protect public safety by ensuring adequate lighting, signage, and maintenance.
- Policy 4-P.36: Assure that, where feasible, developments near or adjacent to bodies of water provide open space that has public access to and views of the water.
- Policy 4-P.42: Locate multi-use trails and associated amenities and passive recreational features to minimize impacts to sensitive habitats and other sensitive surrounding land uses, such as residences.
- Policy 4-P.56: Ensure that construction and grading projects minimize short-term impacts to air quality.
    a) Require grading projects to provide a storm water pollution prevention plan (SWPPP) in compliance with city requirements, which include standards for best management practices that control pollutants from dust generated by construction activities and those related to vehicle and equipment cleaning, fueling and maintenance;
    b) Require grading projects to undertake measures to minimize mononitrogen oxides (NOx) emissions from vehicle and equipment operations; and
    c) Monitor all construction to ensure that proper steps are implemented.

Local Coastal Program

The California Coastal Act regulates all development within the state-designated Coastal Zone, which includes the Project site. The City's Local Coastal Program (LCP) consists of a separate land use plan document containing separate land use policies and an implementation plan, which primarily consists of the City's Zoning Ordinance, as well as portions of the Grading and Drainage Ordinance and Building Codes and Regulations that are applicable to storm water management and grading; master and specific plans applicable to areas in the Coastal Zone are also part of the LCP Implementation Plan (Carlsbad 2019a). Development in the Coastal Zone must comply with the LCP in addition to the General Plan. The Project is located in the Mello II segment of the LCP. The Project has been designed to comply with the applicable policies of the LCP for the Mello II segment including the following:

- Policy 3 – Environmentally Sensitive Habitat Areas (ESHAs):
    - Policy 3-1 – Carlsbad Habitat Management Plan: The Carlsbad HMP includes requirements for avoidance of ESHAs, including Coastal Sage Scrub, oak woodlands, streams, ephemeral drainages, and wetlands to the extent feasible. The HMP also includes minimum wetland and upland habitat mitigation requirements as well as a provision for no net loss of Coastal Sage Scrub, Succulent Shrub, Southern Maritime Chaparral, Southern Mixed Chaparral, Native Grassland, and Oak Woodland within the Coastal Zone of Carlsbad. Early constraints analysis was conducted for the Project to identify sensitive vegetation communities, jurisdictional waters, and special status species. This information was incorporated into the Project design, and appropriate buffers were incorporated consistent with Policy 3-1.12 of the LCP.
    - Policy 3-4 – Grading and Landscaping Requirements: This policy of the LCP includes requirements for new development including runoff volume and water quality requirements, and site design principles, which have been incorporated into the Project's design. Storm water BMPs have been incorporated into Project design and construction to minimize water quality impacts, as well as to slow runoff and allow for infiltration. Development and grading have been designed to avoid ESHAs and to preserve many of the natural slopes that exist within the Project site.
    - Policy 3-7 – City Owned Lands Adjacent to Macario Canyon and Veterans Memorial Park: This policy of the LCP applies to approximately 521 acres in and adjacent to Macario Canyon, including the Project site.
        - Policy 3-7(a) requires that areas shown for conservation shall not be impacted or disturbed except for revegetation, restoration, and other similar activities related to mitigation. Policy 3-7(d) further specifies that protection and management of all mitigation areas shall be consistent with Policy 3-1.10.f and h, which are the Upland Habitat Mitigation Requirements of the HMP. The Project would directly impact 3.36 acres of habitat in the Hardline area. The Project would be required to mitigate for impacts to these areas through implementation of **MM BIO-1** and **MM BIO-2** specifying Project compensatory mitigation. In addition, the Project would require a minor amendment to the City's HMP, including an equivalency finding, to approve the exchange of 3.36 acres in the HMP preserve that would be impacted within the Project site and incorporated into the park for equal or better habitat and acreage. The Proposed Hardline Revisions would result in the net increase of 9.505 acres of additional habitat to the Macario Canyon Open Space area.

- Policy 3-7(b) includes minimum mitigation requirements for impacts to Coastal Sage Scrub and/or to Coastal California gnatcatcher. Mitigation measures specifying compensatory mitigation for sensitive vegetation communities are provided in response to threshold IV(a). Direct impacts to coastal California gnatcatcher territories have been avoided.
- Policy 3-7(c): states that in order to provide a viable north-south wildlife corridor across Macario Canyon, the area shown on the HMP Hardline map as "Veterans Memorial Park Wildlife Corridor" shall be conserved concurrent with any impacts to the Macario Canyon property. No development shall occur within the Wildlife Corridor except a designated trail and rest areas along the trail. The Project focuses development on the northern portion of the Project site. Southern portions of the Project site that abut Macario Canyon would be conserved and not developed as part of the Project.
- Policy 3-7(e): The area shown as "Veterans Memorial Park Development Area" is designated for public recreational use. It is the intent of this policy that the public park area be developed so as to maximize public access and provide a variety of recreational opportunities. Development within steep slopes and/or native vegetation shall be limited to passive recreational facilities, such as recreational trails and picnic areas. Within the proposed development areas, grading of steep slope areas with native vegetation shall be limited to the minimum amount necessary to allow such uses. The Project consists of a public park that would maximize public recreational use of the Project site, consistent with Policy 3-7(e). The Project complies with this policy by avoiding major re-grading of the Project site, and by instead focusing development within previously-disturbed portions of the Project site.
- Policy 3-7(f): Segments of the Citywide Trail System viewpoints and other opportunities for public access shall be incorporated into the development areas. Consistent with this policy, the Project has been designed to include ample public access opportunities including a variety of recreational amenities.

- Policy 4 –Geologic, Floodplain, and Shoreline Hazard Areas:
  - Policy 4-3(b) – Accelerated Soil Erosion for "All Other Areas": For slopes possessing a 25 percent inclination or greater and endangered species and/or Coastal Sage Scrub and Chaparral plant communities, no more than 10 percent of any sensitive habitat can be impacted. As demonstrated in the biological resources analysis contained in Section 2 under threshold IV of this IS/MND, Project impacts to sensitive habitat has been limited to 1.05 acres, which consists of impacts to Diegan coastal sage scrub, southern maritime chaparral, and riparian scrub. This equates to approximately 2.08 percent of the 50.44 acres of these vegetation communities within the Project site, which is substantially less than the 10 percent maximum allowed by this policy.
  - Policy 4-4 – Removal of Natural Vegetation: When earth changes are required and natural vegetation is removed, the area and duration of exposure shall be kept at a minimum. Consistent with this policy, Project design has minimized vegetation removal. The Project would be constructed over 20 months. Disturbed portions of the Project site would be revegetated as soon as practicable following completion of work at that portion of the site
  - Policies 4-5 and 4-6 – Soil Erosion Control Practices and "Sediment Control" Practices: The construction best practices described in this policy would be implemented as part

of the Project's SWPPP. Operational water quality BMPs are shown in the Projects Conceptual Grading Plan, which is provided as Exhibit 7 consistent with this policy. Furthermore, the site design principles listed under Policy 4-5(e) have been incorporated into the Project including focusing development on the least environmentally sensitive portions of the Project site, minimizing the amount of impervious surfaces used, and protecting existing slopes in the site from development.

- Policy 8-4 – Archaeological and Paleontological Resources: Consistent with this policy, Project-specific review of these resources was completed as part of the environmental review process and resulted in appropriate mitigation measures.

There are a total of 6.39 acres of areas with natural slopes that are twenty-five percent inclination or greater that also contain sensitive habitat, which are known as "dual-criteria slopes" consistent with Policy 4-3(b) of the City's Local Coastal Program. The Project proposes impacts to 0.11 acres, or 1.7 percent, of these dual-criteria slopes, which would not exceed the 10 percent encroachment that is allotted for in the Local Coastal Program. As shown in more detail in the Slope Analysis prepared by civTEC, the Project's proposed impacts to these slopes has been avoided to the extent feasible during Project design, and is necessary to establish new trails and other park features for the public's use, which would not be possible to construct otherwise (civTEC 2021).

The City will ensure Project consistency with the requirements of the Local Coastal Program through the design review process as well as through their issuance of a Coastal Development Permit for the Project.

Coastal Resource Protection Overlay Zone

The Project site is located within the Coastal Resource Protection Overlay Zone of the City, which applies to all properties located in the coastal zone. Section 21.203.040 of the Carlsbad Municipal Code contains specific development standards that the City applies to developments within the Coastal Resource Protection Overlay Zone as part of the coastal development permit.

The first development standard for this overlay zone, which is contained at Section 21.203.040(A) relates to the preservation of steep slopes and vegetation. Since the Project would affect steep slopes, which are defined as slopes that are twenty-five percent inclination or greater, a slope map and analysis for the affected slopes has been prepared. As determined in the slope analysis, the Project would grade approximately 6.96 acres of slopes of greater than twenty-five percent which is approximately 19.02 percent of the grading footprint (civTEC 2021). As noted above, there are a total of 6.39 acres of "dual-criteria slopes" as defined by Chapter 21.203 of the City's Municipal Code as well as within Policy 4-3(b) of the City's Local Coastal Program. The Project proposes impacts to 0.11 acres, or 1.7 percent, of these dual-criteria slopes, which would not exceed the 10 percent encroachment that is allotted for in the Municipal Code and Local Coastal Program. As shown in more detail in the Slope Analysis prepared by civTEC, the Project's proposed impacts to these slopes has been avoided to the extent feasible during Project design, and is necessary to establish new trails and other park features for the public's use, which would not be possible to construct otherwise (civTEC 2021).

Consistent with Section 21.203.040(A)(3)(a) of the Municipal Code, a soils investigation has been prepared for the Project by a licensed soils engineer, which has determined the subject slope area would be stable and grading and development impacts would be mitigated for the life of the structure (SoCalGeo 2020a).

As demonstrated in the biological resources analysis in Section 2 of this IS/MND under threshold IV, and as required by Section 21.203.040(a)(3)(c), the proposed impacts to dual criteria slopes would not result in substantial damage or alteration to major wildlife habitat, native vegetation areas, and wildlife corridors with mitigation.

The second development standard for this overlay zone, contained at Section 21.203.040(B) of the Municipal Codes relates to drainage, erosion, sedimentation, and habitat. Consistent with this development standard, the Project has incorporated design elements to prevent runoff contamination, and minimize runoff volume from the Project site in the developed condition, to the greatest extent feasible, as required by Section 21.203.040 of the Carlsbad Municipal Code. More detail is provided in response to hydrology and water quality thresholds, provided in subsection X above.

Liquefaction and floodplain-related risks and impacts have also been analyzed in the geology and soils and hydrology and water quality analysis that is provided in subsections VII and X respectively of this IS/MND.

Hillside Development Regulations

Since the Project includes grading into slopes that are greater than 15 percent and in elevations greater than fifteen feet, a hillside development permit would be required. As required by Section 21.53.230(b) of the Code, undevelopable areas of the Project site were identified during and avoided during Project design to the maximum extent feasible.

The volume of grading for the Project has been minimized and would be 5,866 cubic yards per acre, which is considered an “acceptable” amount based on the City’s hillside development and design standards. Slope heights, contour grading, screening, slope edge building setback, and hillside drainage requirements from the City’s hillside development and design standards have been incorporated as applicable.

Due to the topography of the Project site, modifications to the hillside development and design standards are proposed. The hillside development and design standards limit retaining walls to a maximum height of six vertical feet on slopes over 40 percent gradient. A modification would be required to allow for retaining walls over the six vertical foot limit for walls that are necessary to construct city-wide multi-use trails, to minimize impacts to the surrounding habitat areas, and to stay within acceptable grading volumes. Trees and shrubs would be used to screen and soften the appearance of retaining walls and the retaining walls have curved shapes (rather than straight lines) to naturally transition into the undulating topography and create an aesthetically pleasing and natural appearance.

Habitat Management Plan

The City’s HMP was developed by the City, in cooperation with federal and State wildlife agencies, to preserve and protect sensitive biological resources within the city while allowing for continued economic development. The HMP is a comprehensive approach to preserving natural land for plant and animal species. It defines nature preserves that link with regional and statewide preserves to create a natural network where species can thrive. The HMP was developed under the direction of a number of biologists and other environmental experts as a way to preserve and protect the wide variety of sensitive and endangered animals and plants found in the city. The HMP also assures that money is set aside to maintain these natural networks.

Portions of the Project site that would be permanently impacted by the Project are located within the boundaries of the HMP, identified as a "City of Carlsbad Conservation Lands" within an area of the HMP identified as "Core #4", which includes Agua Hedionda Creek and Lagoon to the west and the City golf course across Faraday Avenue in addition to the southern portion of the Project site. These areas are referred to in the HMP as "existing hardlines", which are defined as: "areas which have already been conserved for their wildlife value due to actions occurring in the past. Examples include onsite open space required to be set aside as part of approval of a development project and areas that have been purchased and set aside as mitigation for project impacts" (Carlsbad 2015c).

Given that the Project site is adjacent to and partially within the HMP preserve, the Project would be required to comply with adjacency standards of the HMP, which relate to fire management, erosion control, landscaping restrictions, fencing, signs and lighting, and predator and exotic species control.

Also, since the Project would directly impact 3.36 acres of habitat in the Hardline area of the HMP, the City would need to process an HMP Minor Amendment (Equivalency Finding) in order to implement the Project. The proposed Hardline Revisions shown in Exhibit 10 would result in the net increase of 9.50 acres of additional habitat to the Macario Canyon/Veterans Memorial Park Preserve.

With implementation of the mitigation measures identified related to threshold IV(f), which ensure compliance with all required avoidance, minimization, and compensatory mitigation efforts, the Project would be consistent with the HMP..

Growth Management Program

Chapter 21.90 of the Carlsbad Municipal Code contains the City's Growth Management Program. To ensure that development does not occur unless facilities and improvements are available, the Growth Management Program requires that the City Council adopt by resolution a citywide facilities and improvements plan. The Citywide Facilities and Improvements Plan was originally adopted in 1986 and has most recently been amended in August 2017 (Carlsbad 2017b).

The Citywide Facilities and Improvements Plan includes an evaluation of the arrangement and number of future housing units in the City and establishes performance standards for public facilities (Carlsbad 2017b). Of most relevance to the Project are the performance standards relating to parks and circulation. The Project is included in the Citywide Facilities and Improvements Plan to help the City achieve an acceptable park performance standard of three acres of community park or special use area per 1,000 population. Therefore, the Project would be consistent with and not inhibit implementation of this aspect of the plan. The Citywide Facilities and Improvements Plan establishes a requirement to maintain Level of Service (LOS) D or better for all modes that are subject to this multi-modal level of service (MMLOS) standard, as identified in Table 3-1 of the General Plan Mobility Element, excluding LOS exempt intersections and streets approved by the City Council. As described in more detail below in subsection XVII of this IS/MND, with implementation of mitigation the Project is consistent with the City's MMLOS standards for pedestrian, bicycles, and transit. Given the considerations above, the Project would not impair implementation of the City's Growth Management Program.

Whitman Way

Cannon Rd

Faraday Ave

- Project Boundary
- Potential Hardline Revisions
- Existing Hardline
- Areas to be Added to Hardline
- Areas to be Removed from Hardline

Vegetation Types and Other Areas

- Non-native Grassland
- Non-native Grassland*
- Diegan Coastal Sage Scrub
- Southern Maritime Chaparral
- Oak Woodland
- Ornamental
- Riparian Scrub
- Disturbed Habitat
- Urban/Developed

*Note: Grassland has a high cover of native herbs.

Aerial Source: Esri, Maxar 2020

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HMP Hardline Gain and Loss

Veterans Memorial Park

Exhibit 10

N W E S

300 150 0 300

Feet

PSOMAS

(Rev: 12/09/2021 MMD) R:\Projects\1RJM\010100\Graphics\ISMND\ex_HMP_Hardline_GainLoss.pdf

McClellan-Palomar Airport Land Use Compatibility Plan

The Project site is located within Safety Zone 6 (the "Zone 6 – Traffic Pattern Zone") of the McClellan-Palomar ALUCP. The Project has been designed to be compatible with the requirements for Zone 6 (San Diego ALUC 2011) related to land uses, building height, and development intensity. According to the "Compatibility Policy Map: Noise", portions of the Project site are located within an area that is anticipated to have airport noise of approximately 60-65 decibel CNEL. According to the noise compatibility criteria and policies presented in Section 3.3 of the ALUCP, the recreational use proposed for the Project would be compatible with the noise expected to result from the airport. The Project would therefore be compatible with the ALUCP.

Environment Ordinance (Carlsbad Municipal Code, Title 19)

This ordinance provides for enhancement and protection of the environment within the City by establishing principles, criteria, and procedures for evaluating the environmental impacts of development, consistent with the General Plan, and ensures compliance with CEQA. As CEQA lead agency, the City is ensuring compliance with CEQA through the preparation of this IS/MND.

California Building Code (Carlsbad Municipal Code, Title 18)

The purpose of this code is to provide standards to safeguard health, property, and public welfare by regulating the design, construction, occupancy, and location of buildings within the city. This code is developed by the California Building Standards Commission based on the latest edition of the model codes promulgated by the International Code Council. The State of California also publishes a California Plumbing, Electrical, Mechanical, and Energy Code. These California codes for construction are adopted by local jurisdictions throughout California. All residential, industrial, and commercial development in the City of Carlsbad must conform to the provisions of these codes. The Project's two proposed structures would comply with all applicable code requirements as detailed in the CBC.

Grading and Drainage Ordinances (Carlsbad Municipal Code, Title 15)

The purposes of the grading ordinance are to: establish minimum requirements for grading, including clearing and grubbing of vegetation, in a manner intended to protect life and property and promote the general welfare; enhance and improve the physical environment of the community; and preserve, subject to economic feasibility, the natural scenic character of the City. The purposes of the drainage ordinance are to: ensure the timely completion of planned local storm drainage, flood control, and water pollution control improvements; and protect and enhance the water quality of the city's receiving waters and wetlands in a manner pursuant to and consistent with the Clean Water Act and municipal permit. The Project would be required to comply with these ordinances as a condition of grading permit issuance. Further, as discussed in threshold VII (d), a mitigation measure requires compliance with the Project's Geotechnical Investigation and any future geotechnical reports. Also, the Project would be required to implement the BMPs contained in the WQMP to avoid and minimize operational water quality impacts.

Carlsbad Community Vision

In 2010, the Carlsbad Community Vision was adopted, which is a set of nine core values that community members said were important to Carlsbad's future. The Project would not conflict with

any of the core values contained in the Carlsbad Community Vision, and would directly support implementation of the two core values listed below.

- Open space and the natural environment: Prioritize protection and enhancement of open space and the natural environment. Support and protect Carlsbad's unique open space and agricultural heritage.
- Access to recreation and active, healthy lifestyles: Promote active lifestyles and community health by furthering access to trails, parks, beaches and other recreation opportunities.

The Project consists of a public park that would result in the permanent conservation of much of the Project site. The Project would thereby result in long term enhancement of the City's open space network and would provide trails, paths, and parkland in support of active and healthy lifestyles for residents.

Sustainable Mobility Plan

In January 2021, Carlsbad City Council adopted the Sustainable Mobility Plan to help improve transportation-related safety, reduce emissions, increase travel choices, and implement the Mobility Element of the city General Plan (Carlsbad 2021d). The Sustainable Mobility Plan presents a comprehensive look at current active travel and transit conditions, as well as previous planning efforts to consolidate findings and recommendations into one master document. There are twelve previous planning documents integrated into the Sustainable Mobility Plan, three of which are described below including the City's: Trails, Bikeways, and Pedestrian Master Plans.

Trails Master Plan

The City's Final Trails Master Plan is the principal planning document for developing and maintaining the citywide trails system (Carlsbad 2019b). The Plan identifies existing trails and future trail development opportunities. The Project's trails are designed to meet the trail standards contained in Chapter 6 of the Final Trails Master Plan. Trails would be operated and maintained by the City consistent with the requirements of Chapter 7 of the Final Trails Master Plan. An existing multi-use trail located within the Project site, which is identified as Segment 8.5 in the City's Final Trails Master Plan, would be extended as part of the Project (Carlsbad 2019). The trail would be extended along the northeast, northern, and western edges of the Project site to provide a perimeter loop trail and connectivity to existing off-site trails adjacent to the park. The Project would comply with requirements of the Final Trails Master Plan and would not impede its implementation.

Carlsbad Bikeway Master Plan

The City's Bikeway Master Plan was prepared in 2007 to provide a blueprint for bicycle transportation and recreation in the City. The Bikeway Master Plan provides for an updated system of bike lanes, bike routes and bike paths, identifies necessary support facilities such as bicycle parking, and recommends a variety of programs to allow for safe, efficient and convenient bicycle travel within Carlsbad and connecting to regional destinations. The Project would not impact existing Class II bike lanes adjacent to the Project site on Faraday Avenue, which are identified in the Bikeway Master Plan. Furthermore, no improvements are required to achieve acceptable level of service (LOS) for bicycles on Faraday Avenue, as discussed in more detail in the transportation-related responses in Section XVII of this IS/MND.

Carlsbad Pedestrian Master Plan

The City's Pedestrian Master Plan was prepared in 2008 (Carlsbad 2008b). It provides an overview of goals, objectives, and policies related to walking, an evaluation of existing conditions, a pedestrian needs analysis, and a list of recommended projects related to pedestrian facilities, none of which occur in close proximity to the Project site. The Project consists of a park that would provide improved and additional pedestrian facilities in furtherance of the goals and objectives of this plan.

Community Forest Management Plan

The City's Community Forest Management Plan was approved in September 2019. It describes how the City cares for its existing trees and will increase overall tree canopy within the City, including on certain City-owned and City-controlled properties, which did not include the Project site. The Plan also includes allowable street tree species and policies for removal of street trees. The Project would not remove any street trees; however, as required by the City's Landscape Manual, a minimum of one street tree for every 40 feet of street frontage would be planted (Carlsbad 2016). The Project would be consistent with the Community Forest Management Plan's second objective, which is to expand the community forest in areas with lesser tree canopy density and maximize its benefits. In furtherance of the City's goals to increase tree cover, the Project's landscaping would include a substantial increase in tree cover when compared to existing vegetation within the Project site. Also, street trees would be planted where there is currently no tree canopy. Street tree species would be selected consistent with requirements and allowed species on the "Street Tree Species Lists" contained in the Community Forest Management Plan. Otherwise, the Project would not directly conflict with any of the other goals or policies contained in the Community Forest Management Plan. The Project site is not located within any of the urban forest interface areas identified in Chapter 5 of the Community Forest Management Plan. Furthermore, the Project site does not contain any heritage trees as described and inventoried in Chapter 6 of the Community Forest Management Plan. Therefore, the Project does not conflict with the City's Community Forest Management Plan.

City of Carlsbad Landscape Manual

The purpose of the City's Landscape Manual is to aid applicants, qualified professionals, and residents, in understanding the City's policies, programs and requirements for landscaping, and to provide guidance for implementation of Carlsbad Municipal Code Chapter 18.50 - Water Efficient Landscape Ordinance (WELO). The City's WELO implements the State of California Water Conservation in Landscaping Act to reduce water use associated with irrigation of outdoor landscaping by setting a maximum amount of water to be applied to landscaping and by designing, installing and maintaining water efficient landscapes not to exceed the maximum water allowance. As required by the Landscape Manual, a conceptual landscape plan has been prepared for the Project, which has been reviewed by the City. The Project's conceptual landscape plan has been prepared consistent with the City's minimum standards and policies. Furthermore, landscape construction documents would be prepared for the Project and reviewed by the City during final design, consistent with Section 4 of the Landscape Manual, to further verify Project consistency with the requirements of the Landscape Manual. Therefore, the Project does not conflict with the City's Landscape Manual.

Mitigation Measures

With implementation of mitigation measures related to biological resources, cultural resources, and transportation, which are provided in Sections IV, V, and XVII respectively of this IS/MND, the Project would have less than significant impacts related to land use and planning.

XII. MINERAL RESOURCES **Would the project:**	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Impact Discussion

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. As identified in Section 3.15, page 3.15-1 of the General Plan and Climate Action Plan Final Program Environmental Impact Report for the Carlsbad General Plan Update, the City does not contain any non-renewable energy resources of economic value to the region and the residents of the State. Mineral resources within the City are no longer being utilized and extracted as exploitable natural resources (Carlsbad 2015a). Therefore, no mineral resource impacts would occur as a result of the project, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to mineral resources; therefore, no mitigation measures are required.

XIII. NOISE **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 2 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?	☐	☐	☒	☐

Regulatory Background

Noise Guidelines Manual

Applicable requirements from the City's Noise Guidelines Manual are provided below (Carlsbad 2013).

C.1 Prior to project approval, the project proponent may be required to produce evidence acceptable to the City that:

a) All construction vehicles or equipment, fixed or mobile, operated within 1,000 feet of a dwelling or noise sensitive use shall be equipped with properly operating and maintained mufflers.

b) Stockpiling and/or vehicle staging areas shall be located as far as practicable from dwellings and other noise sensitive receptors.

Noise Element

The Noise Element of the City's General Plan includes the performance standards listed below in Table 9 for non-transportation uses, which would include the proposed park.

TABLE 9
PERFORMANCE STANDARDS FOR NON-TRANSPORTATION SOURCES
(AS MEASURED AT PROPERTY LINE OF SOURCE/SENSITIVE USE)

Noise Level Descriptor	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Hourly L_{eq}, dB	**55**	**45**
Maximum Level, dB	**75**	**65**
Leq**:** equivalent **noise** level; dB**:** decibel.		
Source: Table 5-3 of the Noise Element of the Carlsbad General Plan.		

Impact Discussion

a) Would the project result in 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?

Less Than Significant Impact. Sound pressure levels are described in decibel (dB), which are units measured on a logarithmic scale. A doubling of the energy of a noise source (such as doubling of traffic volume) would increase the noise level by 3 dB. The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale was devised; the A-weighted decibel scale (dBA) approximates the frequency response of the average healthy ear when listening to most ordinary everyday sounds and is used in this analysis.

Human perception of noise has no simple correlation with acoustical energy. Due to subjective thresholds of tolerance, the annoyance of a given noise source is perceived very differently from person to person. The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at 3 feet is approximately 60 dBA, while loud jet engine noises at 1,000 feet equate to 100 dBA, which can cause serious discomfort.

Several rating scales (or noise "metrics") exist to analyze the effects of noise on a community. These scales include the equivalent noise level (L_{eq}) and the CNEL. Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq}, which is the equivalent noise level for that period of time. The period of time averaging may be specified; $L_{eq(3)}$ would be a 3-hour average. When no period is specified, a one-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, CNEL was developed to account for human sensitivity to nighttime noise. CNEL represents the 24-hour average sound level with penalties for noise occurring in the evening and at night. The CNEL computation divides a 24-hour day into three periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound levels are assigned a 5-dBA penalty, and the nighttime sound levels are assigned a 10-dBA penalty prior to averaging with daytime hourly sound levels.

Construction Noise

The City regulates construction noise through Chapter 8.48 Noise of the Municipal Code by prohibiting construction activities to only occur during the least noise sensitive portions of the day.

8.48.010 Construction hours limitations.

It shall be unlawful to operate equipment or perform any construction in the erection, demolition, alteration, or repair of any building or structure or the grading or excavation of land during the following hours, except as hereinafter provided:

A. After 6:00 PM on any day, and before 7:00 AM, Monday through Friday, and before 8:00 AM on Saturday;

B. All day on Sunday; and

C. On any federal holiday. (Ord. CS-211 § 2, 2013; Ord. 3109 § 1, 1978)

8.48.020 Exceptions.

A. .The building official, city engineer, or other official designated by the city manager may modify the hours of construction specified in Section 8.48.010. In making a determination to lengthen or shorten the hours of construction, the city official shall consider the following:

    a. Whether the project is an emergency repair required to protect the health and safety of any member of the community;

    b. Whether the construction would be less objectionable at night than during daylight hours;

    c. The character and nature of the neighborhood in the vicinity of the work site;

    d. The potential for great economic hardship;

    e. If the work is in the interest of the general public;

    f. Whether there is a previously unforeseen effect on the health, safety, or welfare of the public; and

    g. Any history of complaints regarding compliance with the limitation on hours of construction.

B. As used in this section, “city engineer” shall mean the city engineer or designee, who is the deputy city engineer, construction management and inspection. (Ord. CS-389 § 6, 2021;Ord. CS-211 § 2, 2013; Ord. 3109 § 1, 1978)

8.48.030 Signage.

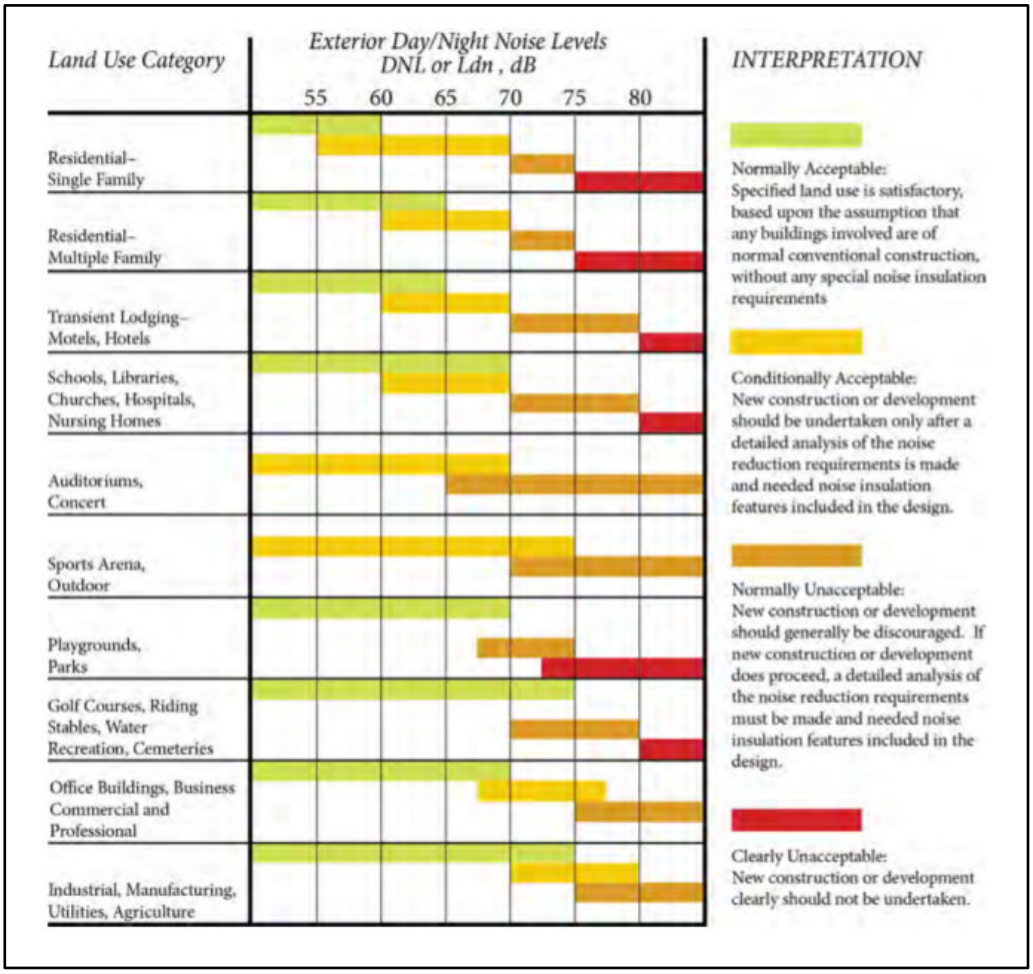
Signs shall be posted at jobsite entrance(s) indicating hours of work as prescribed by this title or as modified by the designated city official. Letters shall be a minimum of four inches high with a minimum stroke width of one-half inch. (Ord. CS-211 § 2, 2013)

Noise Element

The Noise Element of the General Plan provides guidelines on noise limits for stationary and mobile sources of noise as well as noise compatibility of land uses occurring throughout the City.

The City of Carlsbad is affected by several different sources of noise, including automobile traffic, commercial activity, aircraft noise, and periodic nuisances such as construction, loud parties, and other events. The Noise Element of the Carlsbad General Plan is intended to identify these sources and provide objectives and policies that ensure that noise from these sources does not create an unacceptable noise environment (Carlsbad 2015a). Chapter 5, Noise, of the General Plan is the City's "Noise Element" and contains guidelines for noise compatible land uses for long-term operations from all sources as shown in Table 10, Land Use Compatibility for Community Noise Environments. The Noise Element acknowledges that noise from major roadways and airports may affect sensitive receptors.

TABLE 10
LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS



The Noise Element has also published noise limits for non-transportation sources. These limits are shown above in Table 9.

Construction Noise

Future development implemented under the Project could result in a temporary ambient noise increase due to construction activities. Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction (e.g., demolition; land clearing, grading, and excavation; erection). Construction noise would be temporary, over a period of approximately 20 months, and would include noise from activities such as demolition, site preparation, grading, truck hauling of material, pouring of concrete, and the use of power tools. Noise would also be generated by construction equipment use, including earthmovers, material handlers, and portable generators, and could reach high noise levels for brief periods.

The loudest noises during construction are typically from pile driving and blasting. No pile driving or blasting is planned for the Project.

Local residents would be subject to elevated noise levels due to the operation of Project-related construction equipment. The nearest noise sensitive uses are located to the north of the Project site along Whitman Way. Other uses near the Project site include hotel uses located approximately 2,250 feet to the west, a golf course 120 feet to the south, and industrial uses 1,640 feet to the east.

Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the USEPA's Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground -clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment mix for an industrial project and do not include use of atypical, very loud, and vibration-intensive equipment (e.g., pile drivers).

The degree to which noise-sensitive receptors are affected by construction activities depends heavily on their proximity. Estimated noise levels attributable to the development of the Project are shown in Table 11, Construction Noise Levels at Nearby Uses, and calculations are included in Appendix H, Noise Calculations.

TABLE 11
CONSTRUCTION NOISE LEVELS AT NEARBY USES

Construction Phase	Noise Levels (L_{eq} dBA)							
	Residential Uses to the North of the Project Site		Hotel Uses to the West of the Project Site		Golf Course to the South of the Project Site		Light Industrial Uses to the East of the Project Site	
	Max (100 ft)	Avg (1,200 ft)	Max (2,250 ft)	Avg (2,610 ft)	Max (120 ft)	Avg (590 ft)	Max (1,640 ft)	Avg (2,180 ft)
Ground Clearing/ Demolition	78	56	51	50	76	63	54	51
Excavation	82	60	55	54	80	67	58	55
Foundation Construction	82	60	55	54	80	67	58	55
Building Construction	73	51	46	45	71	58	49	46
Paving and Site Cleanup	78	56	51	50	76	63	54	51

L_{eq} dBA: Average noise energy level; Max: maximum; avg: average; ft: feet, NA: Not Applicable

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures.

Source: USEPA 1971.

Table 11 shows both the maximum and average noise levels for construction equipment at the indicated receptors. Maximum noise levels represent the noise levels from construction equipment occurring nearest to the nearby land uses and would occur for a relative short amount of time relative to the overall construction period. Average noise levels represent the noise exposure to sensitive uses based on the distance to the center of the Project site. Noise levels from general Project-related construction activities would range from 46 to 82 dBA L_{eq} for the maximum noise levels and 45 to 67 dBA L_{eq} for average noise levels. It should be noted that these are conservative noise level calculations and do not account for additional attenuation that may occur from topography or structures that may break the line of sight between the noise source and receptor.

The development of the Project would comply with the City of Carlsbad Municipal Code Chapter 8.48, which establishes restrictions for when construction activities are allowed to occur. In addition, the Project's construction activities would not result in unusually noisy activities such as impact pile driving. Because the Project would limit construction noise to the least noise sensitive portions of the day and would not involve especially loud pieces of construction equipment such as pile drivers, impacts during construction would be less than significant, and no mitigation is required.

Operational Noise – On-site Sources

Operational noise sources associated with the Project would include, but are not limited to, landscape maintenance equipment; vehicles entering and exiting the Project site, amplified music from visitors, visitor speech, laughing and yells, and infrequent expressive activity events.

General Park Usage

The nearest noise sensitive use to the Project site are multifamily residential uses located along Whitman Way approximately 130 feet from the nearest trail of the Project. It is anticipated that typical peak weekday park occupancy would include 305 park users while a peak weekend day

occupancy with camps or special events would include 800 park users occurring within the 38.82 acre park. If the peak number of visitors are distributed evenly across the developed portion of the Project site, there would be an average of 17 visitors per acre. The distance to the approximate center of the proposed park is approximately 1,200 feet or a quarter-mile from the sound wall of the nearest residential use. The nearest proposed park uses to the existing residential uses along Whitman Way includes a veterans memorial plaza, community gathering area, pavilion, a building with restrooms and storage, north parking area, and open lawn. These uses are located on the northern area of the Project site and encompass approximately 20 percent of the total developed Project area. For purposes of providing a conservative analysis of potential noise exposure, it is assumed that half the peak weekend visitors (400 people) would be located in these locations and that half of the people would be speaking simultaneously. Estimated noise levels would be 38 dBA L_{eq} at the nearest residential uses (i.e., 130 feet away) if this conservative scenario occurs. Detailed calculation of noise propagation from each noise source are shown in Appendix H. This noise exposure level takes into account noise attenuation associated with distance and the presence of an existing sound wall at the residential use. Project related noise levels of 38 dBA L_{eq} are considered low and substantially below the daytime noise limit of 55 dBA identified in the City's Noise Element. Because speech associated with the park visitors would be below these noise limits, the Project would result in less than significant noise impacts related to general park usage, and no mitigation measures are required.

Expressive Activity Events

The Carlsbad Municipal Code, Section 8.18 requires that a permit be issued by the City for an expressive activity event. This permit requires disclosing whether the event would involve a sound-amplifying system. Pursuant to Section 8.18.050, the City Manager shall issue the expressive activity event permit unless the City Manager finds that approving the permit would be contrary to the public peace, health, safety, or welfare. Noise exposure levels from expressive activity events are dependent on the size of the event, the nature of the event, and time of the event. These factors are currently undefined and would vary based on the event; therefore, evaluation of potential noise impacts would be on an individual basis as applications for expressive activity events are submitted to the City. Section 8.18.050.A.3 allows the City Manager to impose conditions on approval of the expressive activity event permit as he or she determines to be reasonably necessary to protect the public peace, health, safety, or welfare. As such, the City has established a regulatory framework to limit the excessive noise exposure generated by these events. As such, the impact from these events would be less than significant, and no mitigation measures are required.

Parking Lots

The Project proposes two parking lots, which would result in noise typical of parking lots including vehicle engines, exhausts, horns, and doors closing. The north parking area would have 72 stalls while the south parking area would have 37 stalls. The center of the north parking area is approximately 450 feet from the nearest residential use located to the north of the Project site. Assuming that 72 cars utilize the north parking area during the peak hour, noise exposure levels of 27 dBA Leq would occur at the nearest residential use. Project related noise levels of 27 dBA L_{eq} are considered very low and substantially below the daytime noise limit of 55 dBA identified in the City's Noise Element. Because parking lot noise would be below these noise limits, the Project would result in less than significant noise impacts, and no mitigation measures are required.

Operational Noise – Project-Generated Traffic

According to the Transportation Impact Study (Psomas 2021a), the Project would generate an estimated weekday 116 trips in the AM peak hour, 80 trips in the PM peak hour, and 893 daily trips. There would be 1,099 weekend daily trips. Project related traffic volumes would be distributed across roadways local to the Project. Existing traffic volumes along Cannon Road are approximately 16,000 to 23,000 trips per day and 4,000 to 5,000 trips per day along Faraday Avenue. Table 12, Project-Related Offsite Traffic Noise Increases, shows that the corresponding increase in offsite traffic noise would range from 0.1 to 0.6 dBA for the analyzed roadway segments. Due to the small contribution of Project-related traffic along local roadways, traffic noise increases from the Project would not be perceptible or substantial. The impact on traffic noise levels would, therefore, be less than significant, and no mitigation is required.

TABLE 12
PROJECT-RELATED OFFSITE TRAFFIC NOISE INCREASES

Intersection	Segment	CNEL at 100 feet from roadway centerline (dBA)			
		No Project	With Project	Project Contribution	Potential Impact?
Cannon Road	West of Faraday Ave	72.2	72.3	0.1	No
	Faraday Ave to El Camino Rd	70.8	70.9	0.1	No
Faraday Avenue	Cannon Rd to N. Driveway	64.0	64.6	0.6	No
	N. Driveway to S. Driveway	62.9	63.3	0.4	No

CNEL: community noise equivalency level; dBA: A-weighted decibels.
Source: Psomas 2021a.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities such as railroads or vibration-intensive stationary sources but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers.

Construction generally includes a wide range of activities that can generate groundborne vibration. In general, blasting and demolition of structures generate the highest vibrations. Heavy trucks can also generate groundborne vibrations, which vary depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, differential settlement of pavement, and other anomalies all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration of normal traffic on streets and freeways with smooth pavement conditions.

The peak particle velocity (ppv) or the root mean square (rms) velocity is usually used to describe vibration amplitudes. The ppv is defined as the maximum instantaneous peak of the vibration signal and the rms is defined as the square root of the average of the squared amplitude of the signal. The ppv is more appropriate for evaluating potential building damage and is also used for evaluating human response. The units for ppv velocity are normally inches per second (in/sec).

The Municipal Code does not establish quantified limits for vibration levels. The Federal Transit Administration provides construction vibration damage criteria for various types of buildings.

Pile driving and blasting are generally the sources of the most severe vibration during construction. Neither pile driving nor blasting would be used during Project construction. Conventional construction equipment would be used for grading activities. Table 13 summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment.

TABLE 13
VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	ppv at 25 ft (in/sec)
Vibratory roller	0.210
Large bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
ppv: peak particle velocity; ft: feet; in/sec: inches per second. Source: Caltrans 2013; FTA 2018.	

Groundborne vibration levels resulting from construction activities at the Project site were estimated using Caltrans vibration damage potential guideline thresholds; shown in Table 14, Vibration Damage Threshold Criteria.

TABLE 14
VIBRATION DAMAGE THRESHOLD CRITERIA

Structure and Condition	Maximum ppv (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
ppv: peak particle velocity; in/sec: inch(es) per second Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. Source: Caltrans 2013		

The structural damage threshold for “new residential structures” of 0.5 ppv in/sec were selected for analysis. This threshold represents the vibration limits for building damage to nearby uses to the Project site.

The Caltrans vibration annoyance potential guideline thresholds are shown in Table 15, Vibration Annoyance Criteria. Based on the guidance in Table 15, the "distinctly perceptible" vibration level of 0.24 ppv in/sec is considered a threshold for a potentially significant vibration impact for human annoyance.

TABLE 15
VIBRATION ANNOYANCE CRITERIA

Average Human Response	ppv (in/sec)
Severe	2.0
Strongly perceptible	0.9
Distinctly perceptible	0.24
Barely perceptible	0.035
ppv: peak particle velocity; in/sec: inch(es) per second Source: Caltrans 2013	

Table 16, Vibration Exposure at Offsite Land Uses, shows the ppv at identified sensitive land uses and distances for construction equipment anticipated to be used on the Project site relative to building damage and annoyance criteria.

TABLE 16
VIBRATION EXPOSURE AT OFFSITE LAND USES

	Vibration Levels (ppv)			
Equipment	Residential Uses to the North of the Project Site (ppv @ 120 ft)	Hotel Uses to the West of the Project Site (ppv @ 2,000 ft)	Golf Course to the South of the Project Site (ppv @ 2,100 ft)	Light Industrial Uses to the East of the Project Site (ppv @ 1,600 ft)
Vibratory roller	0.02	0.00	0.00	0.00
Large bulldozer	0.01	0.00	0.00	0.00
Small bulldozer	0.00	0.00	0.00	0.00
Loaded trucks	0.01	0.00	0.00	0.00
Building Damage Criteria	**0.5**	**0.5**	**0.5**	**0.5**
Exceeds Damage Criteria?	**No**	**No**	**No**	**No**
Annoyance Criteria	**0.24**	**0.24**	**0.24**	**0.24**
Exceeds Annoyance Criteria?	**No**	**No**	**No**	**No**
ppv: peak particle velocity; ft: feet Source: FTA 2018 (Calculations can be found in Appendix H)				

As shown in Table 16, all ppv levels would be below the building damage and the annoyance thresholds at the nearest off-site structures. Land uses located further away from these locations would be expected to have comparable or less vibration exposure and would likewise result in less than significant impacts related to construction generated vibration. As such, impacts related to the potential for cosmetic building damage would be less than significant, and no mitigation is required.

The operations phase of the Project would involve passenger vehicles that do not emit perceptible levels of vibration. The Project also does not include stationary sources that generate vibration. As such, the operation of the Project would also result in less than significant vibration impacts, and no mitigation is required.

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?

Less Than Significant Impact. The McClellan-Palomar Airport is located approximately 0.8 miles southeast of the Project site. Noise associated with the current and future operation of this Airport was evaluated in the Airport Land Use Compatibility Plan. The Project site is located within the 60–65 dBA airport noise contour for future conditions. As identified in Table 10, Land Use Compatibility for Community Noise Environments, playgrounds/parks with ambient noise exposures of up to 65 dBA Day-Night Average Sound Level (L_{dn}) are considered to be "Normally Acceptable" according to the City's General Plan Noise Element (Carlsbad 2015a). Therefore, the Project would not expose visitors or employees to excessive aircraft noise levels. The impact would be less than significant, and no mitigation measures are required.

Mitigation Measures

Project implementation would not result in significant impacts related to noise; therefore, no mitigation measures are required.

XIV. POPULATION AND HOUSING **Would the project:**	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Discussion

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new units and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. As of January 2020, the City of Carlsbad has a population estimate of 114,463 persons (DOF 2021), and SANDAG estimates a projected population of 125,293 persons by 2035 (SANDAG 2010). The Project consists of the development of a public park and associated facilities. The Project site does not provide residential housing, and the Project does not involve construction of habitable structures; therefore, it would not induce substantial population growth directly.

The Project is anticipated to create limited short-term construction jobs. Construction jobs would typically be filled by existing residents of the region and would not induce housing demand near the construction site due to the temporary nature of construction jobs. In terms of long-term and permanent jobs, the City is estimating two additional employees for the operation of the Project that can be filled by the local labor force. Therefore, the Project's estimated jobs would represent an insignificant increase in new jobs when compared to the total existing and projected jobs in the City of Carlsbad or the County of San Diego. Specifically, this additional employment would represent less than 0.01 percent of the current City population estimate of 48,300 positions as of August 2020 (EDD 2020), and less than 0.005 percent of the projected employment of 80,999 positions by 2050 (SANDAG 2010).

Additionally, the temporary construction crew and the permanent employees of the Project would not create a significant change in demand for goods and services that may induce business investment, growth, or development in the area. Further, the Project site is currently served by existing roads and utility infrastructure, and no extension of roads or infrastructure is proposed by the Project such that would indirectly induce growth. The Project consists of a park that would serve existing and planned populations within the City. Thus, the Project would not result in substantial unplanned population growth, directly or indirectly. Therefore, the impacts would be less than significant, and no mitigation is required.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site does not contain any existing dwelling units, and there are no persons currently residing at the Project site. Therefore, implementation of the Project would not displace existing housing or people and would not require the construction of replacement housing. No significant impacts would occur, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to population or housing; therefore, no mitigation measures are required.

XV. PUBLIC SERVICES **Would the project** result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, a need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	**Potentially Significant Impact**	**Less than Significant with Mitigation Incorporated**	**Less than Significant Impact**	**No Impact**
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☐	☒
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

Impact Discussion

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

i) Fire protection?

Less Than Significant Impact. Fire protection services for the Project site would be provided by the City of Carlsbad Fire Department, which has six fire stations across the City. The City of Carlsbad Fire Department Emergency Operations division is responsible for fire suppression, rescue, Emergency Medical Service (EMS) delivery and disaster mitigation. The Emergency Operations Division is led by the Assistant Fire Chief, with three shift Battalion Chiefs leading A, B, and C platoons; one training Battalion Chief who supervises training and safety; and an EMS Battalion Chief who oversees the medical portion of emergency responses. Approximately 25 personnel make up each shift who are housed within six fire stations located throughout the City. The City of Carlsbad maintains a fleet of emergency vehicles that respond to emergency incidents, which include the front-line apparatus noted below, in addition to reserve apparatus which can immediately be placed in service when additional staffing is needed or when front-line apparatus experience mechanical issues. The City's current fire apparatus include: five fire engines and two reserve engines; one aerial ladder truck; three paramedic ambulances and two reserve paramedic ambulances; two brush engines and one OES brush engine; one Urban Search and Rescue Unit; five chief command vehicles and one reserve; two lifeguard pick-up trucks; one lifeguard off-road utility vehicle; and one lifeguard rescue water craft (Carlsbad 2021b). The Project site is located within Fire District #5 and would be serviced by Fire Station #5, which is located at 2540 Orion Way in Carlsbad. Construction of the park would result in the addition of two buildings that would require fire protection, as well as a public park that would result in increased public access, potentially resulting in increased demand for fire and paramedic services. The Project's increase in demand for fire protection services is not expected to independently require the construction of new or alteration of existing fire protection facilities to maintain an adequate level of fire protection service to the Project area since the Project is included in City-wide plans, which are used by the City's Fire Department to plan their staffing and facilities. As such, no physical impacts associated with the provision of fire protection services would occur and no mitigation is required. Compliance with fire protection design standards during

Project -specific site planning and construction design processes would ensure that the Project would not inhibit the ability of fire protection or paramedic crews to respond at optimum levels.

ii) Police protection?

Less Than Significant Impact. Police protection services for the Project site are provided by the Carlsbad Police Department, located approximately 1.75 miles southeast of the Project site. The City of Carlsbad Police Department employs 184 full-time personnel. Part-time positions are limited and add up to an equivalent of 2.8 full-time employees. Of the 184 authorized full-time positions, 132 are sworn and 52 are civilian (Carlsbad 2021c). Development of the Project would result in a new public park on an existing vacant lot with limited existing public access trails. Although the park is not anticipated to generate the need for new sworn officers, the Project would require police protection services, including response to police service calls. This increase in demand for police protection services is not anticipated to require the construction of new or alteration of existing police department facilities to maintain an adequate level of service to the Project area. Therefore, no physical impacts associated with the provision of police protection services would occur, and no mitigation is required.

iii) Schools?

No Impact. Given that the Project proposes a public park, the Project would not directly result in an increase in population or in students for local schools or the need to expand any academic facilities. Therefore, no impacts would result, and no mitigation is required.

iv) Parks?

No Impact. Given that the Project proposes a public park, the Project would not directly result in an increase in population within the City or Project site. As such, the Project would not result in an increase in demand for the use of other parks outside of the Project site or the expansion of any of these other park or recreational facilities. Therefore, no impacts would result, and no mitigation is required.

v) Other public facilities?

No Impact. Implementation of the Project would not increase the demand for library services or the public services that are not accounted for elsewhere in this IS/MND. As such, the Project would not result in the need for the construction of new or expanded facilities. No physical environmental impacts would result, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to public services; therefore, no mitigation measures are required.

XVI. RECREATION	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☒	☐	☐

Impact Discussion

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

No Impact. The Project would not result in direct or indirect population growth; therefore, the Project would not directly or indirectly increase the demand for or usage of existing parks and other recreational facilities. Further, the implementation of the Project would increase available recreational facilities available in the City and surrounding region through the addition of new active and passive opportunities including playgrounds, bike park, picnic areas, and trails, etc. Therefore, the Project would have no impact related to increased use of existing parks or recreational facilities, and no mitigation is required.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less Than Significant With Mitigation Incorporated. The Project involves the construction of a public park within the Project site. These improvements would be entirely within the Project site and the physical impacts resulting from the construction of these facilities have been addressed through the impact analysis for other resource topics presented throughout this document. No additional impacts would occur, and no additional mitigation is required.

Mitigation Measures

Project implementation would result in significant impacts related to recreation that are covered under other resource topics; therefore, no additional mitigation measures are required.

XVII. TRANSPORTATION **Would the project:**	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, 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?	☐	☐	☒	☐

Impact Discussion

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant With Mitigation Incorporated. Pursuant to SB 743 and CEQA Guidelines Section 15064.3 subdivision (b), VMT is the program for measuring and addressing vehicular circulation system facilities under CEQA. Analysis of Level of Service (LOS) as provided in the project Transportation Impact Study (TIS) is no longer the metric for determining transportation environmental impacts. VMT is addressed in subsection b below.

The Transportation Impact Study (TIS) as required by the City's Transportation Impact Analysis Guidelines (2018). Through this analysis, several features were identified to improve the design of the project and ensure project consistency with the City's transportation, pedestrian, bicycle, and transit policies. The applicant will implement these features, which are outlined in the TIS (Psomas 2021a). Incorporation of these features into the Project ensures that the Project is consistent with the City's Growth Management Plan, as outlined in the TIS. As the City's Transportation Impact Analysis Guidelines and the GMP embody the requirements of the City of Carlsbad with regards to the policies addressing the full range of circulation system requirements and improvements (including transit, roadway, bicycle, and pedestrian facilities), the Project would be consistent with these plans and policies. Therefore, the Project impacts would be less than significant, and no mitigation is required.

b) Would the project conflict or be inconsistent with the CEQA Guidelines Section 15064.3, subdivision (b)?

Less Than Significant Impact. A Vehicle Miles Traveled (VMT) Assessment (VMT Assessment) memorandum was prepared by Fehr & Peers in June 2021, which is provided as Appendix I, to evaluate the effect that the Project would have on regional VMT (Fehr & Peers 2021). The VMT Assessment was prepared consistent with the methodologies described in the City of Carlsbad's Vehicle Miles Traveled (VMT) Analysis Guidelines (Carlsbad 2020c). The Project was evaluated pursuant to the screening criteria in the VMT Analysis Guidelines, but does not meet any of the

criteria. According to the City's guidelines, as a regionally serving public facility, the Project would be considered to have a significant VMT impact if the VMT analysis were to find that the Project would cause a net increase in regional VMT compared to the no project condition. Changes in VMT associated with the Project were calculated for each park user group (general park users, bike park users, and curious users). The VMT analysis was based on travel pattern data collected for park users of other similar parks in the region, and both weekday and weekend travel behavior were analyzed. Then, the regional change in total VMT attributed to the Project was calculated for two scenarios, which assumed different percentages of park users for each scenario. Analysis in the VMT Assessment indicates that the Project is expected to reduce regional VMT because it provides park amenities to the local community and reduces the travel distances that general park users and bike park users would travel without the Project. According to the VMT Assessment, the Project is expected to generate about 3,108 to 5,514 fewer vehicle miles on weekdays and about 4,433 to 7,389 fewer vehicle miles on weekends as compared to before the project was built. Therefore, the Project would have a less than significant impact related to VMT, and no mitigation is required.

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

Less Than Significant Impact. All project circulation improvements have been designed and constructed to City standards; and, therefore, would not result in design hazards. Based on a preliminary sight distance evaluation that was prepared for the Project as part of the Transportation Impact Study (Psomas 2021a), some of the existing street parking along the Project's frontage with Faraday Avenue would need to be removed to provide the proper sight distance for each driveway. Approximately 380-feet of parking would need to be removed south of the north driveway, and approximately 275-feet of parking would need to be removed south of the south driveway to provide adequate sight distance. To help reduce the amount of on on-street parking that would be eliminated by the Project, the Project includes curb extensions that would be constructed to extend each of the Project's driveway to the edge of the existing on-street parking, which would improve sight distance without the loss of as much on-street parking. The curb extension north of the north parking lot would be constructed north of the existing desal driveway to maintain access. With implementation of this design feature, the Project would not increase hazards due to an incompatible use and no mitigation is required.

d) Would the project result in inadequate emergency access?

Less Than Significant Impact. The Project's driveways and internal parking lots have been designed in accordance with all applicable design and safety standards required by adopted fire codes, safety codes, and building codes established by the City's Engineering and Fire Departments. The Project would not increase delays on street segments substantially; therefore, the Project would not result in inadequate emergency access, and the Project impact is considered less than significant.

Mitigation Measures

Project implementation would not result in significant impacts related to transportation; therefore, no mitigation measures are required.

XVIII. TRIBAL CULTURAL RESOURCES **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Impact Discussion

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) 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

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant With Mitigation Incorporated. The City's Planning Division provided notification to the Rincon Band of Luiseño, San Luis Rey Band of Mission Indians, Mesa Grande Band of Diegueno Mission Indians, and the Torres Martinez Desert Cahuilla Indians to initiate preliminary tribal consultation. All tribes are traditionally and culturally affiliated California Native American tribes that have requested notice of proposed projects within the City. The Rincon Band of Luiseño and San Luis Rey Band of Mission Indians tribes responded within 30 days and requested consultation. Preliminary consultation meetings with the Tribes were held in July 2019. Preliminary consultation between the City of Carlsbad and tribal representatives from the Rincon Band of Luiseño and the San Luis Rey Band of Mission Indians identified the area as extremely sensitive for cultural resources important to California tribes and occurred in August 2019 Also, during preliminary consultation between the City and the San Luis Rey Band of Mission Indians, tribal representatives shared information that identified an archaeological site near Faraday Avenue and extending into the Project site.

Formal tribal consultation began on October 26, 2021 to the San Luis Rey Band of Mission Indians, the Rincon Band of Luiseño Indians, Mesa Grande Band of Diegueno Mission Indians,

and the Torres Martinez Desert Cahuilla Indians. An additional closing notice went out on November 22, 2021. On November 30, 2021 the San Luis Rey Band of Mission Indians band sent a formal request for consultation with requests that are incorporated into this MND. The Rincon Band of Luiseño Indians submitted a letter on December 21, 2021, and on March 7, 2022 the City of Carlsbad provided a response with updated mitigation measures in that letter. The results of that response are reflected in the mitigation measures incorporated into this document. Based on the tribal consultation, the City has determined that there is a potential for Tribal Cultural Resources (TCR) to be present within the Project that may be substantially impacted by the Project, resulting in a potentially significant impact.

Mitigation measures were discussed during consultation and have been considered by the City to avoid or minimize the potential significant adverse impacts on the TCR. Mitigation measures **MM CUL-1** through **MM CUL-16**, which require archaeological and tribal monitoring for the Project during grading and initial ground disturbance activities, and which specify the processes to occur if tribal cultural resources are encountered, would reduce the Project's potential significant impacts on TCRs to a less than significant level.

Mitigation Measures

Implementation of **MM CUL-1** through **MM CUL-16**, which are discussed above in the Cultural Resources analysis (threshold V.), would reduce potentially significant impacts to tribal cultural resources to less than significant levels.

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

Impact Discussion

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The Project would connect to existing wet and dry utility main lines that are located within Faraday Avenue to supply water, sewerage, electricity, and natural gas (if needed). The Project would not require or result in the relocation or construction of new or expanded utility infrastructure, as described in more detail below. Furthermore, it is anticipated that the Project's wastewater demands would be accommodated by the existing wastewater treatment and conveyance facilities in the City.

Water Facilities

The Project site is served by the Carlsbad Municipal Water District (CMWD). As described in the CMWD's 2020 Urban Water Management Plan, CMWD covers an area of 20,682 acres,

approximately 32 square miles, and provides potable and recycled water supply to most of the City of Carlsbad. CMWD supplies potable water within its service area and currently receives 82% of its potable water supply from SDCWA. The remaining 18% of CMWD's potable supply is purchased desalinated seawater from the Carlsbad Desalination Plant, delivered via SDCWA infrastructure, and is considered a local supply.

Average daily water demands for the Project would be 41,000 gallons per day (RJM 2020d), primarily for outdoor irrigation. The Project proposes to connect to the existing potable and reclaimed water lines located within Faraday Avenue, as shown in Exhibit 5. Based on the anticipated daily demand, water would be supplied to the northern and southern areas of the park via two new 4-inch water lines that would connect to the existing 8-inch water main that is generally located in the middle of the Faraday Avenue right--of--way. The Project's proposed water infrastructure for the Project would include domestic, irrigation, and fire water service lines, meters, and backflow preventers. A new reclaimed water line would also be installed from the Project site to the existing reclaimed water mainline within Faraday Avenue. Backflow prevention devices, as well as meters, would be installed on each new water line.

Also, a total of two new fire hydrants are proposed as part of the Project, one in the northern area of the park and the second in the southern area of the park. These new hydrants would be connected to the 8-inch water main in Faraday Avenue via 6-inch water lines that would be exclusively for fire service. Backflow preventers would be provided at both points of connection.

The CMWD's UWMP identified that it had sufficient water supplies available to serve the proposed land use that was assumed for the Project site as well as reasonably foreseeable future development during normal, dry, and multiple dry years. Given that the Project's proposed land use is consistent with the land use assumptions utilized in the CMWD's UWMP, less than significant impacts would result from the Project, and no mitigation is required related to this threshold.

Sanitary Sewer Facilities

The Project includes the installation of two new 8-inch sewer laterals which would connect to the existing 12-inch sewer main located within Faraday Avenue. The point of connection is shown in Exhibit 5, Streets and Utilities Plan. Given the sewer lines would only be servicing two small buildings, the sewer water generation for the Project is anticipated to be minimal and no upgrades or other physical alterations to existing off-site sewer facilities are anticipated, beyond the addition of points of connection to service the Project.

Electricity and Natural Gas

The Project would require electricity to service the two proposed buildings, as well as for outdoor lighting throughout the Project site. The Project would connect to existing San Diego Gas and Electric (SDG&E) electrical lines at two locations along the Project's frontage with Faraday Avenue. New electrical lines within the Project site would be installed underground. The Project also includes two new transformers with concrete pads as well as new terminal enclosures. All electrical improvements would be design and constructed in accordance with SDG&E requirements. The points of connection and layout of the Project's electrical infrastructure is shown in Exhibit 5, Streets and Utilities Plan. Given that the Project is consistent with the land use assumed for the Project site, which is used by SDG&E to plan their future facilities, no

expansion of electrical facilities is expected to be required to service the Project. Furthermore, no natural gas service is proposed for the Project.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. The City contracts with Waste Management (WM) to provide trash, recycling, green waste collection to all residential and commercial customers in Carlsbad. The Project involves no demolition of existing structures as the Project site is undeveloped. Therefore, less than significant impacts would occur related to construction solid waste, and no mitigation is required. Project implementation would result in the development of a public park, which would generate solid waste. Solid waste that is not diverted from within the City is hauled to two landfills in San Diego County. The majority of the solid waste is sent to the Otay Landfill, with the balance disposed of at the Sycamore Landfill. The Otay Landfill has a permitted daily capacity of 6,700 tons, with an estimated remaining capacity of 21,194,008 tons (CalRecycle 2021a). Based on the remaining capacity and disposal rates, the Otay Landfill is expected to close in 2030. The Sycamore Landfill has a maximum permitted daily capacity of 5,000 tons per day and a remaining capacity of 113,972,637 tons (CalRecycle 2021b). The Sycamore Landfill is expected to cease operation in 2042 based on current demand. Trash that is generated during Project construction and operations would not exceed State or local standards. Also, as demonstrated above, the County has adequate capacity through 2042, and would be required to continue planning to accommodate anticipated solid waste into the future through the development of an updated integrated waste management plan. Therefore, the Project would result in less than significant impacts related to solid waste generation relative to applicable standards and the capacity of local infrastructure. Also, as noted below in response to threshold XIX(e), the Project would not impair attainment of solid waste reduction goals.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The Project would be required to comply with all applicable federal, State, and local regulations related to solid waste. This includes compliance with The California Integrated Waste Management Act (AB 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50 percent waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted.

Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code Section 42911), the Project is required to provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. Further, in compliance with AB 341, the City would be required to arrange for recycling services for the Project. The implementation of these mandatory requirements would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn will aid in the extension of the life of affected disposal sites. The Project would be required to comply with all applicable solid waste statutes and regulations; as such, impacts related to solid waste statutes and regulations would be less than significant, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to Utilities; therefore, no mitigation measures are required.

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

Impact Discussion

The Project site is just north and northwest of, and outside of, a VHFHSZ that is designated as a Local Responsibility Area (CALFire 2021).

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

Less Than Significant Impact. As discussed in response to threshold IX(f), the Unified San Diego County Emergency Services Organization Operational Area Emergency Plan was prepared in 2010 by the San Diego County Office of Emergency Services to evaluate hazards that the County is susceptible to and to describe a comprehensive emergency management system which provides for a planned response to disaster situations. The Emergency Plan identifies primary evacuation routes as the major interstates, highways, and prime arterials within San Diego County, which would include Cannon Road. Also, the San Diego County Office of Emergency Services has identified Cannon Road as a tsunami evacuation route (County of San Diego 2021) As discussed in detail in the Transportation Impact Study prepared by Psomas in July 2021, the LOS for vehicles currently operate at an acceptable LOS and would continue to do so in the future with or without the project. Furthermore, the Project would not conflict with any of the policies or provisions of the Unified San Diego County Emergency Services Organization Operational Area Emergency Plan. Based on these considerations, there would a less than significant impact related to this threshold, and no mitigation is required.

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?

Less Than Significant Impact. The Project is located on a site containing hillside slopes with natural vegetation. The Project site is just north and northwest of an area designated as a VHFHSZ. Under existing conditions, the Project site and surrounding areas are at risk for wildland fires. The Project would introduce new structures, irrigated landscaping, and other improvements to the Project site, and would increase the amount of people that utilize the Project site when compared to existing conditions. The Project site's topography would remain similar to existing conditions under the Project and would not result in physical conditions that would substantially exacerbate wildfire risk. The Project would have no effect on prevailing winds or in the potential for wildland fires to be encouraged during wind events. Through the Project's introduction of a landscaped park, the Project would reduce the amount of undeveloped land adjacent to homes, apartments, and other land uses near the Project site, which would reduce overall localized wildfire risk. The Project would be constructed in compliance with the 2019 California Fire Code as well as the California Building Code, which contain regulations for safeguarding life and property from fire (ICC 2019; CBSC 2019). Furthermore, although additional occupants would utilize the site and new buildings would be constructed, the park would be closed during a wildfire event so it is unlikely that future park users would be exposed to pollutant concentrations from a wildfire or exposed to the uncontrolled spread of a wildfire. No other aspects of the park would otherwise exacerbate wildfire risks. Therefore, less than significant impacts would result from the Project related to this threshold, and no mitigation is required.

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

Less Than Significant Impact. The Project includes the installation and maintenance of infrastructure, including driveways, parking lots, and trails within the Project site, as well as wet and dry utilities within the Project site and within the existing, developed areas of Faraday Avenue. These improvements have no characteristics that would substantially exacerbate wildfire risks during construction, operation, or ongoing maintenance, nor would they result in temporary or ongoing impacts to the environment. Once constructed, Project infrastructure improvements would not require substantial alterations or maintenance that would have an effect on the environment. Given these considerations, less than significant impacts would result from the Project related to this threshold, and no mitigation is required.

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?

Less Than Significant Impact. The Project site is located upslope and directly adjacent to Faraday Avenue. The Crossings Golf Course is located further downslope of Faraday Avenue to the west of the Project site. Minor ephemeral drainages, which flow only in direct response to precipitation and for short periods of time, traverse the Project site in the existing condition. Project grading would maintain a similar topography to the existing conditions on the Project site and would maintain the same general drainage pattern.

The Project would include a network of 24-inch concrete v-ditches, catch basins with grates, drainage inlets and outlets with trash screens and headwalls, and a series of ten bioretention areas with underdrains, as shown in Exhibit 7, Conceptual Grading Plan. These facilities would convey stormwater through the park and would provide stormwater treatment and retention before the stormwater would be allowed to outlet into existing storm water facilities. Flows from the northern and southern areas of the Project site would be conveyed to two existing storm drain pipes that convey flows west beneath Faraday Avenue and onto the adjacent golf course, which leads ultimately to Agua Hedionda Creek and to Agua Hedionda Lagoon. The Project's drainage design would ensure that people and structures downslope of the Project site, including Faraday Avenue and patrons within the adjacent golf course, would not be flooded due to runoff or drainage changes within the Project site beyond existing conditions.

As discussed in relation to threshold VII(a)(iv), according to the California Department of Conservation, the Project site and adjacent properties have not been evaluated by CGS for seismic landslide hazards (DOC 2021). Slopes are present within and adjacent to the Project site; however, based on the surficial geologic mapping and Geotechnical Investigation prepared for the Project, there is no evidence of surface expressions resulting from landslides at the Project site. In addition, there were no mapped landslides at the Project site and there were no indicators of landslides during the aerial photograph review conducted by the Project's geotechnical engineer (SoCalGeo 2019, 2020a).

The Project would have no impacts related to slope stability or landslides. The Project would have less than significant impacts related to downstream flooding and runoff, and no mitigation is required.

Mitigation Measures

Project implementation would not result in significant impacts related to wildfire; therefore, no mitigation measures are required.

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

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

Less Than Significant With Mitigation Incorporated. Implementation of the Project would have the potential to degrade the quality of the existing environment as described below. Potential significant impacts have been identified related to Biological Resources (IV), Cultural Resources (Section V), Geology and Soils (VII), Land Use and Planning (XI), Recreation (XVI), and Tribal Cultural Resources (XVIII). Mitigation measures have been identified related to individual resource-specific impacts. Special status plant and wildlife species, as well as potential habitat for these species would be impacted by the Project. The Project would also result in impacts to sensitive natural communities including Diegan coastal sage scrub, southern maritime chaparral, and willow dominated riparian scrub. Project construction activities have the potential to temporarily result in impacts to wildlife movement. The Project conflicts with the current HMP, which includes a portion of the Project site within the Hardline area of the HMP. Implementation of **MM BIO-1** through **MM BIO-8** would reduce impacts related to biological resources to less than significant levels. Due to the presence of a known tribal cultural resource within the Project site and the results of records searches, the Project site is considered highly sensitive for tribal cultural, archaeological, historic, and paleontological resources. **MM CUL-1** through **MM CUL-16** and **MM GEO-2** would reduce potentially significant impacts related to these resource topics to less than significant levels. Finally, due to the presence of expansive soils within the Project site, overexcavation, compaction, and other recommendations are provided in the Geotechnical Investigation, which must be implemented to mitigate for potential impacts to proposed structures and users of the Project. With implementation of **MM GEO-1**, which requires the recommendations of the Project's Geotechnical Investigation be incorporated into the Project and

verified by the City, less than significant impacts would result from the Project. The Project would result in a recreational impact due to the proposed construction of recreational facilities that would have an adverse physical effect on the environment. These biological, cultural, geological, and tribal cultural resource impacts are summarized above. All of these significant impacts related to the construction of a new public park are mitigated to less than significant levels through the implementation of the mitigation measures discussed above. Finally, the Project would result in a significant land use and planning impact due to the Project conflicting with applicable plans, policies, and ordinances related to biological resources, cultural resources, and transportation prior to mitigation. These impacts are summarized above along with applicable mitigation. With incorporation of the mitigation measures identified above, the Project would result in less than significant impacts related to this threshold.

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

Less Than Significant Impact. The Project would not have adverse environmental impacts at a significant level. All potential significant impacts would be addressed with mitigation measures. No significant cumulative effects are anticipated because no resources would be adversely affected by the Project, or the Project effects would be localized and of limited extent. A less than significant impact would occur in relation to cumulatively considerable effects.

c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant With Mitigation Incorporated. The Project would not cause significant adverse effects to human beings, either directly or indirectly with mitigation incorporated. As noted above due to the presence of expansive soils within the Project site, overexcavation, compaction, and other recommendations from the Project's Geotechnical Investigation would be implemented to mitigate for potential impacts to proposed structures and users of the Project. With implementation of **MM GEO-1**, which requires the recommendations of the Project's Geotechnical Investigation be incorporated into the Project and verified by the City, less than significant impacts would result from the Project.

Section 3 – References

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Appendix A

Air Quality and Greenhouse Gas Modeling Data

Appendix B

Biological Technical Report

Appendix C

Coastal California Gnatcatcher Report

Appendix D

Phase I Archaeological and Paleontological Resources Inventory

Appendix E

Geotechnical Investigation, Infiltration Testing, and Surficial Geologic Mapping

Appendix F

Phase I Environmental Site Assessment

Appendix G

Preliminary Storm Water Quality Management Plan

Appendix H

Noise Calculations

Appendix I

Vehicle Miles Traveled (VMT) Assessment Memorandum