

# Veterans Memorial Park Project

## Draft Biological Technical Report

### **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  
Parks & Recreation Department**

799 Pine Avenue, Suite 200  
Carlsbad, California 92008-2428  
Contact: Barbara Kennedy

Prepared by

**PSOMAS**

5 Hutton Centre Drive, Suite 300  
Santa Ana, California 92707  
Contact: Ann Johnston  
Vice President/Principal, Resource Management

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**ATTACHMENTS**

<b><u>Attachment</u></b>
A Special Status Plant and Wildlife Species
B Site Plan
C Grading Plan

## **1.0 INTRODUCTION**

### **1.1 PROJECT LOCATION**

The Carlsbad Veterans Memorial Park Project (Project) 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 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 93.62 acres. Just over half the area (about 50 acres) is developable. The remainder of the site is within the City's Habitat Management Plan (HMP) hardline preserve. Sensitive habitat areas in the Project site not already included in the HMP hardline were identified early on in Project design and have been avoided to the extent feasible<sup>1</sup>. Exhibit 1, Regional Location Map, depicts the Project site in the context of the regional roadway system. An aerial image depicting existing conditions on the site is provided as Exhibit 2, Project Location Map.

The Project site is located within the coastal foothills of the San Marcos Mountains and, specifically, includes portions of Section 15 and Section 16, Township 12S/Range 04W, as depicted on the San Luis Rey, California 7.5-minute series U.S. Geological Survey (USGS) topographic maps. Project site elevation ranges from approximately 52 to 326 feet above mean sea level.

### **1.2 REGIONAL RESOURCE PLANNING CONTEXT**

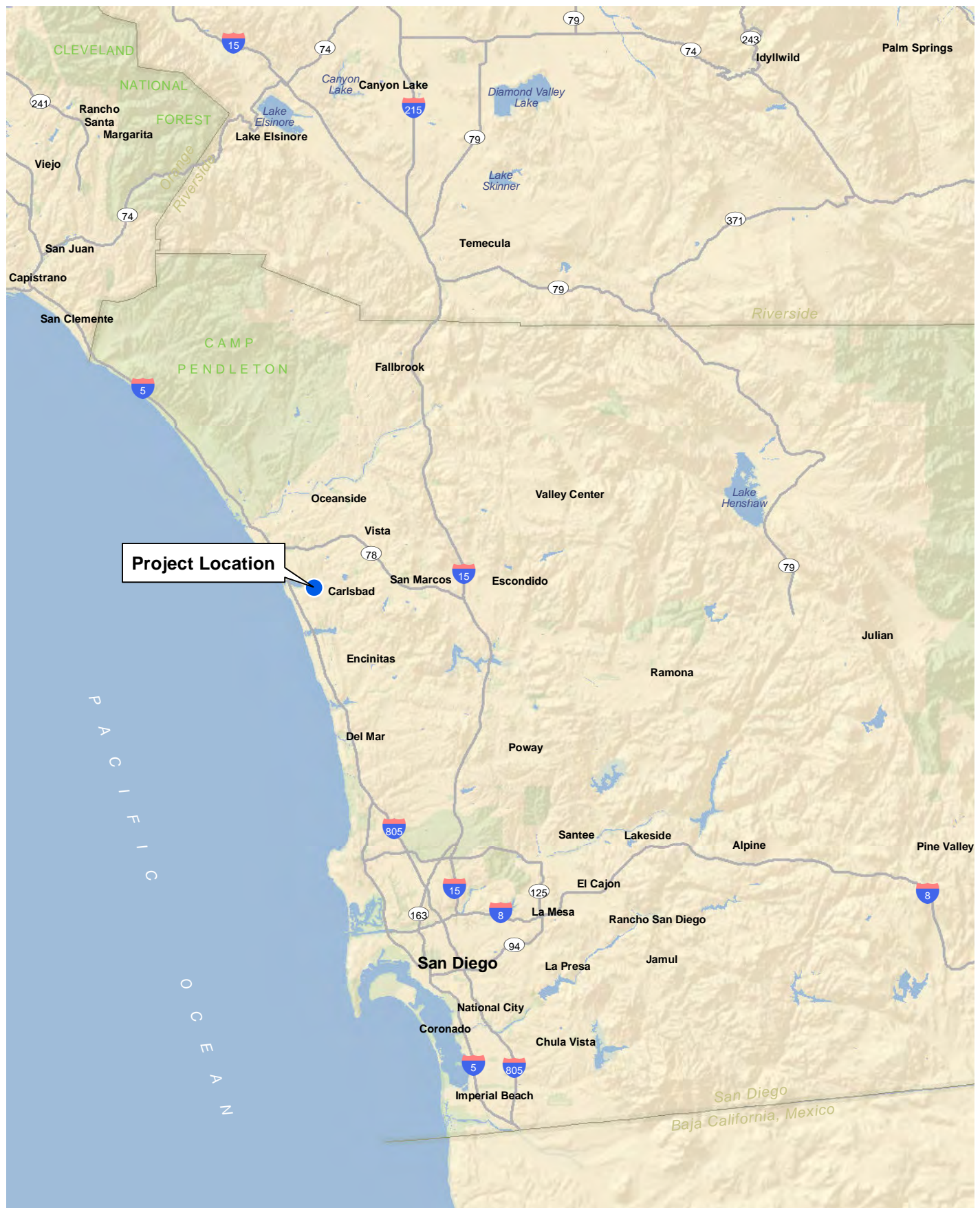
The Project site consists of one parcel located in the City of Carlsbad, San Diego County (Assessor Parcel Number 2122-710-030-00). This parcel has a land use designation of Open Space (OS) and is zoned as OS. The City's Municipal Code permits a maximum building height of 25 feet within the OS zone (City of Carlsbad 2021).

The Project site analyzed in this report is within the boundary of the Carlsbad Habitat Management Plan (HMP) and partially within the City of Carlsbad Mello II Segment of the Local Coastal Program (LCP). The HMP provides local implementation for the Multiple Habitat Conservation Program (MHCP), which is a comprehensive, long-term habitat conservation program and provides permit issuance authority for take of covered species to the local agencies. Conservation provided for in the MHCP in general and the HMP specifically, addresses cumulative and growth inducing impacts on covered species and their habitats.

A portion of the Project site (43.37 acres) is located within the hardline preserve of the City's HMP, which is referred to as the Macario Canyon/Veterans Park Preserve. This part of the Project site is generally within the northern and northeastern portions of the Project site, which is generally undeveloped and vegetated as described in more detail below. This area also includes a 3.1-acre area that was used as a mitigation site for the Poinsettia 61 project and added as to the existing the Macario Canyon/Veterans Park Preserve in 2019. The remaining majority of the area in the northwestern and southwestern portion of the Project site (the developable portion) consists of mostly non-native grasses and is regularly mowed by the City.

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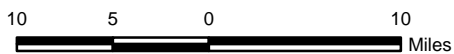
<sup>1</sup> As described in more detail in Section 3, sensitive habitat areas have been avoided to the greatest extent practicable, which includes Diegan coastal sage scrub, southern maritime chaparral, and riparian scrub containing willows.



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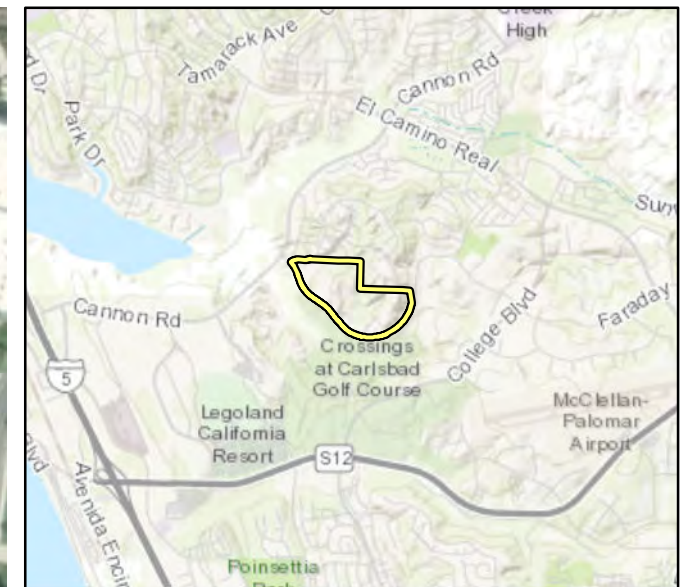
## Regional Location


Veterans Memorial Park

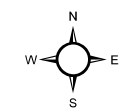


## Exhibit 1





 Project Boundary



300 150 0 300 Feet

Aerial Source: Esri, Maxar 2018

**Project Location**  
Veterans Memorial Park

**Exhibit 2**



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### 1.3 PROJECT DESCRIPTION

The Project consists of the development of a public park on 38.82 acres<sup>2</sup> of a 93.62-acre<sup>3</sup> 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:** 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.

<sup>2</sup> 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.

<sup>3</sup> Acreages presented in the Biological Technical Report do not add to Record of Survey area of 93.702 due to the base mapping used and calculations generated in GIS.

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 106 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 2019). 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. 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 and retaining walls would be constructed at various locations throughout the Project site.

**Construction:** 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.



## 2.0 **METHODS AND SURVEY LIMITATIONS**

### 2.1 **BACKGROUND LITERATURE AND GEOGRAPHIC INFORMATION SYSTEM DATA SEARCH**

Prior to the field surveys in 2019 described below, a literature review was conducted to identify special status plants, wildlife, and habitats that have been reported to occur in the vicinity of the Project site, including the City of Carlsbad Preserves 2022-2027 Preserve Management Plan. During the preparation of this Biological Resources Technical Report for the City's California Environmental Quality Act (CEQA) document, the literature review was updated in August of 2021. The California Native Plant Society's (CNPS') Inventory of Rare and Endangered Plants (CNPS 2021) and the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CDFW 2021a) were reviewed. Database searches included the USGS San Luis Rey and Encinitas 7.5-minute quadrangles.

Resources reviewed to assist in the assessment of potential jurisdictional waters included a soil map of the Project site (USDA NRCS 2019a), the U.S. Department of Agriculture, Natural Resources Conservation Service's (USDA NRCS') State Soil Data Access Hydric Soils List (USDA NRCS 2019b), The National Wetland Plant List (Lichvar et al. 2016), and the U.S. Fish and Wildlife Service's (USFWS's) National Wetlands Inventory (NWI) Wetland Mapper (USFWS 2018).

### 2.2 **FIELD SURVEY METHODS**

On February 18, 2019, Psomas Biologists performed a general plant and wildlife survey, mapped vegetation, and documented the presence of jurisdictional resources onsite. Vegetation was mapped on a 1-inch equals 150-foot (1"=150') scale color aerial. Nomenclature for vegetation communities generally follows that of the *Habitat Management Plan for Natural Communities in the City of Carlsbad* (City of Carlsbad 2004) and *Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California"*, Robert F. Holland, Ph.D., October 1986 (Oberbauer 2008).

Botanical surveys were floristic in nature and consistent with the protocols created by the CDFW (CDFW 2018). In addition to the literature review conducted above, the project Biologist evaluated the rainfall received in the winter and spring to determine the anticipated germination of many annual and perennial herb species on the Project site. The region received approximately 13.84 inches of precipitation between May 2018 and April 2019 (data taken from Oceanside Marina) (WRCC 2019). The average annual precipitation at this station is 10.02 inches. Psomas Biologists monitored reference populations for annual and difficult-to-detect target species to ensure that the surveys were comprehensive. This is especially relevant during periods of unusual rainfall patterns or below average rainfall. If conditions at a nearby reference population are suitable for germination and growth, then it can be inferred that conditions would also be suitable on the Project site.

Surveys for special status plant species were conducted on April 17 and 18 and May 23, 2019, by Psomas Biologists. A systematic survey was conducted in all areas of suitable special status plant habitat. Inaccessible areas were viewed from a distance with binoculars. All plant species observed were recorded in field notes. Plant species were identified in the field or collected for future identification. Plants were identified to the taxonomic level necessary to determine whether they were a special status species. Plants were identified using taxonomic keys, descriptions, and illustrations in Jepson Flora Project (2019), Baldwin et al. (2012), and Hickman (1993). Nomenclature of plant taxa conform to the *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2021b) for special status species and the Jepson eFlora (Jepson Flora Project 2019) for

all other taxa. Any special status plant species observed in the Project site were mapped on a 1-inch equals 150-foot (1"=150') scale color aerial. Data were collected on the number and phenology of individuals (estimated for large populations) and microsite characteristics such as slope, aspect, soil texture, surrounding habitat, and associated species.

Surveys for the coastal California gnatcatcher were conducted by permitted Psomas Biologists on May 8, 29 and June 27, 2019 in accordance with the guidelines issued by the USFWS (USFWS 1997a, 1997b). Three surveys were conducted in suitable habitat with at least one week between site visits. All visits took place during the morning covered all potentially suitable coastal sage scrub habitats for the coastal California gnatcatcher on the Project site. All bird species detected during the survey were recorded, including notable observations of special status wildlife species.

### 3.0 RESULTS

This section describes the biological resources that occur within and adjacent to the Project site. The following topics are discussed below: vegetation communities; wildlife population; special status biological resources; jurisdictional resources; and wildlife movement.

#### 3.1 VEGETATION COMMUNITIES

The following vegetation communities and other landcovers occur on the Project site: non-native grassland, Diegan coastal sage scrub, southern maritime chaparral, oak woodland, ornamental, riparian scrub, disturbed habitat, and urban/developed (Exhibit 3, Table 1).

**TABLE 1  
VEGETATION COMMUNITIES AND OTHER AREAS ON THE PROJECT SITE**

Vegetation Communities or Other Land Cover	Amount on the Project Site (acres)	Developable Portion of the Project Site (acres)	Existing Hardline Preserve within the Project Site (acres)
Diegan Coastal Sage Scrub	48.11	12.43	35.68
Southern Maritime Chaparral	2.14	0.01	2.12
Oak Woodland	0.12	0.00	0.12
Riparian Scrub	0.19	0.19	0.00
Non-native Grassland	40.06	35.35	4.71
Disturbed Habitat	1.70	1.08	0.62
Ornamental	1.24	1.13	0.11
Urban/Developed	0.07	0.07	0.00
<b>Total</b>	<b>93.62</b>	<b>50.25</b>	<b>43.37</b>

#### ***Diegan Coastal Sage Scrub***

A total of 48.11 acres of Diegan coastal sage scrub occurs in patches throughout the Project site. This vegetation community is dominated by a mix of low-growing, drought-deciduous shrubs including California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis ssp. consanguinea*), and coast prickly-pear (*Opuntia littoralis*). The shrub canopy is open to continuous. Understory vegetation, where present, include species such as needlegrass (*Stipa sp.*), soap plant (*Chlorogalum sp.*), chilicothe (*Marah macrocarpa*), tarweed (*Deinandra sp.*), and cryptantha (*Cryptantha sp.*). Portions of the scrub with a dense cover contain lemonade berry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*) intermixed with California sagebrush, California buckwheat, black sage, and California adolphia (*Adolphia californica*). Some areas of Diegan coastal sage scrub are degraded by the presence of non-native vegetation. Black mustard (*Brassica nigra*) occurs along the trail margins and non-native grasses occur in the understory along the northern edge of the Project site.

#### ***Southern Maritime Chaparral***

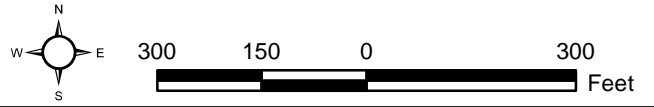
A total of 2.14 acres of Southern maritime chaparral occurs near the ridgeline in the eastern portion of the Project site. This vegetation community occurs on weathered sandstone and is dominated by chamise (*Adenostoma fasciculatum*) with scattered lemonade berry, laurel sumac, and Mojave yucca (*Yucca schidigera*). The shrub canopy is open to continuous, with bare ground

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- Project Boundary
  - Existing Hardline
  - Special Status Species**
  - summer holly
  - Nuttall's scrub oak
  - loggerhead shrike
  - Coastal California Gnatcatcher
  - Vegetation Types and Other Areas**
  - Non-native Grassland
  - Non-native Grassland\*
  - Diegan Coastal Sage Scrub
  - Southern Maritime Chaparral
  - Oak Woodland
  - Ornamental
  - Riparian Scrub
  - Disturbed Land
  - Urban/Developed
  - Poinsettia 61 CSS Restoration
- \*Note: Grassland has a high cover of native herbs.

**Biological Resources**  
Veterans Memorial Park



**Exhibit 3**



between the shrubs. An additional small patch dominated by lemonade berry is located along Faraday Avenue, above the storm drain inlet.

### **Oak Woodland**

A large coast live oak (*Quercus agrifolia*) (covering approximately 0.12 acre) occurs in southern maritime chaparral at the top of the slope in the eastern portion of the Project site. The understory is composed of leaf litter.

### **Riparian Scrub**

A small area of riparian scrub occurs at a pipe culvert leading under Faraday Avenue and as an isolated patch along the northern edge of the Project site. This arroyo willow (*Salix lasiolepis*) dominated vegetation communities totals 0.19 acre. Other plants present in this area includes mule fat (*Baccharis salicifolia* ssp. *salicifolia*), coyote brush, and pampas grass (*Cortaderia selloana*).

### **Non-native Grassland**

Approximately 40.06 acres of non-native grassland occurs within the Project site. The non-native grasslands on the gentler slopes in the central and western portion of the Project site are mowed yearly for fuel modification. This vegetation community is dominated by non-native grasses, including ripgut grass (*Bromus diandrus*), red brome (*Bromus rubens*), wall barley (*Hordeum murinum*), and wild oat (*Avena fatua*). Other weedy herbaceous species occur throughout the area, including variable burclover (*Medicago polymorpha*), cheeseweed (*Malva parviflora*), cocklebur (*Xanthium strumarium*), and redstem filaree (*Erodium cicutarium*).

The vegetation in the fenced depressional area in the center of the Project site and along the southern edge of the Project site adjacent to Faraday Avenue is dominated by non-native, weedy species, primarily black mustard. Tree tobacco (*Nicotiana glauca*) and non-native grasses also occur in the fenced area. The area along Faraday Avenue appears to be hydroseeded and actively managed; common fiddleneck (*Amsinckia intermedia*) seedlings have germinated in this area.

Two areas of non-native grassland in the center of the Project site are notable because they have a relatively high cover of native herbaceous species interspersed with non-native grasses and herbs. Species include deerweed (*Acmispon glaber*), common fiddleneck, red maids (*Calandrinia menziesii*), cryptantha, cut leaf lupine (*Lupinus truncatus*), and telegraph weed (*Heterotheca grandiflora*).

### **Disturbed Land**

Disturbed land consists of the dirt roads and trails throughout the Project site, totaling 1.70 acres. These areas are generally unvegetated but may contain sparse cover of annuals. The dirt roads are actively maintained.

### **Ornamental**

Ornamental areas dominated by red gum (*Eucalyptus camaldulensis*) occurs in patches in the center of the Project site. In addition, two small patches of saltcedar (*Tamarix ramosissima*) occur in the fenced depressional area in the center of the Project site. Saltcedar is considered an invasive, non-native plant species that invades native areas and crowds out native riparian species, diminish early successional habitat, and reduce water tables and interferes with the hydrologic process. Along the northern edge of the Project site adjacent to Whitman Way, is a

maintained landscape area that includes planted pepper tree (*Schinus molle*) and manicured ornamental shrubs. In total, ornamental areas cover approximately 1.24 acres on the Project site.

### **Urban/Developed**

The urban/developed areas on the Project site include a desalination receiver pit on the northwestern portion of the Project site, adjacent to Faraday Avenue. This area is paved and does not contain vegetation. Urban/developed areas total 0.07 acre on the Project site.

## **3.2 WILDLIFE POPULATION**

Common wildlife species observed or expected to occur within the vegetation communities on the Project site are discussed below. Special status wildlife species known or expected to occur are discussed in greater detail in Special Status Wildlife Species (see Section 3.3.3 below).

### **Fish and Amphibians**

No fish were observed during the survey due to lack of suitable habitat. Amphibian species have potential to occur and unidentified tadpoles were observed in non-native grassland that supported two mule fat plants, adjacent to an above ground agricultural pipe. Common amphibian species that may occur include the garden slender salamander (*Batrachoseps major major*), California treefrog (*Pseudacris cadaverina*), and Baja California treefrog (*Pseudacris hypochondriaca*).

### **Reptiles**

Potentially suitable habitat for reptile species occurs throughout the Project site. One reptile species, the western fence lizard (*Sceloporus occidentalis*) was observed. Additional common reptile species expected to occur include the common side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Elgaria multicarinata*), California striped racer (*Coluber lateralis lateralis*), gopher snake (*Pituophis catenifer*), and southern pacific rattlesnake (*Crotalus oreganus helleri*).

### **Birds**

A variety of bird species are expected to be residents on the Project site, using the habitats throughout the year. Other species are present only during certain seasons. For example, the white-crowned sparrow (*Zonotrichia leucophrys*) is expected to occur on the Project site during the winter season and then migrate north in the spring to breed during the summer.

A variety of bird species were observed onsite including California quail (*Callipepla californica*), greater roadrunner (*Geococcyx californianus*), Allen's hummingbird (*Selasphorus sasin*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), black phoebe (*Sayornis nigricans*), loggerhead shrike (*Lanius ludovicianus*), common raven (*Corvus corax*), wrentit (*Chamaea fasciata*), California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), song sparrow (*Melospiza melodia*), and white-crowned sparrow. Additional species that are expected to occur on or adjacent to the Project site include mourning dove (*Zenaidura macroura*), Anna's hummingbird (*Calypte anna*), sharp-shinned hawk (*Accipiter striatus*), red-shouldered hawk (*Buteo lineatus*), American crow (*Corvus brachyrhynchos*), bushtit (*Psaltriparus minimus*), northern mockingbird (*Mimus polyglottos*), Bewick's wren (*Thryomanes bewickii*), ruby-crowned kinglet (*Regulus calendula*), California thrasher (*Toxostoma redivivum*), European starling (*Sturnus vulgaris*), house finch (*Haemorhous mexicanus*), purple finch (*Haemorhous purpureus*), lesser goldfinch (*Spinus psaltria*), and yellow-rumped warbler (*Setophaga coronata*).

## Mammals

The California ground squirrel (*Otospermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), desert cottontail (*Sylvilagus audubonii*), and southern mule deer (*Odocoileus hemionus*) were observed on the Project site. Other mammal species expected to occur include California deer mouse (*Peromyscus californicus*), Dulzura kangaroo rat (*Dipodomys simulans*), long-tailed weasel (*Mustela frenata*), Virginia opossum (*Didelphis virginiana*), common raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*).

Bats occur throughout most of Southern California and may use any portion of the Project site as foraging habitat. Most of the bats that could potentially occur are inactive during the winter and either hibernate or migrate, depending on the species. Common bat species expected to occur on or adjacent to the Project site include Brazilian free-tailed bat (*Tadarida brasiliensis*) and pallid bat (*Antrozous pallidus*).

### 3.3 SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources that were observed, reported, or have the potential to occur on or adjacent to the Project site. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. In addition to species, special status biological resources include vegetation communities that are either unique; of relatively limited distribution in the region; or of particularly high wildlife value. These resources have been defined by federal, State, and local government conservation programs. Sources used to determine the special status of biological resources are listed below.

- **Habitats** – the CNDDDB (CDFW 2021a); NatureServe Conservation Status Assessments: Methodology for Assigning Ranks (Faber-Langendoen et al. 2012); the California Natural Communities List (CDFW 2020), and sensitive habitats defined in the Habitat Management Plan (HMP) for Natural Communities in the City of Carlsbad (Carlsbad 2004).
- **Plants** – the CNDDDB (CDFW 2021a); the Inventory of Rare and Endangered Plants (CNPS 2021); various USFWS *Federal Register* notices regarding listing status of plant species; the *List of Special Vascular Plants, Bryophytes, and Lichens* (CDFW 2021b), and HMP List 1 (Species Proposed for Coverage under the Carlsbad Subarea Plan) and thread leaved brodiaea and vernal plant species from List 3 (Carlsbad 2004).
- **Wildlife** – the CNDDDB (CDFW 2021a); the California Wildlife Habitat Relationships Database System (CDFW 2014); various USFWS *Federal Register* notices regarding listing status of wildlife species; the *List of Special Animals* (CDFW 2021c); and HMP List 1 (Species Proposed for Coverage under the Carlsbad Subarea Plan) and HMP List 3 (Fairy Shrimp Species) (Carlsbad 2004).

#### 3.3.1 Definitions

A **federally Endangered species** is one facing extinction throughout all or a significant portion of its geographic range. A **federally Threatened species** is one likely to become Endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally listed Threatened or Endangered species in a project impact area generally imposes severe constraints on development, particularly if development would result in “take” of the

species or its habitat. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. “Harm” in this sense can include any disturbance of species’ habitats during any portion of its life history.

**Proposed species** or **Candidate species** are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because proposed species may soon be listed as Threatened or Endangered, these species could become listed prior to or during implementation of a proposed project. The presence of a Proposed or Candidate species within a project impact area may impose constraints on development if they are listed prior to issuance of project permits, particularly if a project would result in “take” of the species or its habitat.

The State of California considers an **Endangered species** to be one whose prospects of survival and reproduction are in immediate jeopardy, a **Threatened species** as one present in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management, and a **Rare species** as one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. “Rare species” only applies only to California native plants. State-listed Threatened and Endangered species are protected against take unless an Incidental Take Permit is obtained from the resource agencies. The presence of any State-listed Threatened or Endangered species in a project impact area generally imposes severe constraints on development, particularly if a project would result in “take” of the species or its habitat.

**California Species of Special Concern** is an informal designation used by the CDFW for some declining wildlife species that are not State Candidates for listing. This designation does not provide legal protection but signifies that these species are recognized as special status by the CDFW. A few years ago, the CDFW downlisted several species from Species of Special Concern to the **Watch List**. Although not considered special status, Watch List species are tracked by the CNDDDB.

Species that are **California Fully Protected** and **Protected** include those protected by special legislation for various reasons, such as the mountain lion (*Puma concolor*) and white-tailed kite (*Elanus leucurus*). Fully Protected species may not be taken or possessed at any time. California Protected species include those species that may not be taken or possessed at any time except under special permit from the CDFW issued pursuant to Sections 650 and 670.7 of the *California Code of Regulations*, or Section 2081 of the *California Fish and Game Code*.

Species of **Local Concern** are those that have no official status with the resource agencies but are being watched because either the region has a unique population or the species is declining in the region.

**Special Animal** is a general term that refers to species that the CNDDDB is interested in tracking, regardless of legal or protective status. This term includes species designated as any of the above terms but also includes species that may be considered biologically rare; restricted in distribution; declining throughout their range; have a critical, vulnerable stage in their life cycle that warrants monitoring; are on the periphery of their range and are threatened with extirpation in California; are associated with special status habitats; or are considered by other State or federal agencies or private organizations to be sensitive or declining.

The California Rare Plant Rank (**CRPR**), formerly known as CNPS List, is a ranking system by the Rare Plant Status Review group<sup>4</sup> and managed by the CNPS and the CDFW. A CRPR summarizes information on the distribution, rarity, and endangerment of California’s vascular

<sup>4</sup> This group consists of over 300 botanical experts from the government, academia, non-governmental organizations, and the private sector.



plants. Plants with a CRPR of **1A** are presumed extirpated from the state because they have not been seen in the wild in California for many years and they are either rare or extinct elsewhere. Plants with a CRPR of **1B** are Rare, Threatened, or Endangered throughout their range. Plants with a CRPR of **2A** are presumed extirpated from California but are more common elsewhere. Plants with a CRPR of **2B** are considered Rare, Threatened, or Endangered in California, but are more common elsewhere. Plants with a CRPR of **3** require more information before they can be assigned to another rank or rejected; this is a “review” list. Plants with a CRPR of **4** are of limited distribution or are infrequent throughout a broader area in California; this is a “watch list”. The Threat Rank is an extension that is added to the CRPR to designate the plant’s endangerment level. An extension of **.1** is assigned to plants that are considered to be “seriously threatened” in California (i.e., over 80 percent of the occurrences are threatened or have a high degree and immediacy of threat). Extension **.2** indicates the plant is “fairly threatened” in California (i.e., between 20 and 80 percent of the occurrences are threatened or have a moderate degree and immediacy of threat). Extension **.3** is assigned to plants that are considered “not very threatened” in California (i.e., less than 20 percent of occurrences are threatened or have a low degree and immediacy of threat or no current threats are known). The absence of a threat code extension indicates that this information is lacking for the plant(s) in question.

In addition to providing an inventory of special status plant and wildlife species, the CNDDDB also provides an inventory of vegetation communities that are considered special status by the State and federal resource agencies, academic institutions, and various conservation groups (e.g., the CNPS). Special status natural communities are “of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects”; they may or may not contain special status species (CDFG 2018). Determination of the level of imperilment (i.e., exposure to injury, loss, or destruction) is based on the NatureServe Heritage Program Status Ranks that rank both species and vegetation communities on a global (G) and statewide (S) basis according to their rarity, trend in population size or area, and recognized threats (e.g., proposed developments, habitat degradation, and non-native species invasion) (Faber-Langendoen et al. 2012). Global and state ranks are provided for all native vegetation communities on the *California Natural Communities List*. The ranks are scaled from 1 to 5. NatureServe considers **G1** and/or **S 1** communities to be critically imperiled and at a very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors; **G2** and/or **S2** communities to be imperiled and at high risk of extinction or elimination due to very restricted range, very few populations or occurrences, steep declines, or other factors; **G3** and/or **S3** communities to be vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors; **G4** and/or **S4** communities to be apparently secure and uncommon but not rare with some cause for long-term concern due to declines or other factors; and **G5** and/or **S5** communities to be secure. A question mark (?) denotes an inexact numeric rank, but existing information points to this rank (Faber-Langendoen et al. 2012). Currently, association ranks are not provided, but associations ranked as S3 or rarer are noted. For vegetation alliances<sup>5</sup> that have State ranks of S1–S3, all associations within the alliance are considered to be highly imperiled.

The **Carlsbad HMP-Covered Species** include species for which take authorization would be provided because long-term viability was determined to be adequately maintained under a particular preserve design. Currently, HMP covered specie include all species on HMP List 1 plus the vernal pool species and thread-leaved Brodiaea (*Brodiaea filifolia*) from HMP List 3.

<sup>5</sup> A vegetation alliance is “a classification unit of vegetation, containing one or more associations and defined by one or more diagnostic species, often of high cover, in the uppermost layer or the layer with the highest canopy cover” (Sawyer et al. 2009). This term is generally interchangeable with vegetation type.

### **3.3.2 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 3. 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 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.

### **3.3.3 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.

A total of three coastal California gnatcatcher (federally Threatened; HMP-Covered Species) territories were present on the Project site during the surveys (Exhibit 3). 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 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.

### **3.3.4 Special Status Vegetation Communities**

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: Diegan coastal sage scrub, southern maritime chaparral, and riparian scrub.

### 3.4 JURISDICTIONAL RESOURCES

A variety of areas supporting potential jurisdictional resources on the Project site were evaluated and are described below. None of the areas evaluated were found to be subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), or the CDFW. However, the riparian scrub areas that support willows on the Project site may be sensitive by the California Coastal Commission (CCC). This resource is discussed further in Section 6.

The canyons within the Project site are densely vegetated with upland species and did not exhibit evidence of flow, bed, bank, or Ordinary High Water Mark (OHWM). These areas were not mapped by the NWI. Therefore, these areas would not be subject to the jurisdiction of the USACE, the RWQCB, or the CDFW.

The willow at the northern edge of the Project site was isolated and surrounded by upland species. This area did not exhibit evidence of flow, bed, bank, or OHWM and was not mapped by the NWI. Therefore, this area would not be subject to jurisdiction of the USACE, the RWQCB, or the CDFW.

The 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. There was no evidence of bed or bank at this location. Indicators of OHWM were minimal and limited to a change in vegetation. The three-parameter approach for identifying wetlands (USACE 2008) was used to determine if this area would be considered an adjacent wetland; willow riparian vegetation is located along an unnamed blue-line stream to the south across Faraday Avenue. Hydrophytic vegetation was present in this area; however, indicators of hydric soil and wetland hydrology were not present. Therefore, this area would not be subject to the jurisdiction of the USACE. Given the lack of channelization (i.e., no bed or bank), it is unlikely that this area is under the jurisdiction of the CDFW or the RWQCB (minimal OHWM evidence).

The NWI maps the fenced depressional area in the center of the Project site as a freshwater emergent wetland classified as PEM1Ah (i.e., Palustrine wetlands with persistent, emergent vegetation that is diked or impounded and temporarily flooded). While this area is depressional, it contains upland or facultative species (i.e., black mustard, tree tobacco, coyote brush, saltcedar, and gum trees). Evidence of ponding (e.g., surface water, soil cracks, inundation visible on aerial imagery) was not observed despite surveys conducted following rainfall. Therefore, this area would not be subject to the jurisdiction of the USACE, the RWQCB, or the CDFW.

The Coastal Act definition of wetland (§ 30121) does not distinguish between wetlands according to their quality. Thus, under the Coastal Act, poorly functioning or degraded areas that meet the definition of wetlands are subject to CCC wetland protection policies. In addition, wetlands under the Coastal Act may only display one of the wetland parameters (hydrophytic vegetation, hydric soil, and wetland hydrology) typically used to define wetland areas. Although the riparian scrub onsite is isolated and poorly functioning, it is anticipated that these areas meet the definition of wetlands of the CCC.

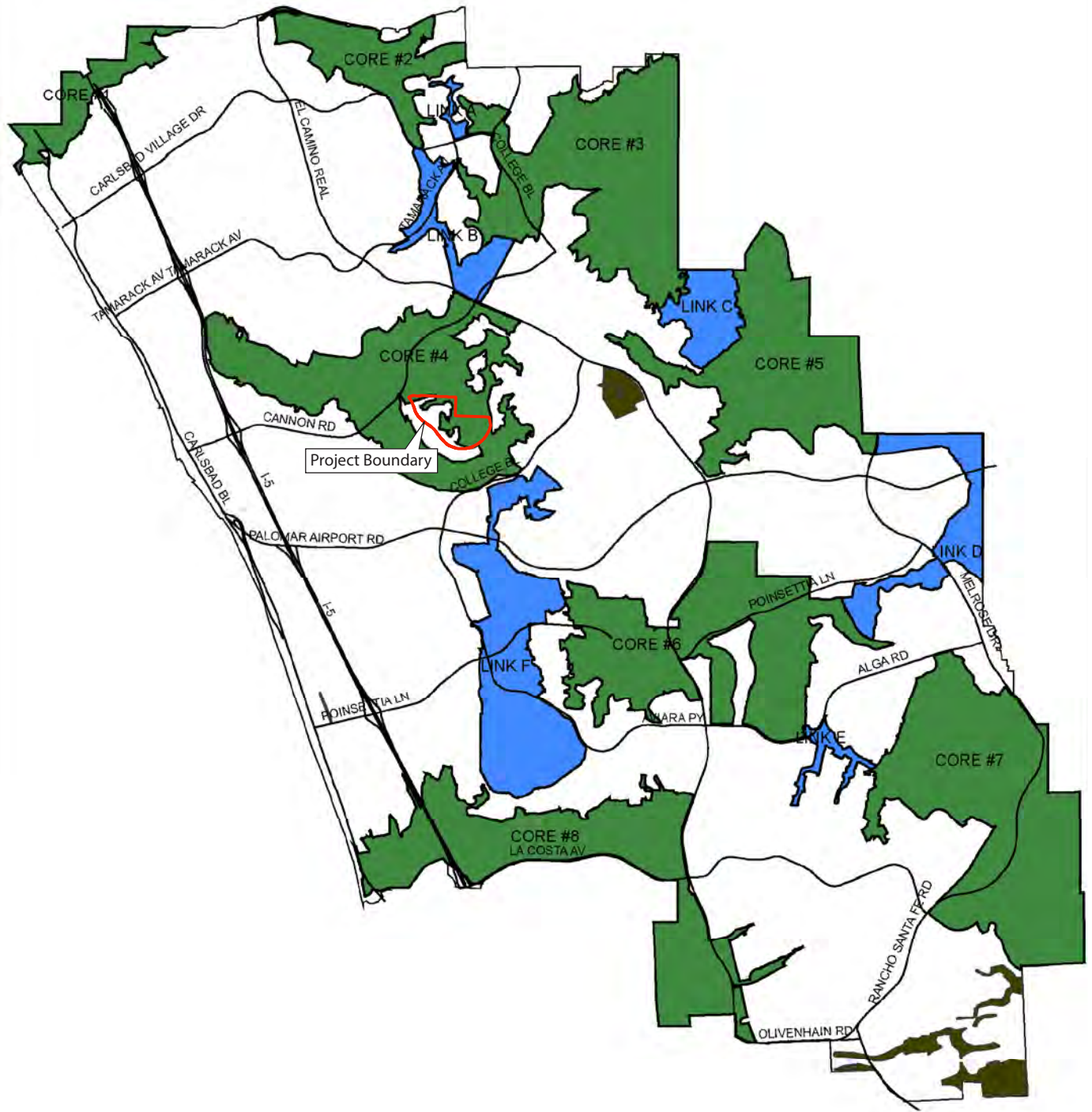
### 3.5 WILDLIFE MOVEMENT

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Fahrig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

The Carlsbad HMP included an evaluation of the preservation of diverse habitats and protection of sensitive biological resources while allowing for development consistent with the City’s General Plan and its Growth Management Plan. The main biological and specific conservation objectives of the Carlsbad HMP relative to habitat connectivity include: (1) maintaining functional wildlife corridors and habitat linkages within the City and to the region, including linkages that connect gnatcatcher populations and movement corridors for large mammals; and (2) maintaining functional biological cores as defined in the Carlsbad HMP.

The Carlsbad HMP defines a core area as “a component of the preserve system established under the HMP, consisting of large blocks of conserved habitat capable of sustaining species over time”. The Project site is located in Carlsbad HMP Core 4 (Exhibit 4). The Carlsbad HMP Core 4 includes approximately 1,063 acres in west-central Carlsbad and includes Agua Hedionda Lagoon and upland habitats immediately east of the lagoon. Important resources to this Core that also occurs within the Project site include riparian scrub, coastal sage scrub, and habitat occupied by the coastal California gnatcatcher.

Core 4 has linkages to Core 2 and Core 3 via Linkage Area B. In addition, Core 6 and Core 8 are linked to Core 4 via Linkage Area F. The portion of Linkage Area F between Cores 4 and 6 is an approximately 1.5-mile steppingstone linkage containing moderately fragmented coastal sage scrub and grassland habitats. The Carlsbad HMP determined that this area is probably an effective linkage for gnatcatchers and other bird species, Palomar Airport Road bisects this linkage, limiting its utility for reptiles and mammals. The portion of Linkage Area F between Cores 4 and 8 is a stepping-stone linkage through west-central Carlsbad containing fragmented patches of coastal sage scrub, grassland, and chaparral, but also a significant amount of existing development. The linkage is approximately 2.5 miles long and is bisected by Palomar Airport Road. The Carlsbad HMP determined it is probably most effective as a dispersal corridor for birds. Coastal sage scrub patches within the linkage area have been known to support a number of nesting gnatcatcher pairs.



- HMP Core
- Linkages
- Special Resource Area

Source: City of Carlsbad, 2006

# Carlsbad HMP Focused Planning Areas

# Exhibit 4

Veterans Memorial Park



## 4.0 **REGULATORY SETTING**

### 4.1 **FEDERAL REGULATIONS**

#### ***Federal Endangered Species Act***

The Federal Endangered Species Act (FESA) protects plants and animals that the USFWS has listed as “Endangered” or “Threatened.” A federally listed species is protected from unauthorized “take,” which is defined in the FESA as acts to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct” (16 USC Sections 1532[19] and 1538[a]). In this definition, “harm” includes “any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife” (50 *Code of Federal Regulations* [CFR], Title 50, Section 17.3). Unless performed for scientific or conservation purposes with the permission of the USFWS, take of listed species is only permissible if the USFWS issues an Incidental Take Permit (ITP). When issuing an ITP, all federal agencies, including the USFWS, must ensure that their activities are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species” (16 USC 1536[a]). Enforcement of the FESA is administered by the USFWS.

The FESA also provides for designation of Critical Habitat: specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and “which may require special management considerations or protection” (16 USC 1538[5][A]). Critical Habitat may also include areas outside the current geographical area occupied by the species that are nonetheless essential for the conservation of the species.

#### ***Migratory Bird Treaty Act of 1918***

The Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703–711), as amended in 1972, makes it unlawful at any time, by any means or in any manner, unless permitted by regulations, to “pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer to barter; barter; offer to purchase; purchase; deliver for shipment; ship; export; import; cause to be shipped, exported or imported; deliver for transportation; transport or cause to be transported; carry or cause to be carried; or receive for shipment, transportation, carriage, or export, any migratory bird; any part, nest, or eggs of any such bird; or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. . . .” (16 USC 703).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. This regulation seeks to protect migratory birds and active nests. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 CFR 10.13), as updated by the 1983 American Ornithologists’ Union (AOU) Checklist and published supplements by the USFWS.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protect all species and subspecies of these families.

On December 22, 2017, the Department of the Interior Office of the Solicitor released Memorandum M-37050 stating that the MBTA's "taking" or "killing of migratory birds applies only to deliberate acts such as hunting intended to take a migratory bird. This administration will not seek criminal penalties against companies and individuals who incidentally take migratory birds through otherwise lawful activities. This reverses the previous administration's interpretation, which issued Memorandum M-37041 stating that the MBTA applied to both intentional and incidental take. However, because of the court's split interpretation on the MBTA, it is recommended that companies continue to implement Best Management Practices (BMPs) to mitigate impacts on migratory birds.

### ***Bald and Golden Eagle Protection Act***

The Bald and Golden Eagle Protection Act (16 USC 668) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

A 1994 Memorandum from President William Clinton to the heads of Executive Agencies and Departments establishes the policy concerning collection and distribution of eagle feathers for Native American religious purposes.

### ***Clean Water Act***

Section 404 of the Clean Water Act (CWA) (33 USC 1251 et seq.) regulates the discharge of dredged or fill material into waters of the United States, including wetlands. USACE is the designated regulatory agency responsible for administering the 404 permit program and for making jurisdictional determinations. This permitting authority applies to all waters of the United States where the material has the effect of (1) replacing any portion of waters of the United States with dry land or (2) changing the bottom elevation of any portion of waters of the United States. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in waters of the United States. Dredge and fill activities are typically associated with development projects; water resource-related projects; infrastructure development; and wetland conversion to farming, forestry, or urban development.

Under Section 401 of the CWA, an activity requiring a USACE Section 404 permit must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will not violate established federal or State water quality standards. The State Water Resources Control Board (SWRCB), in conjunction with the nine California RWQCBs, is responsible for administering the Section 401 water quality certification program.

Under Section 401 of the federal CWA, an activity involving discharge into a water body must obtain a federal permit and a State Water Quality Certification to ensure that the activity will not violate established water quality standards. The SWRCB's and RWQCBs' jurisdiction also extend to all "waters of the State" when no waters of the United States are present, including wetlands and non-wetland waters of the State (isolated and non-isolated). The United States Environmental Protection Agency (USEPA) is the federal regulatory agency responsible for implementing the CWA. However, it is the SWRCB, in conjunction with the nine RWQCBs, who essentially has been delegated the responsibility of administering the water quality certification (Section 401) program.

The Navigable Waters Protection Rule was published in the Federal Register on April 21, 2020 and will become effective on June 22, 2020. The Navigable Water Protection Rule provides new

regulatory text defining waters of the United States. One of the major changes to the definition of waters of the United States is that ephemeral waters are no longer subject to USACE regulation under the CWA. While the USACE and USEPA have reduced areas under their jurisdiction, the SWRCB will assert jurisdiction over all waters that meet any historic definitions of waters of the United States.

On May 28, 2020, the SWRCB's recently issued *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to waters of the State* went into effect. Under these new regulations, the SWRCB and its nine RWQCBs will assert jurisdiction over all existing waters of the United States and all waters that would have been considered waters of the United States under the definition that existed prior to the 2020 Navigable Waters Protection Rule (i.e., ephemeral waters). Thus, the waters of the United States that would no longer be under USACE jurisdiction following the Navigable Waters Protection Rule would still be under the SWRCB's jurisdiction as waters of the State.

### National Pollutant Discharge Elimination System Program

The National Pollutant Discharge Elimination System (NPDES) program, created in 1972 by the Clean Water Act (CWA), helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. The permit provides two levels of control: technology-based limits and water quality-based limits (if technology-based limits are not sufficient to provide protection of the water body).

The NPDES Program has been delegated to the State of California for implementation through the State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards (Regional Water Boards), collectively Water Boards. In California, NPDES permits are also referred to as waste discharge requirements (WDRs) that regulate discharges to waters of the United States.

## **4.2 STATE REGULATIONS**

### ***California Environmental Quality Act***

The CEQA (13 *Public Resources Code* Sections 21000 et seq.) is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The CEQA Guidelines (14 *California Code of Regulations* [CCR] Chapter 3) are the regulations that explain and interpret the law for both public agencies and private development required to administer CEQA.

With regards to plants and animals, Section 15380 of the CEQA Guidelines independently defines "Endangered" and "Rare" species separately from the definitions of the California Endangered Species Act (CESA). Under CEQA, Endangered species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while Rare species are defined as those that (1) have such low numbers that they could become Endangered if their environment worsens or (2) are likely to become endangered within the foreseeable future (i.e., "threatened" as used in the FESA). In addition, a Lead Agency can consider a non-listed species (e.g., species with a CRPR, California Species of Special Concern, or species of Local Concern) to be treated as if it were Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of "Rare" or "Endangered" in the project region.

The CEQA Guidelines designates certain "trustee agencies" that have jurisdiction by law over natural resources affected by a project which are held in trust for the people of California. The



CDFW is the trustee responsible for conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project. The CDFW shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities and shall make recommendations regarding those resources held in trust for the people of California (*California Fish and Game Code* §1802).

### California Endangered Species Act

The State of California implements the CESA which is enforced by the CDFW. While the provisions of the CESA are similar to the FESA, CDFW maintains a list of California Threatened and Endangered species, independent of the FESA Threatened and Endangered species list. It also lists species that are considered Rare and Candidates for listing, which also receive protection. The California list of Endangered and Threatened species is contained in Title 14, Sections 670.2 (plants) and 670.5 (animals) of the *California Code of Regulations*.

State-listed Threatened and Endangered species are protected under provisions of the CESA. Activities that may result in take of individuals (defined in CESA as acts to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by the CDFW. While habitat degradation or modification is not included in the definition of take under CESA, the CDFW has interpreted take to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

If it is determined that the take would not jeopardize the continued existence of the species, an ITP can be issued by CDFW per Section 2081 of the *California Code of Regulations*. If a State-listed species is also federally listed, and the USFWS has issued an ITP that satisfies CDFW’s requirements, CDFW may issue a consistency finding in accordance with Section 2080.1 of the *California Fish and Game Code*.

### California Fish and Game Code

The CDFW administers the *California Fish and Game Code*. Particular sections of the Code are applicable to natural resource management.

#### *Native Plant Protection*

Sections 1900–1913 of the *California Fish and Game Code* were developed to preserve, protect, and enhance Endangered and Rare plants in the State of California. The act requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use that would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

#### *Unlawful Take or Destruction of Nests or Eggs*

These sections duplicate federal protection under the MBTA. Section 3503 of the California Fish and Game Code makes it unlawful to take, possess, or destroy any bird’s nest or any bird’s eggs. Further, any birds in the orders Falconiformes or Strigiformes (birds of prey, such as hawks, eagles, and owls) and their nests and eggs are protected under Section 3503.5 of the California Fish and Game Code. Section 3513 of the

California Fish and Game Code prohibits the take and possession of any migratory nongame bird, as designated in the MBTA.

### *California Fully Protected Species*

The State of California created the “Fully Protected” classification in an effort to identify and provide additional protection to those animals that are rare or that face possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the State and/or Federal Endangered Species Acts; however, some have not been formally listed.

Various sections of the California Fish and Game Code provide lists of Fully Protected reptile and amphibian (§ 5050), bird (§ 3511), and mammal (§ 4700) species that may not be taken or possessed at any time, except as provided in Sections 2081.7, 2081.9, or 2835. The CDFW is unable to authorize the issuance of permits or licenses to take these species, except for necessary scientific research.

### *California Fish and Game Code (Sections 1600 through 1616)*

California Fish and Game Code Sections 1600 et seq. establish a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

California Fish and Game Code Section 1602 requires any person, State, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- substantially obstruct or divert the natural flow of a river, stream, or lake
- substantially change or use any material from the bed, channel, or bank of a river, stream, or lake
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake

Section 1602 of the California Fish and Game Code applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW’s regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Lake or Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

### **California Porter-Cologne Water Quality Control Act**

Pursuant to the California Porter-Cologne Water Quality Control Act, the SWRCB and the nine RWQCBs may require permits (known as “Waste Discharge Requirements” or WDRs) for the fill or alteration of the waters of the State. The term “waters of the State” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (*California Water Code*, Section 13050[e]). The SWRCB and RWQCB have interpreted their authority to require WDRs to extend to any proposal to fill or alter waters of the State, even if those same waters are not under USACE jurisdiction. Pursuant to this authority, the State and Regional Boards may require the submission of a “report of waste discharge” under Section 13260, which is treated as an application for WDRs.

The Porter-Cologne Water Quality Control Act charges the SWRCB and the nine RWQCBs statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. SWRCB and the RWQCBs may require permits (WDRs) for the fill or alteration of the waters of the State.

### **California Coastal Act of 1976**

The California Coastal Act regulates all development within the state-designated Coastal Zone, which includes the Project Site. Carlsbad’s 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. Development in the Coastal Zone must comply with the LCP in addition to the General Plan.

### **Natural Communities Conservation Planning Act**

The Natural Community Conservation Planning Act, codified in Sections 2800–2835 of the *California Fish and Game Code* and signed into law on October 1991, authorizes the preparation of Natural Community Conservation Plans (NCCPs). The Act is a State of California effort to protect critical vegetative communities and their dependent wildlife species. The purpose of an NCCP is to sustain and restore those species and their habitat identified by the CDFW that are necessary to maintain the continued viability of those biological communities impacted by human changes to the landscape. The NCCP process provides an alternative to protecting species on a “single species basis” as in the federal and State ESAs. Under the Act, the CDFW is responsible for creating process planning and conservation guidelines for NCCP programs. Local governments and landowners may then prepare the NCCPs so that they comply with the CESA.

## **4.3 LOCAL REGULATIONS**

### **Multiple Habitat Conservation Program**

The City of Carlsbad and six other cities in northern San Diego County participated in the preparation of the MHCP, which was adopted and certified by the San Diego Association of Governments (SANDAG) Board of Directors in March 2003. The MHCP is a comprehensive, long-term habitat conservation program and provides permit issuance authority for take of covered species to the local agencies. Conservation provided for in the MHCP in general and the HMP specifically, addresses cumulative and growth inducing impacts on covered species and their habitats.

### ***Habitat Management Plan for Natural Communities in the City of Carlsbad***

The City's HMP was developed as an MHCP subarea plan 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 City of Carlsbad is the only city in North San Diego County with an approved HMP, which is a comprehensive approach to preserving natural land for plant and animal species while allowing development to occur consistent with the Carlsbad General Plan and Growth Management Plan. It establishes a 6,400-acre preserve system that link with regional and statewide preserves to create a natural network where species can thrive.

## 5.0 **SIGNIFICANCE CRITERIA**

### 5.1 **THRESHOLDS OF SIGNIFICANCE**

The environmental impacts relative to biological resources are assessed using impact significance criteria that mirror the policy contained in CEQA (*California Public Resources Code* §21001[c]). Accordingly, the State Legislature has established it to be the policy of the State to:

Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.

Determining whether a project would have a significant effect plays a critical role in the CEQA process. According to Section 15064.7 of the CEQA Guidelines (Thresholds of Significance), each public agency is encouraged to develop and adopt—by ordinance, resolution, rule or regulation—their own significance thresholds that the agency would use in determining the level of significance of environmental effects. A significance threshold defines the quantitative, qualitative, or performance limits of an environmental effect. If these thresholds are exceeded, the agency would consider the effect to be significant.

The City of Carlsbad's significance thresholds that will be used to determine the level of significance of environmental effects are if the proposed Project would:

1. 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 CDFW or USFWS?
2. 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 CDFW or USFWS?
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
4. 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?
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

## 6.0 EVALUATION OF PROJECT IMPACTS

### 6.1 INTRODUCTION

This section presents an impact analysis of the proposed Project. All construction activities, including staging and equipment areas, on the Project site are assumed to be within the Project impact area identified on Exhibit 5. In addition, direct buffer impact areas have been identified where the limits of disturbance occur within 20 feet of Diegan sage scrub habitat and/or the Poinsettia 61 CSS Restoration Area located in the northeast portion of the site. These direct impacts include are those that involve the initial loss of habitat or individuals due to vegetation clearing and anticipated direct disturbance within the 20-foot buffer area from construction and operational activities. Indirect impacts would be those related to impacts on the adjacent remaining habitat due to construction activities (e.g., noise, dust) or operation of a project (e.g., human activity).

Additional detail of various park features, and anticipated grading has been provided in the Site Plan (Attachment B) and Grading Plan (Attachment C).

Biological impacts associated with the proposed Project were evaluated with respect to the following special status (synonymous with “sensitive”) biological issues:

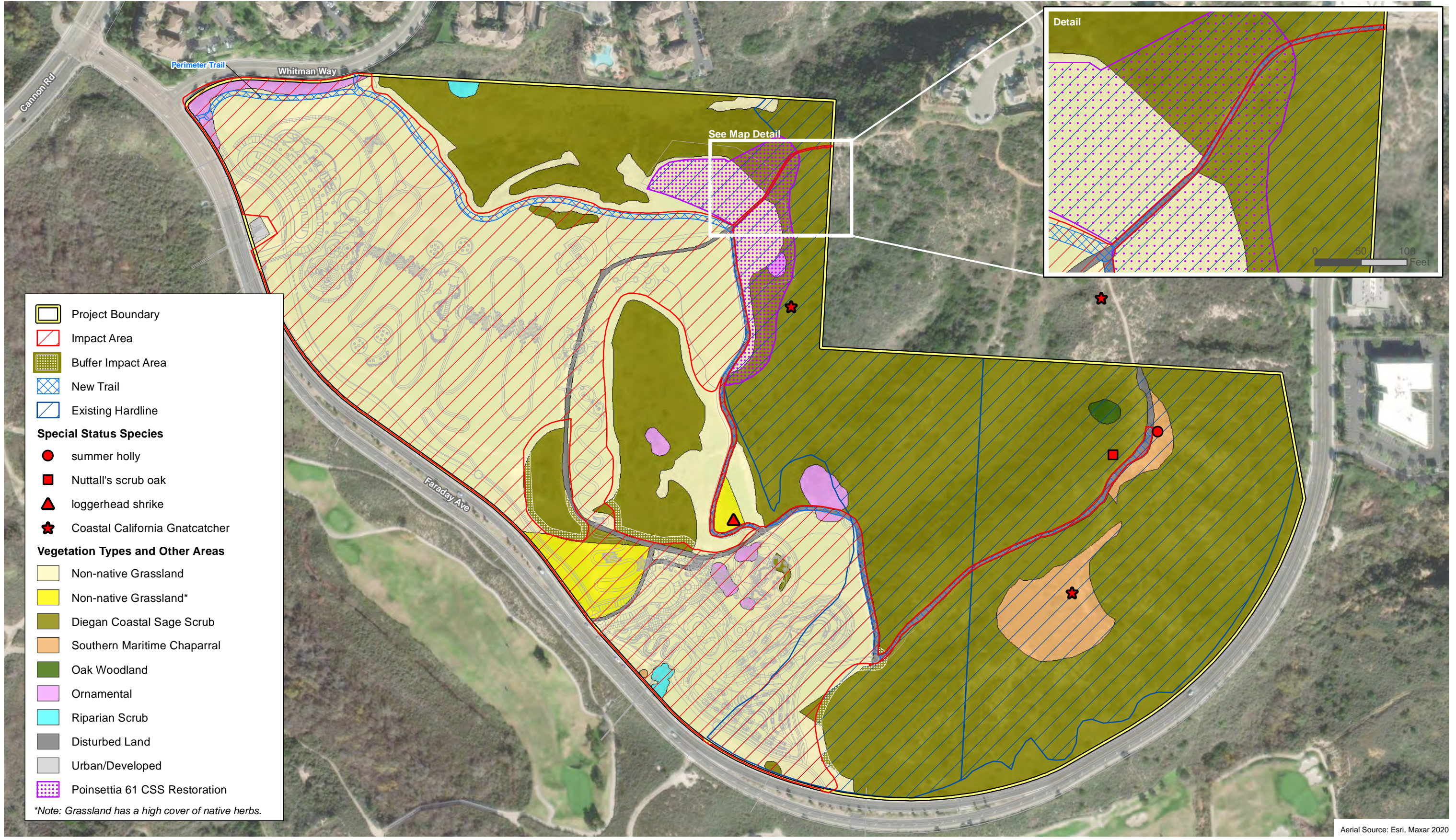
- Species listed under federal or State Endangered Species Acts
- Species proposed for listing under federal or State Endangered Species Acts
- Non-listed species that meet the criteria in the definition of “Rare” or “Endangered” in the CEQA Guidelines (i.e., 14 California Code of Regulations, Section 15380)<sup>6</sup>
- Species designated as California Species of Special Concern
- Vegetation communities (synonymous with “habitat”) suitable to support a federally or State-listed Endangered or Threatened plant or wildlife species
- Streambeds, waterbodies, wetlands, and their associated vegetation
- Vegetation communities, other than wetlands, considered special status by regulatory agencies (e.g., the USFWS, the CDFW) or resource conservation organizations
- Other species or issues of concern to regulatory agencies or conservation organizations

The actual and potential occurrence of these resources on the Project site were correlated with the significance criteria listed above in order to determine whether proposed Project impacts on these resources would be considered significant. To evaluate whether an impact on biological resources would result in a “substantial adverse effect,” both the resource itself and how that resource fits into a regional context must be considered. The proposed Project’s regional setting includes the boundaries of the City of Carlsbad.

For impact analysis purposes, a “substantial adverse effect” is defined as the loss or harm of a magnitude which, based on current scientific data and knowledge, would (1) substantially diminish population numbers of a species or distribution of a habitat type within the region or (2) eliminate the functions and values of a biological resource in the region. For the purpose of this analysis,

<sup>6</sup> Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., plant with a CRPR of 1B.1) to be Endangered, Rare, or Threatened if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species meets the definitions for Rare and Endangered according to Section 15380 of the CEQA Guidelines.

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**Project Boundary**

**Impact Area**

**Buffer Impact Area**

**New Trail**

**Existing Hardline**

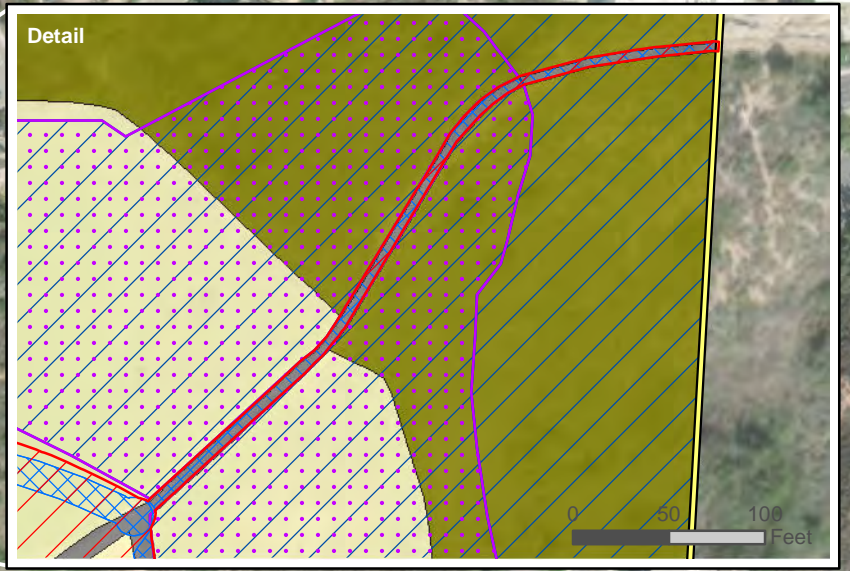
**Special Status Species**

- summer holly
- Nuttall's scrub oak
- ▲ loggerhead shrike
- ★ Coastal California Gnatcatcher

**Vegetation Types and Other Areas**

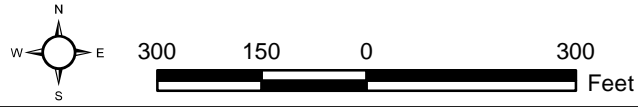
- Non-native Grassland
- Non-native Grassland\*
- Diegan Coastal Sage Scrub
- Southern Maritime Chaparral
- Oak Woodland
- Ornamental
- Riparian Scrub
- Disturbed Land
- Urban/Developed
- Poinsettia 61 CSS Restoration

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



**Project Impacts**

Veterans Memorial Park



**Exhibit 5**



impacts to biological resources are considered significant (before calculating the offsetting impacts of mitigation measures [MMs]).

**6.2 IMPACTS TO VEGETATION COMMUNITIES**

Vegetation communities and other areas that would be impacted by the proposed Project are shown in Table 2 and Exhibit 5. These impacts are discussed in more detail below.

**TABLE 2  
IMPACT AREAS**

<b>Vegetation Communities or Other Land Cover</b>	<b>Existing (Acres)</b>	<b>Impacted (Acres)</b>	<b>Avoided<sup>a</sup></b>
Diegan Coastal Sage Scrub	48.11	0.94	47.17
Southern Maritime Chaparral	2.14	0.01	2.13
Oak Woodland	0.12	0.00	0.12
Riparian Scrub	0.19	0.10	0.09
Non-native Grassland	40.06	35.29	4.77
Disturbed Habitat	1.70	1.70	0.00
Ornamental	1.24	0.77	0.47
Urban/Developed	0.07	0.00	0.07
<b>TOTAL</b>	<b>93.62</b>	<b>38.82</b>	<b>54.82</b>
<sup>a</sup> Avoided habitat includes the following within the upland buffer: 1.56 acres of coastal sage scrub, 0.72 acre non-native grassland and 0.17 disturbed habitat.			

***Diegan Coastal Sage Scrub***

The proposed 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. Mitigation Measures BIO-2 and BIO-3 reduce this impact to a less than significant level.

***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. Mitigation Measures BIO-2 and BIO-3 reduce this impact to a less than significant level.

***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. Mitigation Measures BIO-2 and BIO-3 reduce this impact to a less than significant level.

***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. Mitigation Measure BIO-1 reduces this impact to a less than significant level.



### ***Disturbed Habitat, Ornamental, and Urban/Developed Areas***

A total of 1.70 acres of disturbed habitat and 0.77 acre of ornamental areas would also be impacted on the Project site. These impacts are not significant; therefore, no mitigation is required.

### ***Indirect Impacts to Vegetation Communities***

Potential indirect impacts to vegetation community described above could include (1) excessive dust, erosion, and sedimentation from construction activities and (2) trash, introduction of invasive plant species, and increased fire risk from Project use. It is expected that during construction of the Project, that typical construction practices, including dust control, erosion control, and water quality protection measures, would be implemented to reduce these effects. The Project has been designed to minimize potential indirect impacts by Park users; however, the proposed open space would include vegetation buffers and fencing to reduce the long-term indirect impacts to vegetation community on the Project site. Indirect impacts to vegetation shall be reduced to a level below significant with incorporation of Mitigation Measure BIO-3.

## **6.3 IMPACTS TO JURISDICTIONAL RESOURCES**

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. Mitigation Measures BIO-2 and BIO-3 reduce this impact to a less than significant level.

## **6.4 IMPACTS TO WILDLIFE**

To assess impacts on wildlife, the total impact on particular vegetation types that provide habitat for wildlife was assessed. The following discussion of wildlife impacts focuses on the common wildlife species occurring on the Project site and immediate area.

### ***Direct Impacts from Habitat and Wildlife Loss***

Native and non-native vegetation provide valuable nesting, foraging, roosting, and denning opportunities for a variety of wildlife species. The proposed Project would permanently impact approximately 38.82 acres of mostly non-native vegetation communities on the Project site. Removing or altering habitats on the Project site would likely result in the loss of small mammals, reptiles, amphibians, and other slow-moving wildlife that live in the Project's direct impact area. More mobile wildlife species that are now using the Project site would be forced to move into the remaining areas of open space, which would consequently increase competition for available resources in those areas. This situation would result in the loss of individuals that cannot successfully compete. The loss of vegetation that provides wildlife habitat is considered an adverse impact. However, this impact would not be expected to reduce populations of wildlife species below self-sustaining levels in the Project region. Therefore, this impact would be considered adverse but less than significant, and no mitigation would be required.

Several common bird species have the potential to nest in the vegetation or on the ground on the Project site. The loss of an active migratory bird nest, including nests of common species, 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, Mitigation Measure BIO-4 has been included that 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 an impact to individual animals. In addition, if other construction activities cannot be avoided during the breeding season, the Project shall implement Mitigation Measure BIO-5 to avoid and/or reduce potential impacts to wildlife.

### **Wildlife Movement**

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, consisting mostly of non-native grassland, will not significantly affect movement in this area (Exhibit 6, HMP Hardline Gain and Loss). The addition of 12.86 acres to the HMP hardline to compensate for the loss will 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.

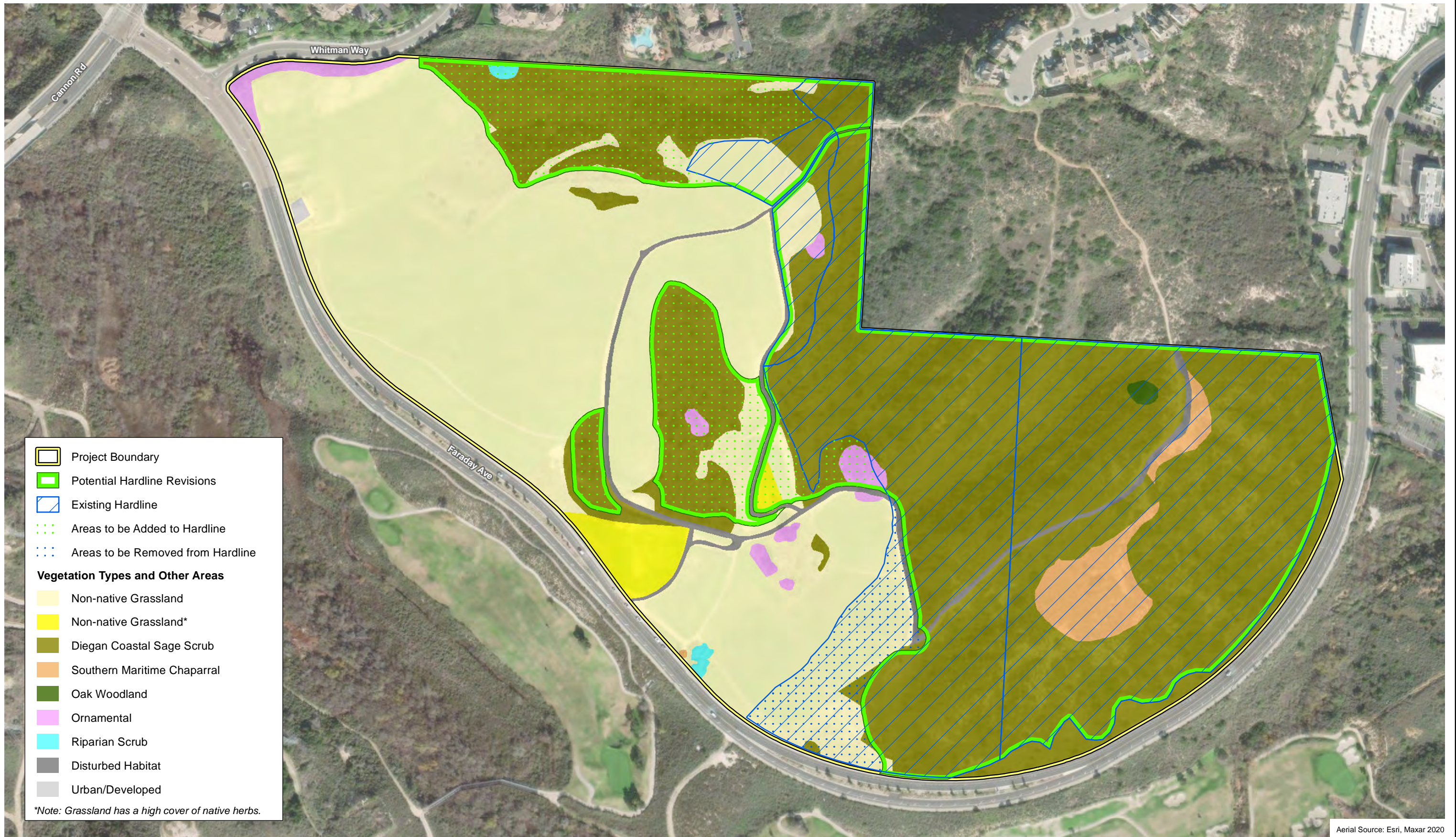
However, the land use change from an open field to a developed park may have a significant potential impact to wildlife movement in this area. The active and passive uses within the park will result in significantly greater presence of cars, pedestrians, bicycles, dogs, and associated noise, which could cause wildlife to avoid the general area. For example, the presence, sign, and smell of dogs has been shown to reduce wildlife usage, and even passive activities such as hiking and wildlife viewing can affect the distribution and abundance of some wildlife species, even in protected areas (Lenth et al. 2008, Reed et al 2014). However, extensive wildlife movement studies conducted for the Village H Off-Leash Dog Area and Trail Connector Project has shown that native wildlife is most active during the nighttime hours, especially between 10:00 pm and 4:00 am, whereas human/dog use occurs mostly during the daytime hours (ESA 2021). This activity pattern (temporal shift) is consistent with data collected throughout the City and may illustrate that wildlife is adapting to this urbanized environment (R. Humphrey, personal communication, 2021; Ritzel and Gallo 2020). To keep potential impacts to a less than significant level, the project includes extensive wildlife-friendly fencing between the park and the HMP hardline areas (Exhibit 7, Fencing and Circulation). In addition, the City shall implement Mitigation Measure BIO-6d. that requires that the Project be consistent with HMP Adjacency Standards, including the specific requirements for park signage to deter entry into the native habitat by people and pets.

## **6.5 IMPACTS TO SPECIAL STATUS BIOLOGICAL RESOURCES**

### ***Special Status Plant Species***

Three special status plant species were observed on the Project site including California adolphia, summer holly, and Nuttall's scrub oak. The plant species are located in the preserved areas of the Project and will not be impacted by Project implementation. Therefore, no mitigation is required for direct impacts.

To protect the special status plant species in the preserved areas, standard measures addressed in the Carlsbad HMP provide adequate protection. Potential indirect impacts to special status

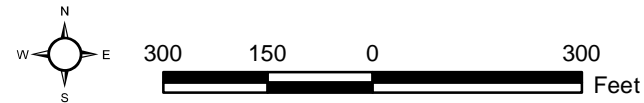


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Aerial Source: Esri, Maxar 2020

### HMP Hardline Gain and Loss

Veterans Memorial Park



### Exhibit 6



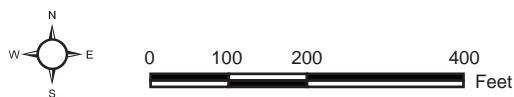
(Rev: 12/09/2021 MMD) R:\Projects\1RJM\010100\Graphics\Biotech\ex\_HMP\_Hardline\_GainLoss.pdf



Source: RJM Design Group, 2022

# Fencing and Circulation

Veterans Memorial Park



# Exhibit 7



plant species shall be reduced to a level below significant with incorporation of Mitigation Measures BIO-3.

### **Special Status Wildlife Species**

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 (*Artemisospiza 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 will impact approximately 35 acres of potential habitat for species that primarily occur in grassland areas and may occur onsite including the western spadefoot (*Spea hammondi*), burrowing owl (*Athene cunicularia*), northern harrier (*Circus hudsonius*), and California horned lark (*Eremophila alpestris actia*). Potential impacts to these species are considered potentially significant. Mitigation Measures BIO-1 will reduce these impacts to a less than significant level.

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 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, Mitigation Measure BIO-4 has been included that 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 Mitigation Measure BIO-5 to avoid and/or reduce potential impacts.

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, Mitigation Measure BIO-5 has been included that addresses actions to avoid and/or reduce potential impacts to roosting bat species.

### ***Special Status Vegetation Types***

The proposed Project would impact a total of 0.94 acre of Diegan coastal sage scrub, 0.01 acre of southern maritime chaparral, and 0.1 acre of willow dominated riparian scrub. These impacts are considered significant and would need to be mitigated as listed in the HMP. Mitigation Measures BIO-2 reduces these impacts to a less than significant level.

## **6.5.1 Local Policies, Ordinances or Approved Regional Conservation Plan**

### ***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 proposed Project will impact sensitive HMP species and habitat. Implementation of Mitigation Measures BIO-1 through 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 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 will 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.

With the implementation of Mitigation Measures BIO-6, which provides protection from indirect impacts to the preserve areas adjacent to the construction site, and BIO-7, which requires the processing and approval of a minor amendment to the HMP to address the Project's proposed changes to the boundary of the Hardline preserved areas (Exhibit 6, HMP Hardline Gain and Loss), impacts would be reduced to less than significant levels.

### ***Carlsbad Local Coastal Program***

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

**7.0 MITIGATION MEASURES**

**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. 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 (Exhibit 8, Onsite Mitigation Area). 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.



**GENERAL NOTES:**

- PROJECT IS SUBJECT TO ALL REQUIREMENTS OF THE CITY OF CARLSBAD LANDSCAPE MANUAL DETERMINED APPROPRIATE FOR THIS PROJECT.
- ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE (2% GRADE IN PLANTING AREAS) AWAY FROM ALL STRUCTURES & TERMINATING IN AN APPROVED DRAINAGE SYSTEM.
- THE LANDSCAPE PLAN SHALL FEATURE GRASS COVER, SHRUBS, AND TREES TO SCREEN ELEMENTS OF UNSIGHTLINESS & SCREEN/SCREEN NEW IMPROVEMENTS.
- ALL UTILITIES ARE TO BE SCREENED.
- ALL TREES (EXCEPT ON SLOPES 5:1 OR STEEPER) SHALL BE A MINIMUM 5 GALLON SIZE.
- 50% OF THE SHRUBS (EXCEPT ON SLOPES 5:1 OR STEEPER) SHALL BE A MINIMUM 3 GALLON SIZE.
- SLOPES 6:1 OR STEEPER REQUIRING EROSION CONTROL MEASURES AS SPECIFIED HEREIN SHALL BE TREATED WITH ONE OR MORE OF THE FOLLOWING PLANTING STANDARDS:
  - STANDARD #1 - COVER CROP/AND EROSION CONTROL MATTING  
COVER CROP SHALL BE A SEED MIX TYPICALLY MADE UP OF QUICKLY GERMINATING AND FAST COVERING GRASSES, CLOVERS, AND/OR WILDFLOWERS. SUBMIT THE SPECIFIC SEED MIX FOR CITY APPROVAL PRIOR TO APPLICATION. THE COVER CROP SHALL BE APPLIED AT A RATE SUFFICIENT TO PROVIDE 90% COVERAGE WITHIN THIRTY (30) DAYS. THE TYPE OF EROSION CONTROL MATTING SHALL BE AS APPROVED BY THE CITY & AFFIXED TO THE SLOPE AS RECOMMENDED BY THE MANUFACTURER. ON SLOPES 3 FEET OR LESS IN VERTICAL HEIGHT WHERE ADJACENT TO PUBLIC WALKS OR STREETS, EROSION CONTROL MATTING SHALL BE REQUIRED DURING THE REMAINDER OF THE YEAR. THE COVER CROP AND/OR EROSION CONTROL MATTING MAY BE USED ON SLOPES GREATER THAN 3 FEET IN HEIGHT, EROSION CONTROL MATTING SHALL BE REQUIRED AND A COVER CROP SHALL NOT BE USED, UNLESS OTHERWISE APPROVED BY THE CITY.
  - STANDARD #2 - GROUND COVER  
ONE HUNDRED PERCENT (100%) OF THE AREA SHALL BE PLANTED WITH A GROUND COVER KNOWN TO HAVE EXCELLENT SOIL BINDING CHARACTERISTICS PLANTED FROM A MINIMUM SIZE OF FLATTED MATERIAL & SPACED TO PROVIDE FULL COVERAGE WITHIN ONE YEAR.
  - STANDARD #3 - LOW SHRUBS  
LOW SPREADING WOODY SHRUBS (PLANTED FROM A MINIMUM OF 1 GALLON CONTAINERS) SHALL COVER A MINIMUM OF SEVENTY PERCENT (70%) OF THE SLOPE FACE (AT MATURE SIZE).
  - STANDARD #4 - TREES AND/OR LARGER SHRUBS  
TREES AND/OR LARGER SHRUBS SHALL BE PLANTED FROM A MINIMUM OF 1 GALLON CONTAINERS, INSTALLED AT A MINIMUM RATE OF ONE (1) PLANT PER TWO HUNDRED (200) SQUARE FEET.
- SLOPES - 6:1 OR STEEPER AND:
  - 3' OR LESS IN VERTICAL HEIGHT & ADJACENT TO PUBLIC WALKS OR STREETS REQUIRE AT A MINIMUM STANDARD #1 (COVER CROP OR EROSION CONTROL MATTING).
  - 3' TO 6' IN VERTICAL HEIGHT REQUIRE STANDARDS #1 (EROSION CONTROL MATTING SHALL BE INSTALLED IN LIEU OF A COVER CROP), #2 & #3.
  - IN EXCESS OF 6' VERTICAL HEIGHT REQUIRE STANDARDS #1 (EROSION CONTROL MATTING SHALL BE INSTALLED IN LIEU OF A COVER CROP), #2, #3, & #4.
- AREAS GRADED FLATTER THAN 6:1 REQUIRE A COVER CROP PER STANDARD #1 WITH TEMPORARY IRRIGATION WHEN THEY HAVE ONE OR MORE OF THE FOLLOWING CONDITIONS:
  - SHEET GRADED PADS NOT SCHEDULED FOR IMPROVEMENTS WITHIN 6 MONTHS OF COMPLETION OF ROUGH GRADING.
  - A POTENTIAL EROSION PROBLEM AS DETERMINED BY THE CITY.
  - IDENTIFIED BY THE CITY AS HIGHLY VISIBLE AREAS TO THE PUBLIC OR HAVE SPECIAL CONDITIONS THAT WARRANT IMMEDIATE TREATMENT.
- PER ZONING CODE SECTION 21-44 TABLE B: AT LEAST 3% OF THE PARKING AREA SHALL BE PLANTED AND MAINTAINED WITH TREES LISTED ON THE CITY'S OFFICIAL STREET TREE LIST, OR APPROVED SHRUBS. SAID TREES OR SHRUBS SHALL BE CONTAINED IN PLANTING AREAS WITH A MINIMUM DIMENSION OF 4 FEET AND BOUNDED BY A CONCRETE OR MASONRY CURB OF A MINIMUM 6 INCHES IN HEIGHT LOCATED THROUGHOUT THE OFF-STREET PARKING AREAS IN ORDER TO OBTAIN THE MAXIMUM AMOUNT OF DISPERSION.
- PARKING AREAS SHALL BE SCREENED FROM ADJACENT PROPERTY OR STREETS THROUGH THE USE OF PLANTING OR ANY COMBINATION OF PLANTING, WOUNDING, 1' DECORATIVE WALLS, SCREENING ELEMENTS SHALL HAVE A TOTAL HEIGHT OF AT LEAST THREE (3) FEET.
- ANY TREES LOCATED WITHIN A VEGETAR SITE LINE MUST HAVE ALL LIMBS REMOVED TO A HEIGHT OF 6 FEET ABOVE THE ADJACENT TOP OF CURB.

**GENERAL LANDSCAPE NOTES:**

- (\*) - DENOTES CALIFORNIA NATIVE PLANT MATERIAL
- ALL PLANT MATERIAL IDENTIFIED WITH NUCOLS IV WATER USE CATEGORY FOR REGION 5
- (VJ) - VERY LOW
- (L) - LOW
- (M) - MODERATE
- (H) - HIGH
- ALL TREES WITHIN 5' OF PUBLIC SIDEWALKS ARE TO RECEIVE 24" DEEP LINEAR ROOT BARRIER ON HARDSCAPE SIDE OF TREE ONLY. NO ROOT BARRIERS ARE TO ENCIRCLE TREE WITH THE EXCEPTION OF TREES PLANTED WITHIN TREE WELLS.

- (WQ) WATER QUALITY TREATMENT AREA (END LETTER CORRESPONDS TO BMP BASIN IDENTIFICATION)
- (E) SAN DIEGO COUNTY WATER AUTHORITY CARLSBAD DESALINATION CONVEYANCE PIPELINE - MACARIO TUNNEL PIT EASEMENT (APPROX. 80'x80'; SEE NORTH PARKING AREA EXHIBIT FOR ADDITIONAL DETAIL)

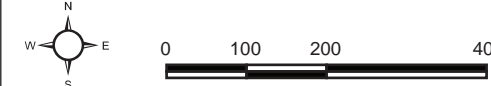
HMP BUFFER AREA PLANTING NOT SHOWN ON PLAN. BUFFER AREAS TO BE SUPPLEMENTED WITH CALIFORNIA NATIVE PLANT MATERIAL (1 GAL. MIN.) AS NEEDED.

TREES	
<b>PARKING / PLAZA AREAS (CIRCULATION)</b> (75)	GOLD MEDALLION TREE (SMALL) LONDON PLANE TREE (PERIMETER) COAST LIVE OAK (PERIMETER) HOLLY OAK (PERIMETER) CHINESE ELM (PERIMETER)
<b>PLAY / EXERCISE AREAS (ACTIVE)</b> (105)	PURPLE-LEAF EASTERN REDBUD (SMALL) NEW ZEALAND XMAS TREE (SMALL) CALIFORNIA DYCKHOPE (PERIMETER) ENGELMANN OAK (PERIMETER) FIREWHEEL TREE (SMALL)
<b>MEMORIAL / GARDEN AREAS (PASSIVE)</b> (14)	STRAWBERRY TREE (SMALL) SWEETSHADE (SMALL) WESTERN GOTTOWOOD (PERIMETER) BLUE ELDERBERRY (SMALL) AFRICAN TULIP TREE (PERIMETER)
<b>BIO-SHALE / DETENTION AREAS</b> (82)	WESTERN GOTTOWOOD (PERIMETER) BLUE ELDERBERRY (SMALL) CALIFORNIA BAY LAUREL (SMALL)
SHRUBS/ACCENTS/GROUNDCOVERS	
<b>BIO-SHALE / DETENTION BASIN PLANTS</b>	CAREX PANSA* (M) CAREX PRAEGRACILIS* (M) CHONDRAPETALUM ELEPHANTUM (L) FESTUCA RUBRA* (M) JUNCUS PATENS* (L) MULLENBERGIA RIGENS* (M)
<b>FLOWERING / ACCENT / MASSING - SMALL (1'-5' H &amp; W)</b>	CALIFORNIA MEADOW SEDGE WESTERN MEADOW SEDGE LARGE GAFFE RUSH RED FESCUE CALIFORNIA GRAY RUSH DEER GRASS
<b>FLOWERING / ACCENT / MASSING - MEDIUM (3'-6' H &amp; W)</b>	AGAVE ATTENUATA (L) ALOE ARBORESCENS (L) ALOE STRIATA (L) ARISTIDA PURPUREA* (VL) BACCHARIS PIGEON POINT* (L) BOULDERIA BLONDE AMBITION* (VL) CEANOTHUS HURRICANE POINT* (L) CISTIS SUNSET (L) ERIOGONUM CANUM CATALINA* (VL) LEYMUS COND. CANYON PRINCE* (L) MIMULUS AURIANTICUS* (VL) NASSELLA PULCHRA* (VL) ONOTHERA BEER BUSH-YOU (L) SEROICO MANDRALISCAE (L) SPHAERALCEA AMBIGUA* (L) TRICHOSTEMA LANATUM* (VL)
<b>FLOWERING / ACCENT / MASSING - LARGE (6'-10' H &amp; W)</b>	CEANOTHUS RAY HARTMAN* (L) FREMONT CAL GLORY* (VL) HETEROMELES ARBUTIFOLIA* (VL) RHUS INTEGRIFOLIA* (VL) RHUS OVATA* (VL)
<b>HYDROSEED MIXES (\$45 SEEDS) TO BE SUPPLEMENTED WITH 1 GAL. (MIN.) NATIVE PLANTS</b>	ARTHEMISIA CALIFORNICA* (VL) ERIOGONUM FASCIGULATUM* (VL) NASSELLA PULCHRA* (VL) OPUNTIA LITORALIS* (VL) SALVIA MELLIFERA* (VL)
<b>PRELIMINARY HABITAT MITIGATION AREAS</b>	COASTAL SAGEBUSH COMMON BUCKWHEAT PURPLE NEEDLE GRASS COAST PRICKLY PEAR BLACK SAGE
<b>TURF</b>	MARATHON II DWARF TALL FESCUE (50D) (H)
<b>MULCH COVERED AREAS</b>	AREAS TO BE USED FOR FUTURE PASSIVE USES, PUBLIC ART OR MAINTENANCE PURPOSES



**On-Site Mitigation Area**

Veterans Memorial Park



Source: RJM Design Group, 2022

**Exhibit 8**



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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**

<b>Vegetation Communities and Other Areas</b>	<b>Impacted (Acres)</b>	<b>Mitigation Ratio (From Table 11 of HMP)</b>	<b>Mitigation Required (Acres)</b>
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 <sup>a</sup>	0.3
<b>Total</b>	<b>1.05</b>		<b>2.21</b>
<sup>a</sup> 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:

- Since coastal California gnatcatchers (*Poliioptila 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.
- 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.
- The USFWS shall be notified immediately of any federally listed species that are located during pre-construction surveys within the adjacent areas.
- 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.

- 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.

- 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.
- If dead or injured listed species are located, initial notification must be made within three working days, in writing, to the USFWS and CDFW.
- 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.
- 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 site where they may come into contact with any listed species.
- 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.

- 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.
- 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.
- 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.
- 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.

- 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.

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**ATTACHMENT A**  
**SPECIAL STATUS PLANT AND WILDLIFE SPECIES**

**SPECIAL STATUS PLANT AND WILDLIFE SPECIES  
REPORTED FROM THE VICINITY OF THE PROJECT SITE**

Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<b>Plants</b>							
<i>Abronia maritima</i>	red sand-verbena	–	–	4.2		coastal dunes	Not expected to occur; no suitable habitat.
<i>Acanthomintha ilicifolia</i>	San Diego thorn-mint	FT	SE	1B.1	Coverage contingent on other MHCP Subarea Plans being permitted	Active vertisol clay soils in chaparral, coastal scrub, valley and foothill grassland, vernal pools.	Limited potential to occur; limited suitable soils. Not expected because of the lack of observation during field studies.
<i>Acmispon prostratus</i>	Nuttall's acmispon	–	–	1B.1		Coastal dunes, coastal scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Adolphia californica</i>	California adolphia	–	–	2B.1		Sandy/gravelly to clay soils in chaparral, coastal sage scrub, valley and foothill grassland.	Observed in the Project site.
<i>Agave shawii</i> var. <i>shawii</i>	Shaw's agave	–	–	2B.2		Medium to very fine sandy loam. sandstone substrate in chaparral and coastal sage scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Ambrosia pumila</i>	San Diego ambrosia	FE	–	1B.1	Coverage contingent on other MHCP Subarea Plans being permitted	Sandy loam or clay soil in chaparral, coastal scrub, valley and foothill grassland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Aphanisma blitoides</i>	aphanisma	–	–	1B.2		Coastal bluff scrub, coastal dunes, coastal scrub, on bluffs and slopes near the ocean in sandy or clay soils.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	Del Mar manzanita	FE	–	1B.1	Coverage contingent on funding for management of Conserved Areas	Sandy coastal mesas and ocean bluffs in chaparral.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Artemisia palmeri</i>	San Diego sagewort	–	–	4.2		In sandy soil of coastal scrub, chaparral, riparian forest, riparian woodland, riparian scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Atriplex coulteri</i>	Coulter's saltbush	–	–	1B.2		Alkaline or clay soils of coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.	Limited potential to occur; limited suitable soils. Not expected because of the lack of observation during field studies.
<i>Atriplex pacifica</i>	south coast saltscale	–	–	1B.2		Alkaline soil of coastal scrub, coastal bluff scrub, playas, coastal dunes.	Not expected to occur; no suitable alkaline soils.
<i>Baccharis vanessae</i>	Encinitas baccharis	FT	SE	1B.1	Coverage contingent on funding for management of Conserved Areas	Sandstone in steep, open, rocky chaparral and cismontane woodland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Bloomeria clevelandii</i>	San Diego goldenstar	–	–	1B.1		Clay soils in chaparral, coastal scrub, valley and foothill grassland, vernal pools.	Limited potential to occur; limited suitable soils and at edge of current known range. Not expected because of the lack of observation during field studies.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	FT	SE	1B.1	Coverage contingent on funding for management of Conserved Areas	Clay soils in chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools.	Limited potential to occur; limited suitable soils. Not expected because of the lack of observation during field studies.
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	-	-	1B.1		Mesic, clay areas in vernal pools, valley and foothill grassland, closed-cone coniferous forest, cismontane woodland, chaparral, meadows and seeps.	Limited potential to occur; limited suitable soils. Not expected because of the lack of observation during field studies.
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	-	-	3		Sandy or clay soil in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Ceanothus verrucosus</i>	wart-stemmed ceanothus	-	-	2B.2	Coverage contingent on other MHCP Subarea Plans being permitted	Chaparral.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	-	-	1B.1		Marshes and swamps (margins), valley and foothill grassland, vernal pools, disturbed sites.	May occur; suitable habitat.
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	-	-	1B.1		Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland, disturbed sites.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	-	-	1B.1		Sandy soil in coastal bluff scrub, coastal dunes.	Not expected to occur; no suitable habitat.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Chorizanthe orcuttiana</i>	Orcutt's spineflower	FE	SE	1B.1	Covered	Sandy soil in coastal scrub, chaparral, closed-cone coniferous forest.	Limited potential to occur; suitable habitat but at edge of current known range. Not expected because of the lack of observation during field studies.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	–	–	1B.2		Sand and Gabbroic clay in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Cistanthe maritima</i>	seaside cistanthe	–	–	4.2		Sandy soil in coastal bluff scrub, coastal scrub, and valley and foothill grassland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	–	–	1B.2	Coverage contingent on funding for management of Conserved Areas	Chaparral, cismontane woodland.	Observed in the Project site.
<i>Convolvulus simulans</i>	small-flowered morning-glory	–	–	4.2		Clay, occasionally serpentine soils in chaparral openings, coastal scrub, and valley and foothill grasslands.	Limited potential to occur; limited suitable soils. Not expected because of the lack of observation during field studies.
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	Del Mar Mesa sand aster	–	–	1B.1	Coverage contingent on funding for management of Conserved Areas	Maritime sediments and conglomerates of chaparral, coastal scrub, coastal bluff scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Cryptantha wigginsii</i>	Wiggins' cryptantha	–	–	1B.2		Clay soils in coastal scrub.	Reported from the Project site (CDFW 2019; 2013 record). Not expected because of the lack of observation during field studies.
<i>Deinandra paniculata</i>	paniculate tarplant	–	–	4.2		Vernally mesic or sandy soil in coastal scrub, valley and foothill grassland, and vernal pools.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Dichondra occidentalis</i>	western dichondra	–	–	4.2		Among rocks and shrubs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	–	–	1B.1	Covered	Shallow clays over serpentine or rocky areas of coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland.	Limited potential to occur; limited suitable soils. Not expected because of the lack of observation during field studies.
<i>Dudleya viscida</i>	sticky dudleya	–	–	1B.2	Coverage contingent on other MHCP Subarea Plans being permitted	Cliffs and banks in coastal scrub, coastal bluff scrub, chaparral, cismontane woodland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Ericameria palmeri</i> var. <i>palmeri</i>	Palmer's goldenbush	–	–	1B.1		Granitic soil on steep, mesic hillsides of coastal scrub, chaparral.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Eryngium aristulatum</i> <i>var. parishii</i>	San Diego button-celery	FE	SE	1B.1	Coverage contingent on funding for management of Conserved Areas	Vernal pools, coastal scrub, valley and foothill grassland.	Not expected to occur; no suitable habitat.
<i>Erysimum ammophilum</i>	sand-loving wallflower	–	–	1B.2		Sandy openings in chaparral (maritime), coastal dunes, coastal scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Erythranthe diffusa</i>	Palomar monkeyflower	–	–	4.3		Granitic or sandy soils in chaparral openings and meadows in pine and oak woodland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Euphorbia misera</i>	cliff spurge	–	–	2B.2	Covered	Rocky areas in coastal bluff scrub, coastal scrub, Mojavean desert scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Ferocactus viridescens</i>	San Diego barrel cactus	–	–	2B.1	Coverage contingent on other MHCP Subarea Plans being permitted	Chaparral, coastal scrub, valley and foothill grassland.	Limited potential to occur; at edge of current known range. Not expected because of the lack of observation during field studies.
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	–	–	4.2		Clay soil in chaparral, coastal scrub, valley and foothill grassland.	Reported from the Project site (CDFW 2019; 1981 record). Not expected because of the lack of observation during field studies.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Hazardia orcuttii</i>	Orcutt's hazardia	–	ST	1B.1	Covered	Clay soil in chaparral, coastal scrub.	Limited potential to occur; limited suitable soils. Not expected because of the lack of observation during field studies.
<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	beach goldenaster	–	–	1B.1		Sandy soil in coastal dunes, coastal scrub, chaparral (coastal).	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Hordeum intercedens</i>	vernal barley	–	–	3.2		Coastal dunes, coastal scrub, saline flats and depressions in valley and foothill grassland, and vernal pools.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	–	–	1B.2		Sandy soil in coastal scrub, chaparral.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Iva hayesiana</i>	San Diego marsh-elder	–	–	2B.2	Coverage contingent on funding for management of Conserved Areas	Marshes and swamps, playas.	Not expected to occur; no suitable habitat.
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	–	–	4.2		Mesic coastal dunes, alkaline seeps, and coastal salt marshes and swamps.	Not expected to occur; no suitable habitat.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	–	–	1B.1		Alkaline soils in coastal salt marshes, playas, vernal pools.	Not expected to occur; no suitable habitat or soils.



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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	–	–	4.3		Dry soils in chaparral, coastal scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Leptosyne maritima</i>	sea dahlia	–	–	2B.2		Coastal scrub, coastal bluff scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Lycium californicum</i>	California box-thorn	–	–	4.2		Coastal bluff scrub and coastal scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Microseris douglasii</i> ssp. <i>platycarpa</i>	small-flowered microseris	–	–	4.2		Clay soils in cismontane woodland, coastal scrub, valley and foothill grassland, and vernal pools.	May occur; limited suitable soils but reported adjacent to the Project site (CCH 2019; 1998 record). Not expected because of the lack of observation during field studies.
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	–	–	3.1	Coverage contingent on funding for management of Conserved Areas	Alkaline soil in vernal pools, valley and foothill grassland.	Not expected to occur; no suitable soils.
<i>Nama stenocarpa</i>	mud nama	–	–	2B.2		Marshes and swamps.	Not expected to occur; no suitable habitat.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Navarretia fossalis</i>	spreading navarretia	FT	–	1B.1	Coverage contingent on funding for management of Conserved Areas	Vernal pools, chenopod scrub, marshes and swamps, playas.	Not expected to occur; no suitable habitat.
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	–	–	1B.2		Coastal dunes.	Not expected to occur; no suitable habitat.
<i>Nemacaulis denudata</i> var. <i>gracilis</i>	slender cottonheads	–	–	2B.2		Coastal dunes, Desert dunes, and Sonoran desert scrub.	Not expected to occur; no suitable habitat.
<i>Ophioglossum californicum</i>	California adder's-tongue	–	–	4.2		Chaparral, valley and foothill grassland, and Vernal pools.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Orcuttia californica</i>	California Orcutt grass	FE	SE	1B.1	Coverage contingent on funding for management of Conserved Areas	Vernal pools.	Not expected to occur; no suitable habitat.
<i>Orobanche parishii</i> ssp. <i>brachyloba</i>	short-lobed broomrape	–	–	4.2		Sandy soil in coastal bluff scrub, coastal dunes, coastal scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Pentachaeta aurea</i> ssp. <i>aurea</i>	golden-rayed pentachaeta	–	–	4.2		Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and valley and foothill grassland.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	Torrey pine	–	–	1B.2	Coverage contingent on funding for management of Conserved Areas	Sandstone in closed-cone coniferous forest and chaparral.	Limited potential to occur; suitable habitat. Not expected because of the lack of observation during field studies.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Quercus dumosa</i>	Nuttall's scrub oak	-	-	1B.1	Covered	Sandy soil or clay loam in closed-cone coniferous forest, chaparral, coastal scrub.	Observed in the Project site.
<i>Quercus engelmannii</i>	Engelmann oak	-	-	4.2	Coverage contingent on other MHCP Subarea Plans being permitted	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland.	Limited potential to occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Selaginella cinerascens</i>	ashy spike-moss	-	-	4.1		Chaparral and coastal scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	-	-	2B.2		Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Sphenopholis interrupta</i> ssp. <i>californica</i>	prairie false oat	-	-	1B.1		Chaparral	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<i>Stipa diegoensis</i>	San Diego County needle grass	-	-	4.2		Rocky, often mesic, soil in chaparral and coastal scrub.	Limited potential to occur; suitable habitat but at edge of current known range. Not expected because of the lack of observation during field studies.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Suaeda esteroa</i>	estuary seablite	-	-	1B.2		Marshes and swamps.	Not expected to occur; no suitable habitat.
<i>Suaeda taxifolia</i>	woolly seablite	-	-	4.2		Coastal bluff scrub, coastal dunes, marshes and swamps.	Not expected to occur; no suitable habitat.
<i>Viguiera laciniata</i>	San Diego County viguiera	-	-	4.3		Chaparral and coastal scrub.	May occur; suitable habitat. Not expected because of the lack of observation during field studies.
<b>Invertebrates</b>							
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	-		Coverage contingent on funding for management of Conserved Areas	Endemic to San Diego and Orange County mesas vernal pools and ponding areas.	Not expected to occur; no suitable habitat.
<i>Cicindela senilis frosti</i>	senile tiger beetle	-	-			Inhabits marine shoreline, from Central California coast south to salt marshes of San Diego.	Not expected to occur; no suitable habitat.
<i>Danaus plexippus</i> pop. 1	monarch - California overwintering population	-	-			Winter roost sites located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	May occur; suitable habitat.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	-		Coverage contingent on funding for management of Conserved Areas	Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Not expected to occur; no suitable habitat.
<i>Tryonia imitator</i>	mimic tryonia (=California brackishwater snail)	-	-			Inhabits coastal lagoons, estuaries and salt marshes, from Sonoma County south to San Diego County.	Not expected to occur; no suitable habitat.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<b>Fish</b>							
<i>Eucyclogobius newberryi</i>	tidewater goby	FE	SSC			Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not expected to occur; no suitable habitat.
<b>Amphibians</b>							
<i>Spea hammondi</i>	western spadefoot	–	SSC			Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Pools are essential for breeding and egg-laying.	May occur; suitable habitat.
<b>Reptiles</b>							
<i>Anniella stebbinsi</i>	southern California legless lizard	–	SSC			Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Limited potential to occur; marginally suitable habitat.
<i>Arizona elegans occidentalis</i>	California glossy snake	–	SSC			Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	May occur; suitable habitat.
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	–	WL		Covered	Inhabits low-elevation washes and sandy areas in coastal scrub, chaparral, and valley-foothill hardwood habitats.	May occur; suitable habitat.
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	–	SSC			Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	May occur; suitable habitat.

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Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Crotalus ruber</i>	red-diamond rattlesnake	–	SSC			Occurs in rocky areas and dense vegetation in chaparral, woodland, grassland, and desert. Needs rodent burrows, cracks in rocks or surface cover objects.	May occur; suitable habitat.
<i>Emys marmorata</i>	western pond turtle	–	SSC			A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation.	Not expected to occur; no suitable habitat.
<i>Phrynosoma blainvillii</i>	coast horned lizard	–	SSC			Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	May occur; suitable habitat.
<i>Plestiodon skiltonianus interparietalis</i>	Coronado skink	–	WL			Grassland, chaparral, pinon-juniper and juniper sage woodland, pine-oak and pine forests in Coast Ranges of Southern California.	May occur; suitable habitat.
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	–	SSC			Brushy or shrubby vegetation in coastal Southern California.	May occur; suitable habitat.
<i>Thamnophis hammondi</i>	two-striped gartersnake	–	SSC			Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not expected to occur; limited potential to move through uplands.
<i>Thamnophis sirtalis</i> pop. 1	south coast gartersnake	–	SSC			Marsh and upland habitats near permanent water with good strips of riparian vegetation.	Not expected to occur; limited potential to move through uplands.

**SPECIAL STATUS PLANT AND WILDLIFE SPECIES  
REPORTED FROM THE VICINITY OF THE PROJECT SITE**

Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<b>Birds</b>							
<i>Accipiter cooperii</i>	Cooper's hawk	–	WL		Covered	Woodland, chiefly of open, interrupted or marginal type.	May occur for foraging and nesting; suitable habitat.
<i>Agelaius tricolor</i>	tricolored blackbird	–	CE, SSC			Requires open water, protected nesting substrate, and foraging area with insect prey.	Not expected to occur; no suitable habitat.
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	–	WL		Covered	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	May occur for foraging and nesting; suitable habitat.
<i>Aquila chrysaetos</i>	golden eagle	–	FP, WL			Rolling foothills, mountain areas, sage-juniper flats, and desert. Nests in cliff-walled canyons.	Limited potential to occur for foraging; marginally suitable foraging habitat. Not expected to occur for nesting; no suitable nesting habitat.
<i>Artemisospiza belli belli</i>	Bell's sage sparrow	–	WL			Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	May occur for foraging and nesting; suitable habitat.
<i>Athene cunicularia</i>	burrowing owl	–	SSC			Open, dry annual or perennial grasslands, deserts, and scrublands with low-growing vegetation and suitable burrow sites.	May occur for foraging and nesting; suitable habitat.
<i>Buteo swainsoni</i>	Swainson's hawk	–	ST			Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Limited potential to occur for foraging; marginally suitable foraging habitat. Not expected to occur for nesting; does not nest in region.

**SPECIAL STATUS PLANT AND WILDLIFE SPECIES  
REPORTED FROM THE VICINITY OF THE PROJECT SITE**

Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	–	SSC			Coastal sage scrub with tall cactus for nesting and roosting.	Not expected to occur; no suitable habitat.
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT	SSC		Covered	Sandy beaches, salt pond levees & shores of large alkali lakes.	Not expected to occur; no suitable habitat.
<i>Circus hudsonius</i>	northern harrier	–	SSC			Coastal salt & freshwater marsh. Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas.	May occur for foraging and nesting; suitable habitat.
<i>Elanus leucurus</i>	white-tailed kite	–	FP, WL			Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	May occur for foraging and nesting; suitable habitat.
<i>Empidonax traillii eximius</i>	southwestern willow flycatcher	FE	SE		Covered	Riparian woodland.	Not expected to occur; no suitable habitat.
<i>Eremophila alpestris actia</i>	California horned lark	–	WL			Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Limited potential to occur for foraging and nesting; marginally suitable habitat.
<i>Icteria virens</i>	yellow-breasted chat	–	SSC		Covered	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Not expected to occur; no suitable habitat.
<i>Lanius ludovicianus</i>	loggerhead shrike	–	SSC			Open grasslands with scattered shrubs and trees.	Observed in the Project site.
<i>Laterallus jamaicensis coturniculus</i>	California black rail	–	ST, FP			Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	Not expected to occur; no suitable habitat.



**SPECIAL STATUS PLANT AND WILDLIFE SPECIES  
REPORTED FROM THE VICINITY OF THE PROJECT SITE**

Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	–	SE		Covered	Inhabits coastal salt marshes, from Santa Barbara south through San Diego County.	Not expected to occur; no suitable habitat.
<i>Plegadis chihi</i>	white-faced ibis	–	WL		Covered	Dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	Not expected to occur; no suitable habitat.
<i>Polioptila californica californica</i>	coastal California gnatcatcher	FT	SSC		Covered	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Reported from the Project site (CDFW 2019; 2013 record).
<i>Rallus obsoletus levipes</i>	light-footed Ridgway's rail	FE	SE, FP			Found in salt marshes traversed by tidal sloughs, where cordgrass and pickleweed are the dominant vegetation.	Not expected to occur; no suitable habitat.
<i>Riparia riparia</i>	bank swallow	–	ST			Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.	Not expected to occur; no suitable habitat.
<i>Setophaga petechia</i>	yellow warbler	–	SSC			Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Not expected to occur; no suitable habitat.
<i>Sternula antillarum browni</i>	California least tern	FE	SE, FP		Covered	Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, land fills, or paved areas.	Not expected to occur; no suitable habitat.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE	SE		Covered	Riparian forest, riparian scrub, riparian woodland.	Not expected to occur; no suitable habitat.

**SPECIAL STATUS PLANT AND WILDLIFE SPECIES  
REPORTED FROM THE VICINITY OF THE PROJECT SITE**

Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<b>Mammals</b>							
<i>Antrozous pallidus</i>	pallid bat	–	SSC			Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	May occur for foraging and roosting; suitable habitat.
<i>Chaetodipus californicus femoralis</i>	Dulzura pocket mouse	–	SSC			Variety of habitats including coastal scrub, chaparral & grassland in San Diego County.	May occur; suitable habitat.
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	–	SSC			Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	May occur; suitable habitat.
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	–	SSC			Pinon and juniper woodlands, riparian scrub, and Sonoran thorn woodland. Roosts in caves and buildings.	Not expected to occur; no suitable habitat.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	–	SSC			Throughout California in a wide variety of habitats. Most common in mesic sites.	May occur for foraging; suitable foraging habitat. Limited potential to occur for roosting; marginally suitable roosting habitat.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE	ST			Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover.	Not expected to occur; potentially suitable habitat, but no historic occurrences and surrounding urban development limits potential.

**SPECIAL STATUS PLANT AND WILDLIFE SPECIES  
REPORTED FROM THE VICINITY OF THE PROJECT SITE**

Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur
<i>Eumops perotis californicus</i>	western mastiff bat	–	SSC			Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	May occur for foraging; suitable foraging habitat. Limited potential to occur for roosting; marginally suitable roosting habitat.
<i>Lasiurus cinereus</i>	hoary bat	–	–			Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of trees.	Limited potential to occur for foraging and roosting; marginally suitable foraging and roosting habitat.
<i>Lasiurus xanthinus</i>	western yellow bat	–	SSC			Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees.	Not expected to occur; no suitable habitat.
<i>Leptonycteris yerbabuenae</i>	lesser long-nosed bat	Delisted	–			Arid regions such as desert grasslands and shrub land. Suitable day roosts (caves & mines) and suitable concentrations of food plants (columnar cacti & agaves) are critical resources. No maternity roosts known from California; may only be vagrant.	Not expected to occur; no suitable habitat.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	–	SSC			Coastal sage scrub habitats in Southern California.	Low potential to occur; marginally suitable habitat.
<i>Myotis yumanensis</i>	Yuma myotis	–	–			Optimal habitats are open forests and woodlands with sources of water over which to feed. Maternity colonies in caves, mines, buildings or crevices.	May occur for foraging and roosting; suitable habitat.

**SPECIAL STATUS PLANT AND WILDLIFE SPECIES  
REPORTED FROM THE VICINITY OF THE PROJECT SITE**

Scientific Name	Common Name	Federal	State	CRPR	Covered under the MHCP Subarea Plan	Habitat	Potential to Occur														
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	–	SSC			Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	May occur; suitable habitat.														
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	–	SSC			Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Not expected to occur; no suitable habitat.														
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE	SSC			Coastal scrub.	Not expected to occur; no suitable habitat.														
<i>Taxidea taxus</i>	American badger	–	SSC			Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils.	Not expected to occur due to surrounding development; marginally suitable habitat.														
<p>CRPR: California Rare Plant Rank, MHCP: Multiple Habitat Conservation Plan</p> <p><b>Species Status:</b></p> <table border="0"> <tr> <td><b>Federal (USFWS)</b></td> <td><b>State (CDFW)</b></td> </tr> <tr> <td>FE Endangered</td> <td>SE Endangered</td> </tr> <tr> <td>FT Threatened</td> <td>ST Threatened</td> </tr> <tr> <td></td> <td>CE Candidate Endangered</td> </tr> <tr> <td></td> <td>FP Fully Protected</td> </tr> <tr> <td></td> <td>SSC Species of Special Concern</td> </tr> <tr> <td></td> <td>WL Watch List</td> </tr> </table> <p><b>CRPR</b></p> <p>1B Plants Rare, Threatened, or Endangered in California and elsewhere                  2B Plants Rare, Threatened, or Endangered in California, but more common elsewhere                  3 Plants about which we need more information - review list                  4 Plants of limited distribution - watch list</p> <p><b>Threat Code Extensions</b></p> <p>None Plants lacking any threat information                  .1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)                  .2 Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)                  .3 Not very threatened in California (&lt;20% of occurrences threatened; low degree and immediacy of threat or no current threats known)</p>								<b>Federal (USFWS)</b>	<b>State (CDFW)</b>	FE Endangered	SE Endangered	FT Threatened	ST Threatened		CE Candidate Endangered		FP Fully Protected		SSC Species of Special Concern		WL Watch List
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**ATTACHMENT B**  
**SITE PLAN**



**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 (12 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

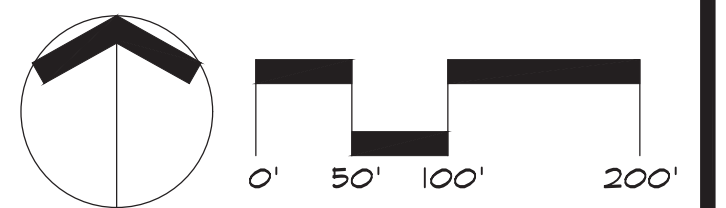
**CONSTRUCTION LEGEND**

CONSTRUCT:

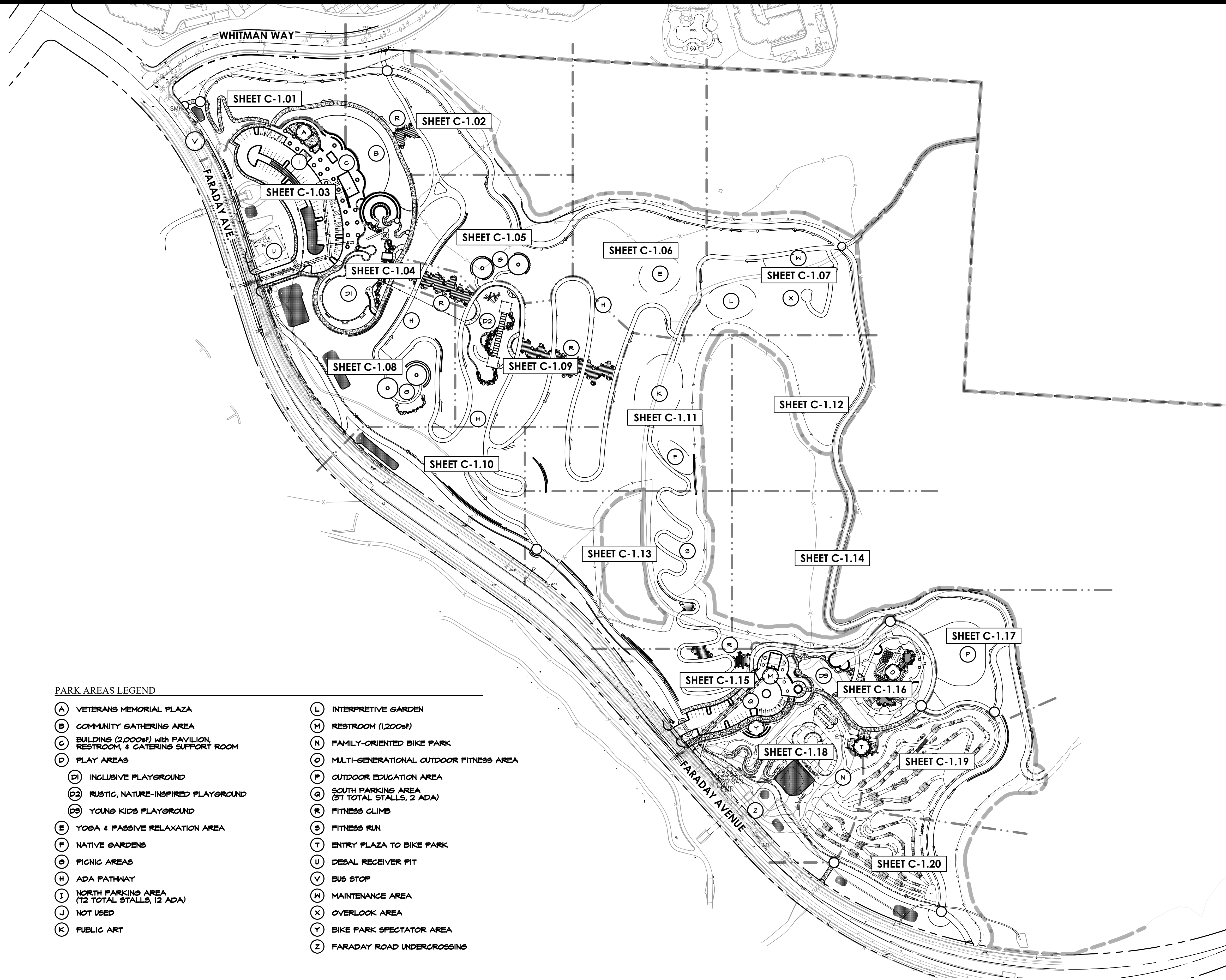
- (1) INTERNAL PATHWAY (PERMEABLE)
- (2) CONCRETE SIDEWALK (VEHICULAR RATED)
- (3) FITNESS RUN (8' WIDE, PERMEABLE)
- (4) DECORATIVE CONCRETE
- (5) DECORATIVE PAVING
- (6) RESILIENT SURFACING (PERMEABLE)
- (7) VEHICULAR ASPHALT DRIVE AISLES
- (8) VEHICULAR PARKING STALLS (ASPHALT PAVING)
- (9) BIKE PARK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

**BOUNDARY LEGEND**

- 20' HABITAT BUFFER
- HABITAT MANAGEMENT PLAN BOUNDARY



**ATTACHMENT C**  
**GRADING PLAN**



EARTHWORK		
<b>AREA DISTURBED:</b>	37.1±	ACRES
<b>CUT</b>	216,250	CUBIC YARDS
SHRINKAGE (13%±)	(28,100)	CUBIC YARDS
<b>FILL</b>	173,200	CUBIC YARDS
SHRINKAGE (O/E) (13%±)	650	CUBIC YARDS
SUBSIDENCE (0.1'±)	6,000	CUBIC YARDS
<b>EXPORT</b>	8,300	CUBIC YARDS
<b>OVER-EXCAVATION *</b>	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 14% - 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.

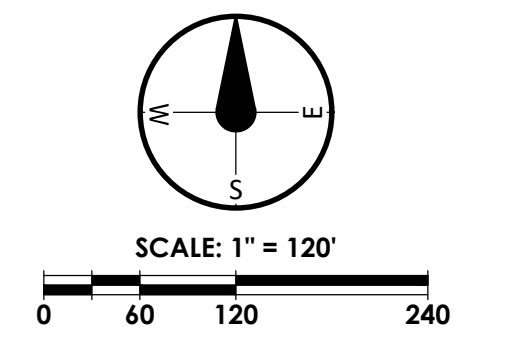
**BASIS OF BEARINGS**

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:

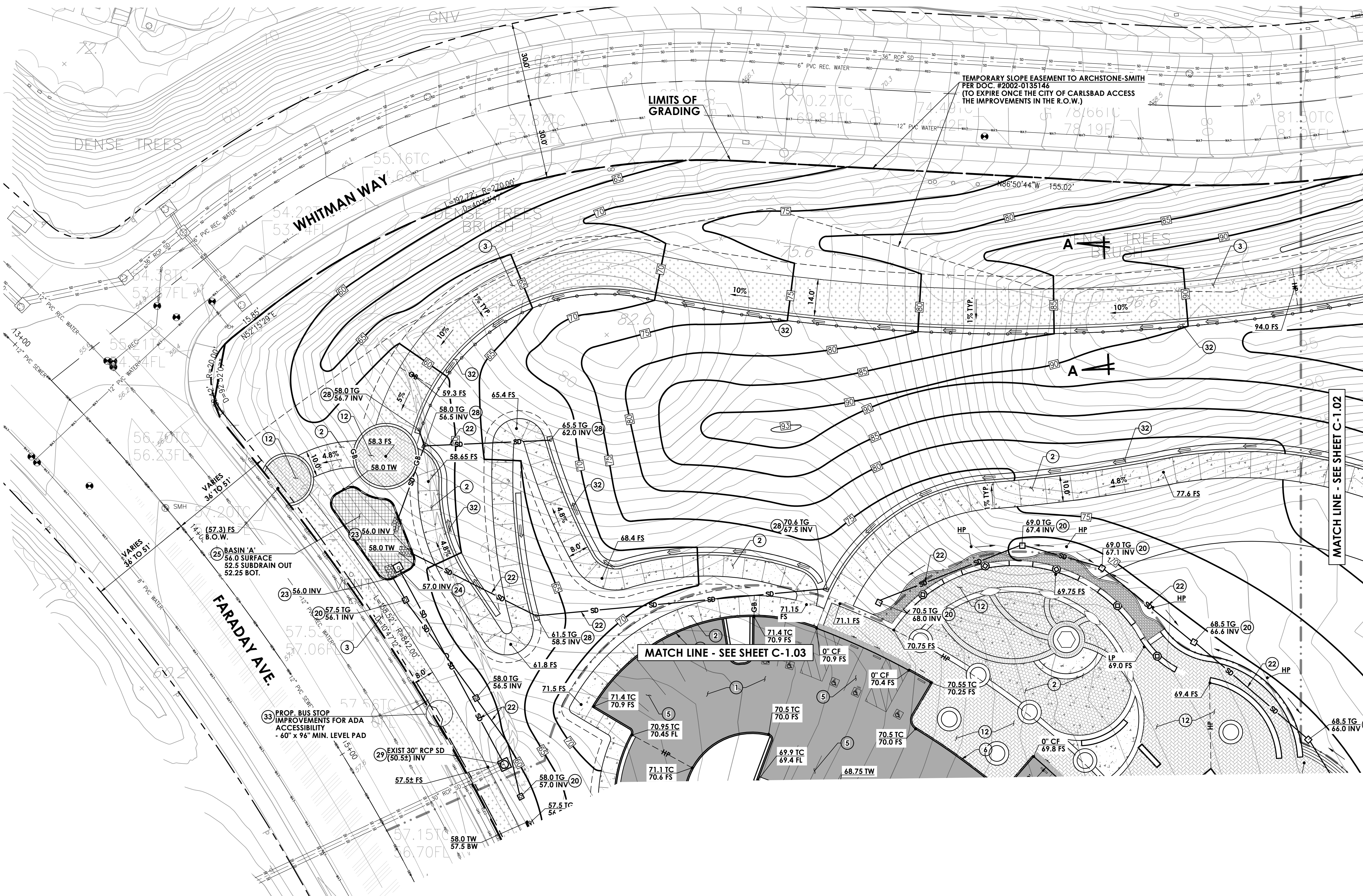
REFERENCED STATIONS CONNECTED PER ROS 17271:  
105, 109, 58, 57, 56, 130

**PARK AREAS LEGEND**

- |   |   |
|---|---|
| (A) VETERANS MEMORIAL PLAZA   | (L) INTERPRETIVE GARDEN                         |
| (B) COMMUNITY GATHERING AREA  | (M) RESTROOM (1,200sf)                          |
| (C) BUILDING (2,000sf) WITH PAVILION, RESTROOM, & CATERING SUPPORT ROOM | (N) FAMILY-ORIENTED BIKE PARK                   |
| (D) PLAY AREAS  | (O) MULTI-GENERATIONAL OUTDOOR FITNESS AREA     |
| (D1) INCLUSIVE PLAYGROUND   | (P) OUTDOOR EDUCATION AREA                      |
| (D2) RUSTIC, NATURE-INSPIRED PLAYGROUND                                 | (Q) SOUTH PARKING AREA (51 TOTAL STALLS, 2 ADA) |
| (D3) YOUNG KIDS PLAYGROUND  | (R) FITNESS CLIMB                               |
| (E) YOGA & PASSIVE RELAXATION AREA                                      | (S) FITNESS RUN                                 |
| (F) NATIVE GARDENS  | (T) ENTRY PLAZA TO BIKE PARK                    |
| (G) PICNIC AREAS  | (U) DESAL RECEIVER PIT                          |
| (H) ADA PATHWAY   | (V) BUS STOP                                    |
| (I) NORTH PARKING AREA (12 TOTAL STALLS, 12 ADA)                        | (W) MAINTENANCE AREA                            |
| (J) NOT USED  | (X) OVERLOOK AREA                               |
| (K) PUBLIC ART  | (Y) BIKE PARK SPECTATOR AREA                    |
|   | (Z) FARADAY ROAD UNDERCROSSING                  |



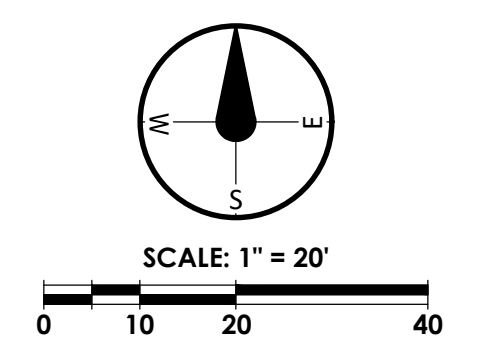
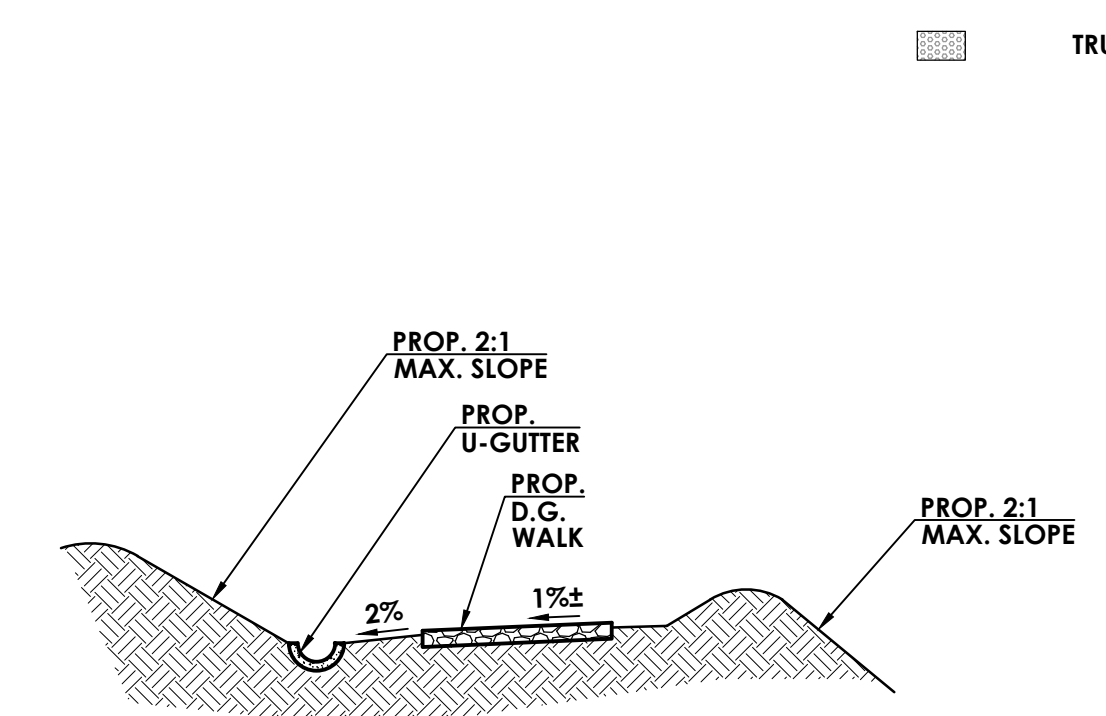
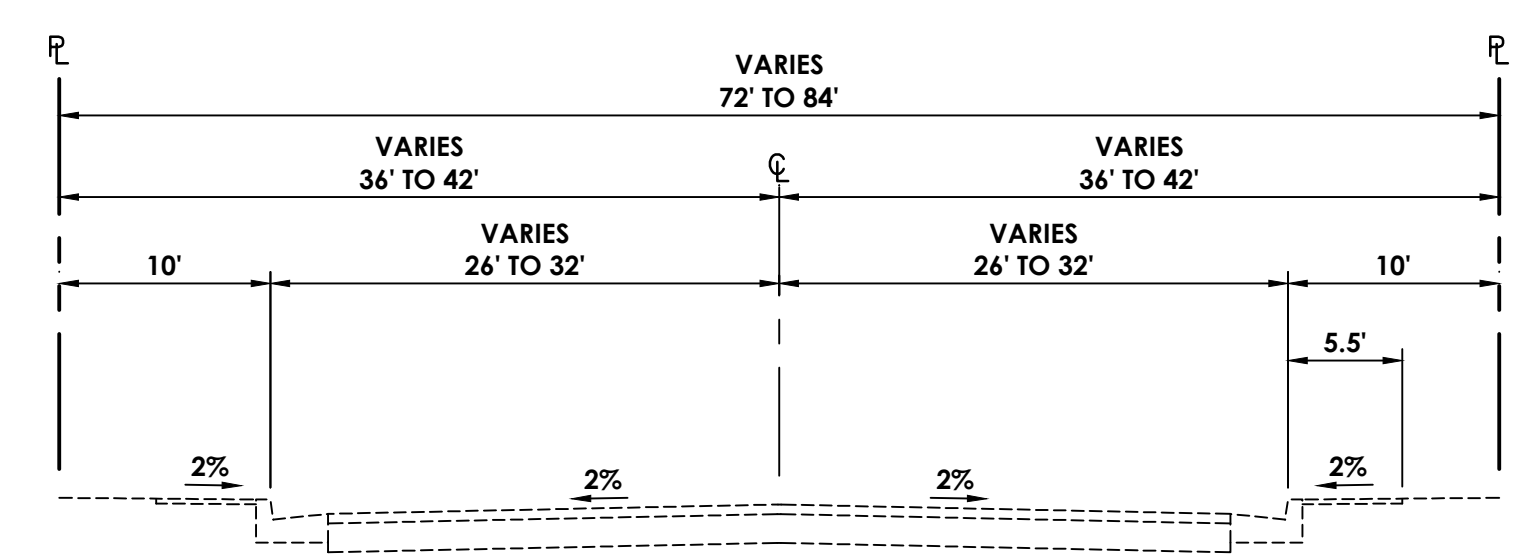
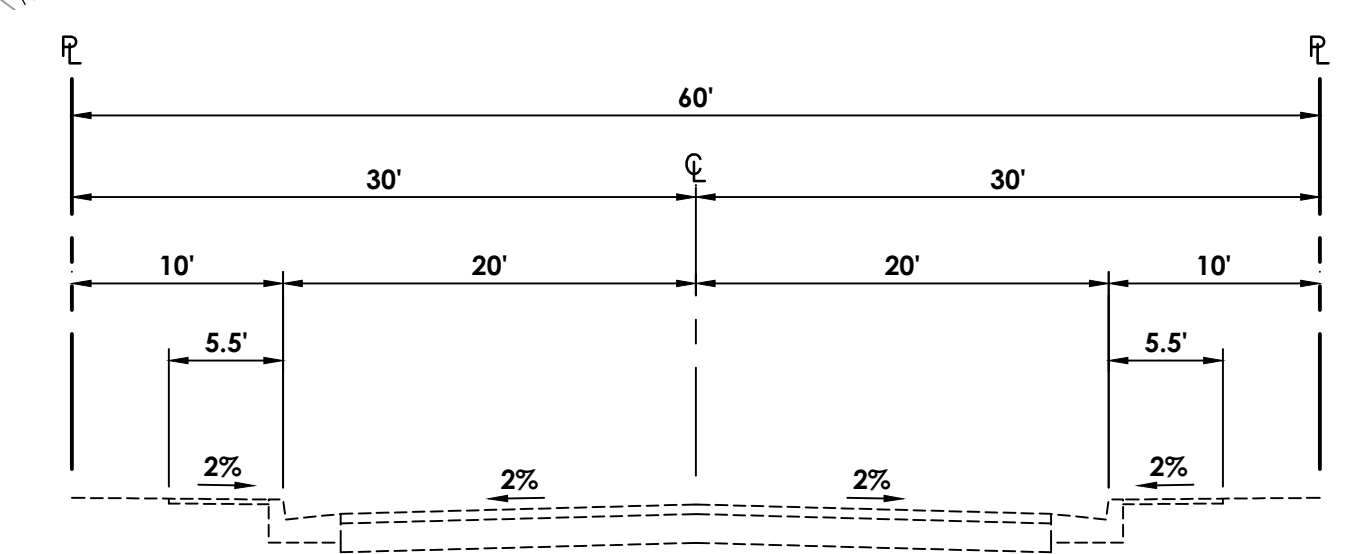


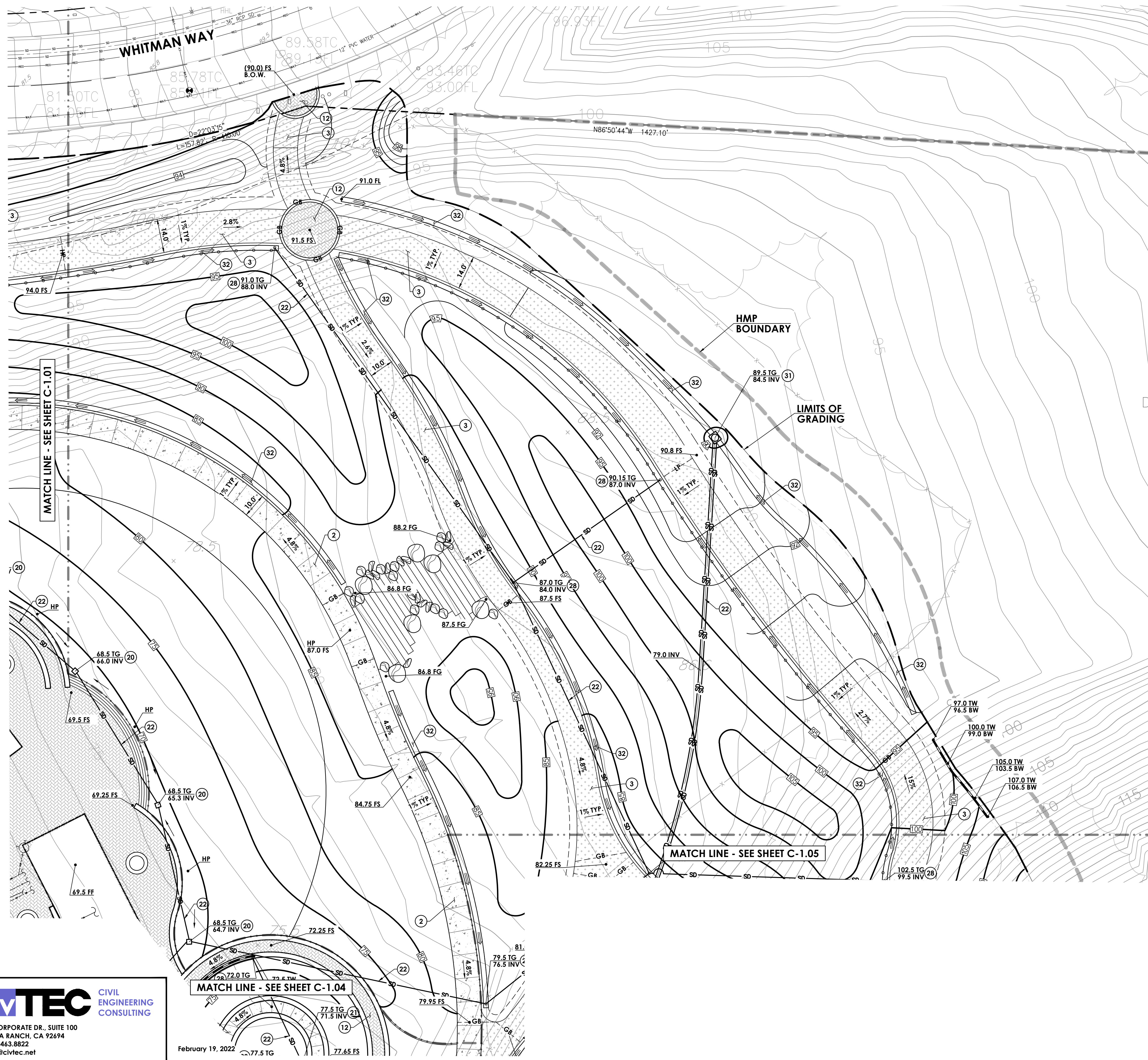


- GENERAL CONSTRUCTION NOTES**
- CONSTRUCT A.C./A.B. PAVEMENT (DRIVE AISLES) PER SOILS ENGINEER RECOMMENDATIONS
  - CONSTRUCT CONCRETE SURFACE PER LANDSCAPE ARCHITECT PLANS
  - CONSTRUCT D.G. SURFACE PER LANDSCAPE ARCHITECT PLANS
  - CONSTRUCT RESILIENT SURFACE PER LANDSCAPE ARCHITECT PLANS
  - CONSTRUCT A.C./A.B. PAVEMENT (PARKING STALLS) PER SOILS ENGINEER RECOMMENDATIONS
  - CONSTRUCT CURB PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT CURB & GUTTER PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT CURB RAMP PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT 3-FOOT WIDE V-GUTTER (IN PARKING AREAS)
  - PROTECT IN PLACE
  - CONSTRUCT ALLEY APRON PER S.D.R.S.D. DWG. NO. G-17
  - CONSTRUCT DECORATIVE PAVING SURFACE PER LANDSCAPE ARCHITECT PLANS
- STORM DRAIN CONSTRUCTION NOTES**
- CONSTRUCT CATCH BASIN & GRATE
  - CONSTRUCT ATRIUM DRAIN
  - CONSTRUCT PVC (SDR 35) OR H.D.P.E. STORM DRAIN PIPE, BEDDING PER S.D.R.S.D. DWG. NO. D-60
  - CONSTRUCT HEADWALL (INLET) AND TRASH RACK PER DETAIL ON SHEET C-0.02
  - CONSTRUCT 24"x24" CATCH BASIN & GRATE (OUTLET) PER DETAIL ON SHEET C-0.02
  - CONSTRUCT BIOFILTRATION AREA WITH UNDERDRAIN PER DETAIL ON SHEET C-0.02
  - CONNECT TO RESILIENT SURFACE DRAIN
  - CONSTRUCT CONCRETE WEIR PER DETAIL ON SHEET C-0.02
  - CONSTRUCT INLET AT U-DITCH
  - CONSTRUCT STORM DRAIN CLEANOUT - TYPE 'A' - PER S.D.R.S.D. DWG. NO. D-09
  - CONSTRUCT CURB INLET CATCH BASIN PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT CATCH BASIN - TYPE 'F' - PER S.D.R.S.D. DWG. NO. D-07
  - CONSTRUCT BROW DITCH - TYPE 'B' - PER S.D.R.S.D. DWG. NO. D-75
  - CONSTRUCT LEVEL PAD FOR BUS STOP
  - CONSTRUCT 18" WIDE U-CHANNEL WITH SOLID METAL COVER

**LEGEND**

—	PROPERTY LINE	—	SLOPE
- - -	MATCH LINE	—	CURB
—	PROPOSED CONTOUR	—	CURB & GUTTER
—	PROP. RETAINING WALL	—	3-FOOT WIDE V-GUTTER
—	HMP BOUNDARY	—	PEDESTRIAN RAMP
—	20-FOOT BUFFER	—	PROPOSED STORM DRAIN
—	SIGHT DISTANCE	—	PROPOSED DOMESTIC WATER
—	CONCRETE PAVERS (IMPERVIOUS)	—	PROPOSED RECLAIMED WATER
—	D.G. PAVING (PERVIOUS)	—	PROPOSED SEWER
—	PAVERS (IMPERVIOUS)	—	PROPOSED ELECTRIC LINE
—	RESILIENT SURFACE (IMPERVIOUS)	—	SPLIT RAIL FENCE
—	CONCRETE (IMPERVIOUS)	—	PERIMETER FENCE
—	A.C. PAVING (IMPERVIOUS)	—	EXISTING CONTOUR
—	BIOFILTRATION AREA	—	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	—	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	—	EXISTING MANHOLE
—	FLOW DIRECTION/BROW DITCH	—	EXISTING FIRE HYDRANT
□	TYPE 'F' CATCH BASIN	—	EXISTING WATER VALVE
□	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
—	RIP RAP		
—	TRUNCATED DOME PAVERS		

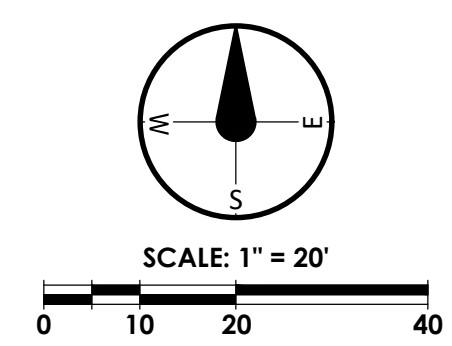




- GENERAL CONSTRUCTION NOTES**
- ① CONSTRUCT A.C./A.B. PAVEMENT (DRIVE AISLES) PER SOILS ENGINEER RECOMMENDATIONS
  - ② CONSTRUCT CONCRETE SURFACE PER LANDSCAPE ARCHITECT PLANS
  - ③ CONSTRUCT D.G. SURFACE PER LANDSCAPE ARCHITECT PLANS
  - ④ CONSTRUCT RESILIENT SURFACE PER LANDSCAPE ARCHITECT PLANS
  - ⑤ CONSTRUCT A.C./A.B. PAVEMENT (PARKING STALLS) PER SOILS ENGINEER RECOMMENDATIONS
  - ⑥ CONSTRUCT CURB PER S.D.R.S.D. STANDARD DETAIL
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  - ⑨ CONSTRUCT 3-FOOT WIDE V-GUTTER (IN PARKING AREAS)
  - ⑩ PROTECT IN PLACE
  - ⑪ CONSTRUCT ALLEY APRON PER S.D.R.S.D. DWG. NO. G-17
  - ⑫ CONSTRUCT DECORATIVE PAVING SURFACE PER LANDSCAPE ARCHITECT PLANS
- STORM DRAIN CONSTRUCTION NOTES**
- ⑳ CONSTRUCT CATCH BASIN & GRATE
  - ㉑ CONSTRUCT ATRIUM DRAIN
  - ㉒ CONSTRUCT PVC (SDR 35) OR H.D.P.E. STORM DRAIN PIPE, BEDDING PER S.D.R.S.D. DWG. NO. D-60
  - ㉓ CONSTRUCT HEADWALL (INLET) AND TRASH RACK PER DETAIL ON SHEET C-0.02
  - ㉔ CONSTRUCT 24"x24" CATCH BASIN & GRATE (OUTLET) PER DETAIL ON SHEET C-0.02
  - ㉕ CONSTRUCT BIOFILTRATION AREA WITH UNDERDRAIN PER DETAIL ON SHEET C-0.02
  - ㉖ CONNECT TO RESILIENT SURFACE DRAIN
  - ㉗ CONSTRUCT CONCRETE WEIR PER DETAIL ON SHEET C-0.02
  - ㉘ CONSTRUCT INLET AT U-DITCH
  - ㉙ CONSTRUCT STORM DRAIN CLEANOUT - TYPE 'A' - PER S.D.R.S.D. DWG. NO. D-09
  - ㉚ CONSTRUCT CURB INLET CATCH BASIN PER S.D.R.S.D. STANDARD DETAIL
  - ㉛ CONSTRUCT CATCH BASIN - TYPE 'F' - PER S.D.R.S.D. DWG. NO. D-07
  - ㉜ CONSTRUCT BROW DITCH - TYPE 'B' - PER S.D.R.S.D. DWG. NO. D-75
  - ㉝ CONSTRUCT LEVEL PAD FOR BUS STOP
  - ㉞ CONSTRUCT 18" WIDE U-CHANNEL WITH SOLID METAL COVER

**LEGEND**

	PROPERTY LINE		SLOPE
	MATCH LINE		CURB
	PROPOSED CONTOUR		CURB & GUTTER
	PROP. RETAINING WALL		3-FOOT WIDE V-GUTTER
	HMP BOUNDARY		PEDESTRIAN RAMP
	20-FOOT BUFFER		PROPOSED STORM DRAIN
	SIGHT DISTANCE		PROPOSED DOMESTIC WATER
	CONCRETE PAVERS (IMPERVIOUS)		PROPOSED RECLAIMED WATER
	D.G. PAVING (PERVIOUS)		PROPOSED SEWER
	PAVERS (IMPERVIOUS)		PROPOSED ELECTRIC LINE
	RESILIENT SURFACE (IMPERVIOUS)		SPLIT RAIL FENCE
	CONCRETE (IMPERVIOUS)		PERIMETER FENCE
	A.C. PAVING (IMPERVIOUS)		EXISTING CONTOUR
	BIOFILTRATION AREA		EXISTING STREET LIGHT
	CATCH BASIN & GRATE		EXISTING MISC. UTIL. BOX
	ATRIUM DRAIN		EXISTING MANHOLE
	FLOW DIRECTION/BROW DITCH		EXISTING FIRE HYDRANT
	TYPE 'F' CATCH BASIN		EXISTING WATER VALVE
	TYPE 'A' CLEAN OUT		
	CURB INLET CATCH BASIN		
	RIP RAP		
	TRUNCATED DOME PAVERS		

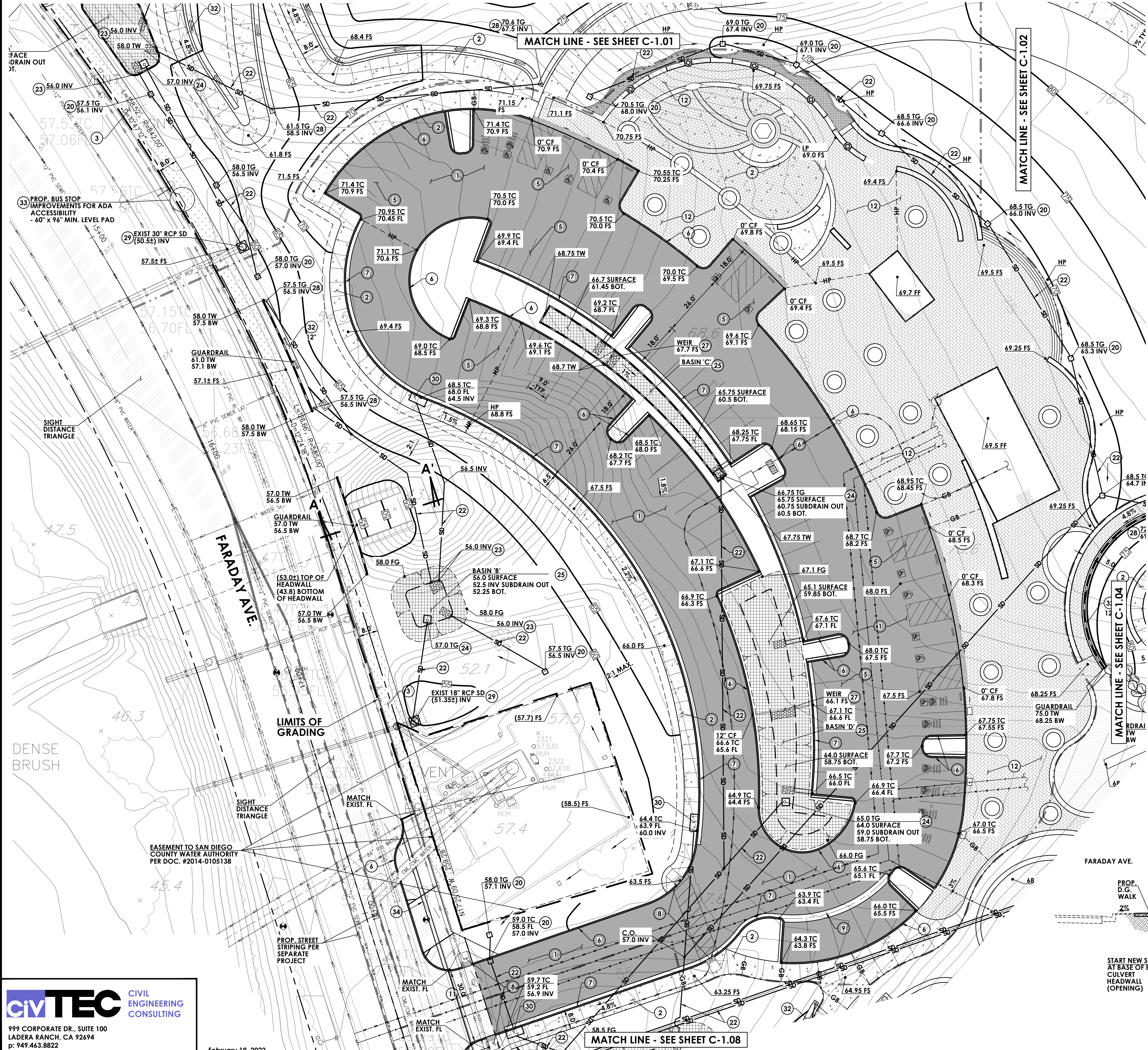


SHEET C-1.02

**CIVITEC** CIVIL ENGINEERING CONSULTING  
 999 CORPORATE DR., SUITE 100  
 LADERA RANCH, CA 92694  
 p: 949.463.8822  
 e: tec@civitec.net

February 19, 2022

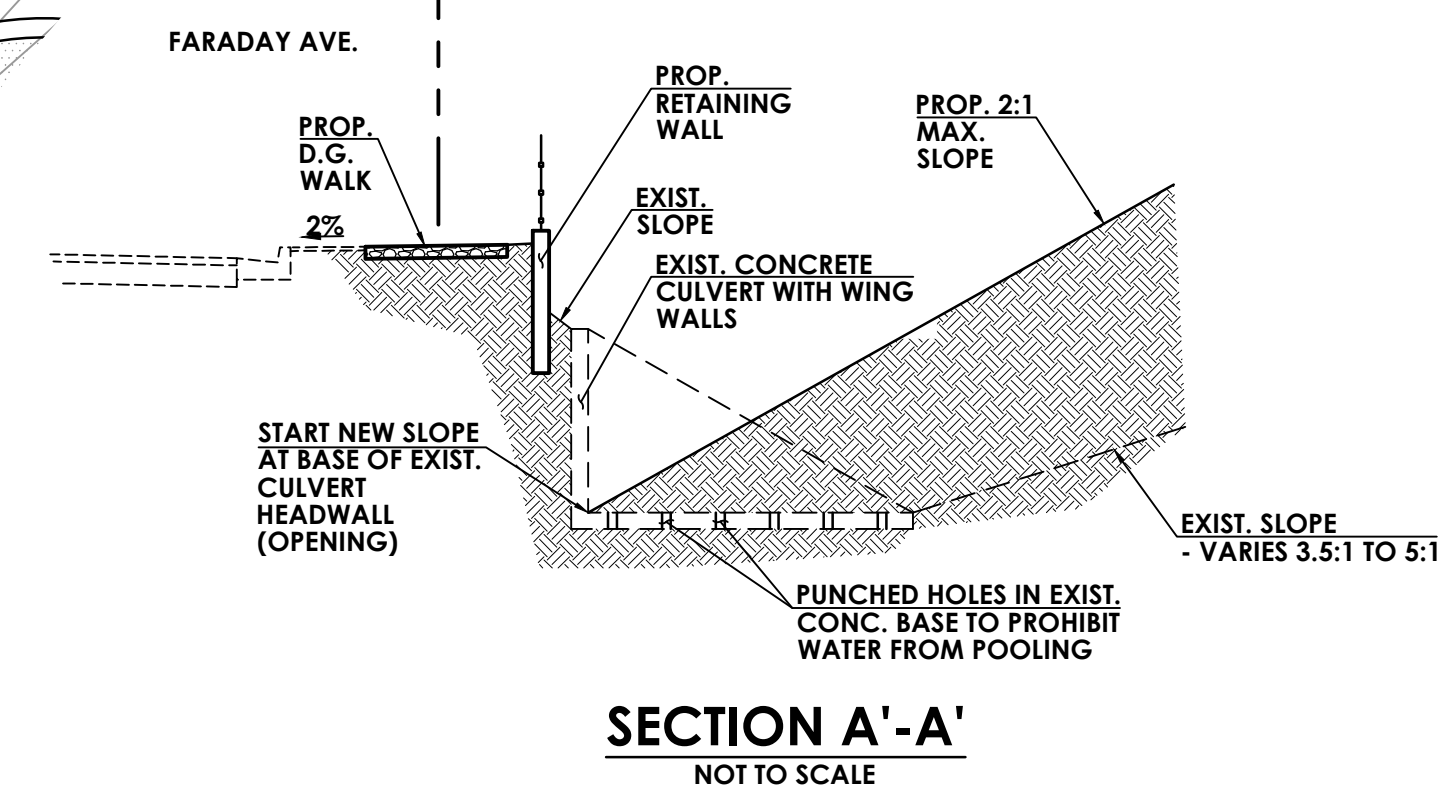
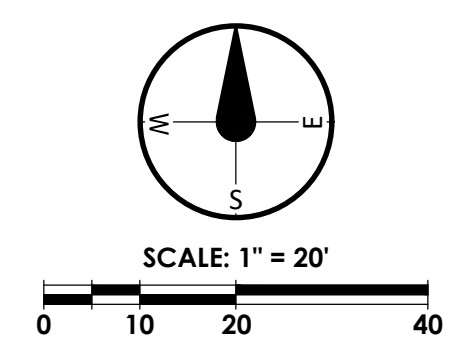
SHEET <b>8</b>	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS <b>40</b>
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. <b>CIP 4609</b>		DRAWING NO.



- GENERAL CONSTRUCTION NOTES**
- CONSTRUCT A.C./A.B. PAVEMENT (DRIVE AISLES) PER SOILS ENGINEER RECOMMENDATIONS
  - CONSTRUCT CONCRETE SURFACE PER LANDSCAPE ARCHITECT PLANS
  - CONSTRUCT D.G. SURFACE PER LANDSCAPE ARCHITECT PLANS
  - CONSTRUCT RESILIENT SURFACE PER LANDSCAPE ARCHITECT PLANS
  - CONSTRUCT A.C./A.B. PAVEMENT (PARKING STALLS) PER SOILS ENGINEER RECOMMENDATIONS
  - CONSTRUCT CURB PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT CURB & GUTTER PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT CURB RAMP PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT 3-FOOT WIDE V-GUTTER (IN PARKING AREAS)
  - PROTECT IN PLACE
  - CONSTRUCT ALLEY APRON PER S.D.R.S.D. DWG. NO. G-17
  - CONSTRUCT DECORATIVE PAVING SURFACE PER LANDSCAPE ARCHITECT PLANS
- STORM DRAIN CONSTRUCTION NOTES**
- CONSTRUCT CATCH BASIN & GRATE
  - CONSTRUCT ATRIUM DRAIN
  - CONSTRUCT PVC (SDR 35) OR H.D.P.E. STORM DRAIN PIPE, BEDDING PER S.D.R.S.D. DWG. NO. D-60
  - CONSTRUCT HEADWALL (INLET) AND TRASH RACK PER DETAIL ON SHEET C-0.02
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  - CONNECT TO RESILIENT SURFACE DRAIN
  - CONSTRUCT CONCRETE WEIR PER DETAIL ON SHEET C-0.02
  - CONSTRUCT INLET AT U-DITCH
  - CONSTRUCT STORM DRAIN CLEANOUT - TYPE 'A' - PER S.D.R.S.D. DWG. NO. D-09
  - CONSTRUCT CURB INLET CATCH BASIN PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT CATCH BASIN - TYPE 'F' - PER S.D.R.S.D. DWG. NO. D-07
  - CONSTRUCT BROW DITCH - TYPE 'B' - PER S.D.R.S.D. DWG. NO. D-75
  - CONSTRUCT LEVEL PAD FOR BUS STOP
  - CONSTRUCT 18" WIDE U-CHANNEL WITH SOLID METAL COVER

**LEGEND**

—	PROPERTY LINE	—	SLOPE
- - -	MATCH LINE	—	CURB
—	PROPOSED CONTOUR	—	CURB & GUTTER
—	PROP. RETAINING WALL	—	3-FOOT WIDE V-GUTTER
—	HMP BOUNDARY	—	PEDESTRIAN RAMP
—	20-FOOT BUFFER	—	PROPOSED STORM DRAIN
—	SIGHT DISTANCE	—	PROPOSED DOMESTIC WATER
—	CONCRETE PAVERS (IMPERVIOUS)	—	PROPOSED RECLAIMED WATER
—	D.G. PAVING (PERVIOUS)	—	PROPOSED SEWER
—	PAVERS (IMPERVIOUS)	—	PROPOSED ELECTRIC LINE
—	RESILIENT SURFACE (IMPERVIOUS)	—	SPLIT RAIL FENCE
—	CONCRETE (IMPERVIOUS)	—	PERIMETER FENCE
—	A.C. PAVING (IMPERVIOUS)	—	EXISTING CONTOUR
—	BIOFILTRATION AREA	—	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
—	FLOW DIRECTION/BROW DITCH	+	EXISTING FIRE HYDRANT
□	TYPE 'F' CATCH BASIN	+	EXISTING WATER VALVE
□	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
—	RIP RAP		
—	TRUNCATED DOME PAVERS		

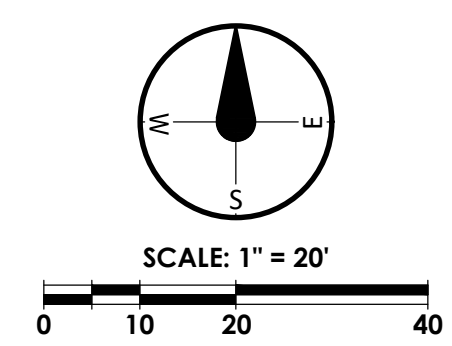




- GENERAL CONSTRUCTION NOTES**
- 1 CONSTRUCT A.C./A.B. PAVEMENT (DRIVE AISLES) PER SOILS ENGINEER RECOMMENDATIONS
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  - 4 CONSTRUCT RESILIENT SURFACE PER LANDSCAPE ARCHITECT PLANS
  - 5 CONSTRUCT A.C./A.B. PAVEMENT (PARKING STALLS) PER SOILS ENGINEER RECOMMENDATIONS
  - 6 CONSTRUCT CURB PER S.D.R.S.D. STANDARD DETAIL
  - 7 CONSTRUCT CURB & GUTTER PER S.D.R.S.D. STANDARD DETAIL
  - 8 CONSTRUCT CURB RAMP PER S.D.R.S.D. STANDARD DETAIL
  - 9 CONSTRUCT 3-FOOT WIDE V-GUTTER (IN PARKING AREAS)
  - 10 PROTECT IN PLACE
  - 11 CONSTRUCT ALLEY APRON PER S.D.R.S.D. DWG. NO. G-17
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  - 21 CONSTRUCT ATRIUM DRAIN
  - 22 CONSTRUCT PVC (SDR 35) OR H.D.P.E. STORM DRAIN PIPE, BEDDING PER S.D.R.S.D. DWG. NO. D-60
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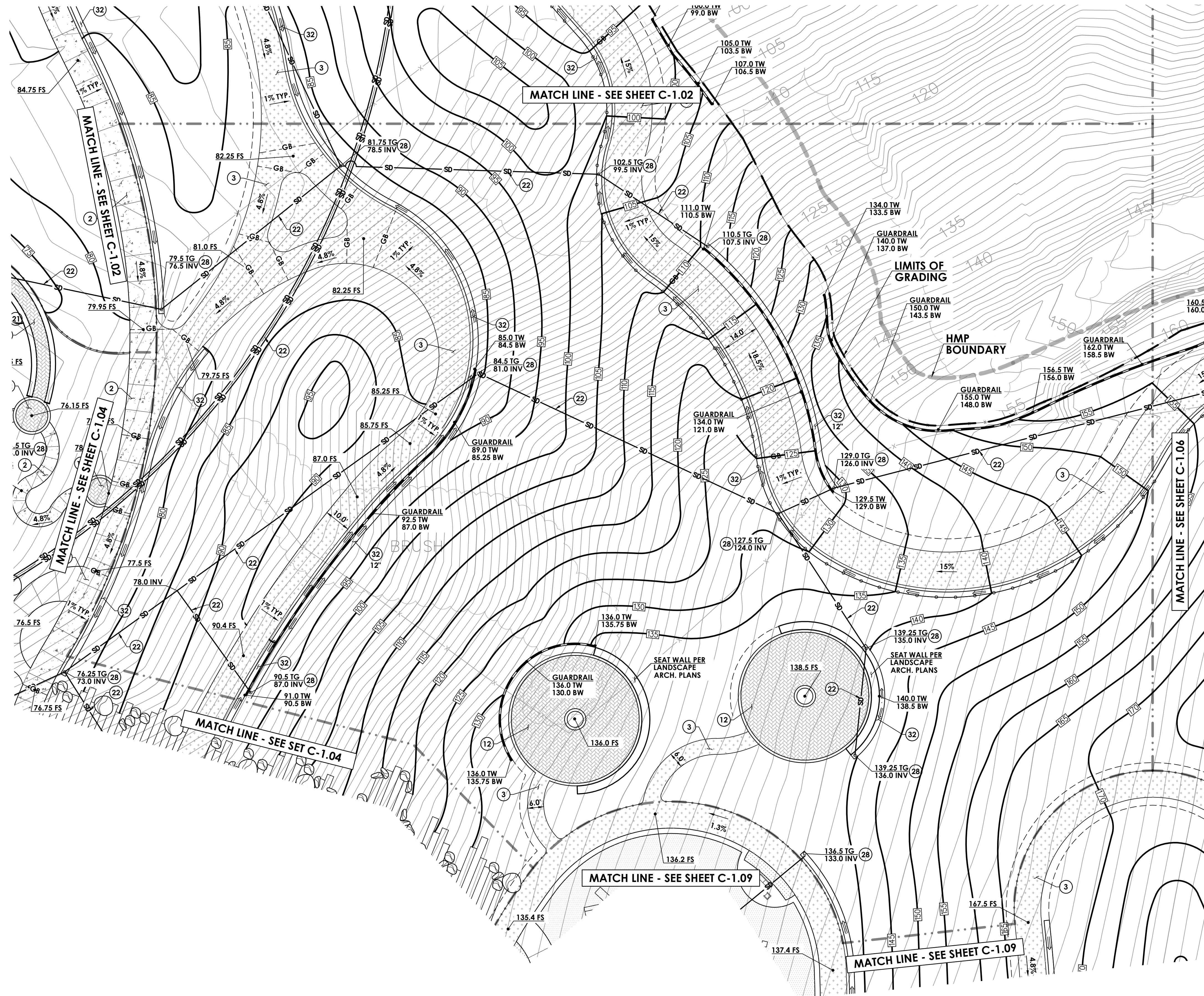
**LEGEND**

	PROPERTY LINE		SLOPE
	MATCH LINE		CURB
	PROPOSED CONTOUR		CURB & GUTTER
	PROP. RETAINING WALL		3-FOOT WIDE V-GUTTER
	HMP BOUNDARY		PEDESTRIAN RAMP
	20-FOOT BUFFER		PROPOSED STORM DRAIN
	SIGHT DISTANCE		PROPOSED DOMESTIC WATER
	CONCRETE PAVERS (IMPERVIOUS)		PROPOSED RECLAIMED WATER
	D.G. PAVING (PERVIOUS)		PROPOSED SEWER
	PAVERS (IMPERVIOUS)		PROPOSED ELECTRIC LINE
	RESILIENT SURFACE (IMPERVIOUS)		SPLIT RAIL FENCE
	CONCRETE (IMPERVIOUS)		PERIMETER FENCE
	A.C. PAVING (IMPERVIOUS)		EXISTING CONTOUR
	BIOFILTRATION AREA		EXISTING STREET LIGHT
	CATCH BASIN & GRATE		EXISTING MISC. UTIL. BOX
	ATRIUM DRAIN		EXISTING MANHOLE
	FLOW DIRECTION/BROW DITCH		EXISTING FIRE HYDRANT
	TYPE 'F' CATCH BASIN		EXISTING WATER VALVE
	TYPE 'A' CLEAN OUT		
	CURB INLET CATCH BASIN		
	RIP RAP		
	TRUNCATED DOME PAVERS		



SHEET C-1.04

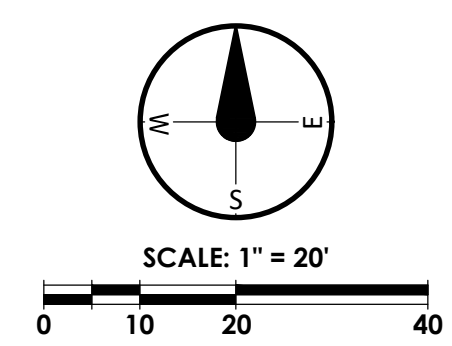
SHEET <b>10</b>	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS <b>40</b>
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. <b>CIP 4609</b>		DRAWING NO.



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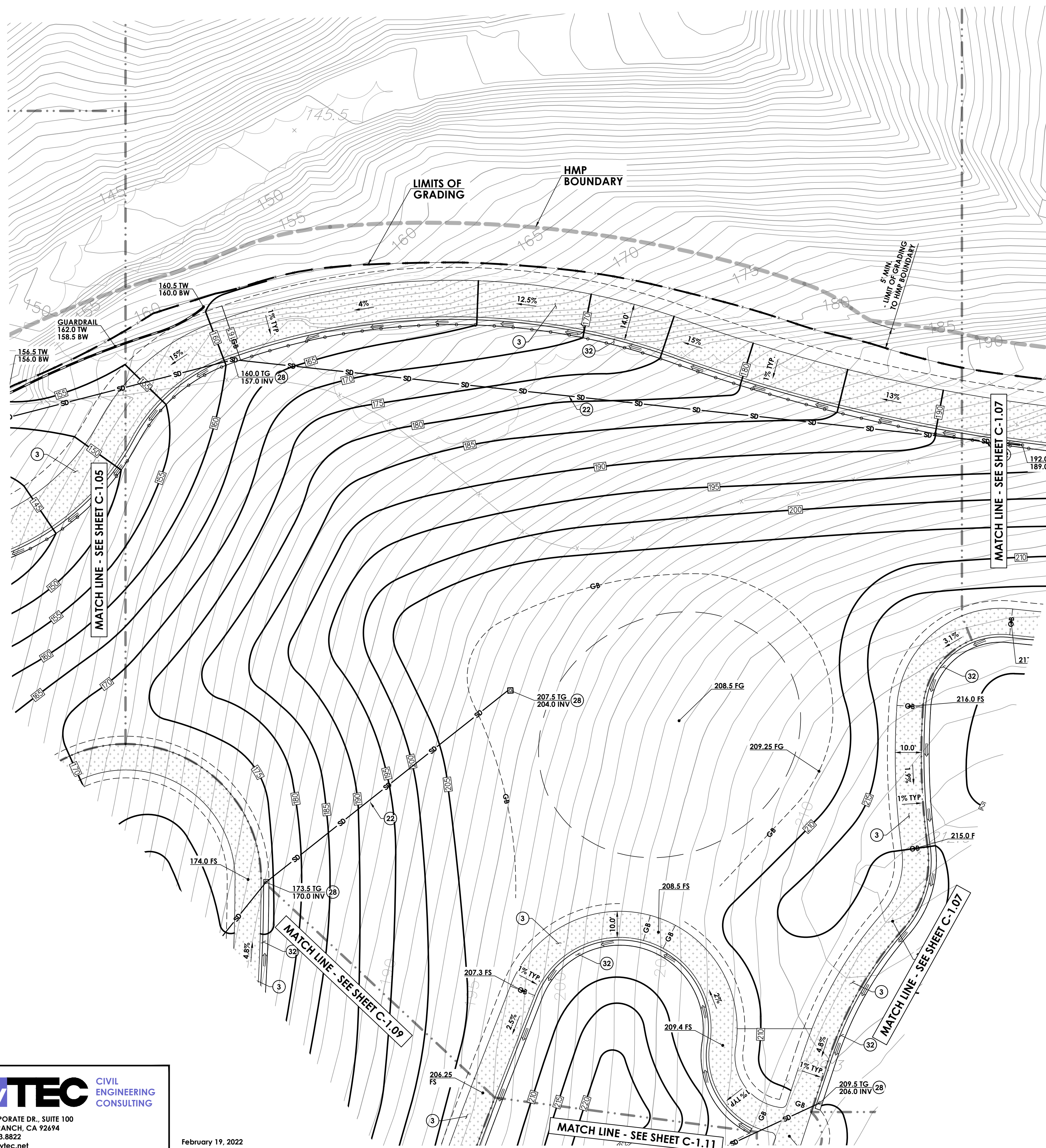
**LEGEND**

— — — — —	PROPERTY LINE	— / — / —	SLOPE
- - - - -	MATCH LINE	— — — — —	CURB
— (95) —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
— — — — —	PROP. RETAINING WALL	— — — — —	3-FOOT WIDE V-GUTTER
— — — — —	HMP BOUNDARY	— — — — —	PEDESTRIAN RAMP
— — — — —	20-FOOT BUFFER	— — — — —	PROPOSED STORM DRAIN
— — — — —	SIGHT DISTANCE	— — — — —	PROPOSED DOMESTIC WATER
— — — — —	CONCRETE PAVERS (IMPERVIOUS)	— — — — —	PROPOSED RECLAIMED WATER
— — — — —	D.G. PAVING (PERVIOUS)	— — — — —	PROPOSED SEWER
— — — — —	PAVERS (IMPERVIOUS)	— — — — —	PROPOSED ELECTRIC LINE
— — — — —	RESILIENT SURFACE (IMPERVIOUS)	— — — — —	SPLIT RAIL FENCE
— — — — —	CONCRETE (IMPERVIOUS)	— — — — —	PERIMETER FENCE
— — — — —	A.C. PAVING (IMPERVIOUS)	— — — — —	EXISTING CONTOUR
— — — — —	BIOFILTRATION AREA	— — — — —	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
— — — — —	FLOW DIRECTION/BROW DITCH	+	EXISTING FIRE HYDRANT
○	TYPE 'F' CATCH BASIN	⊕	EXISTING WATER VALVE
○	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
— — — — —	RIP RAP		
— — — — —	TRUNCATED DOME PAVERS		



SHEET C-1.05

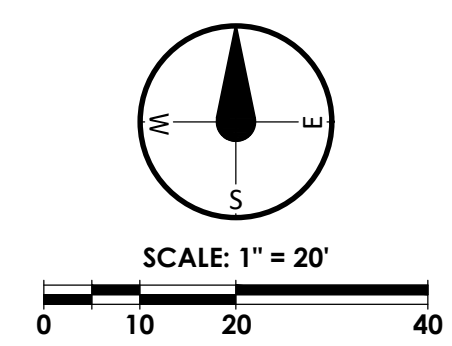
SHEET 11	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. CIP 4609		DRAWING NO.



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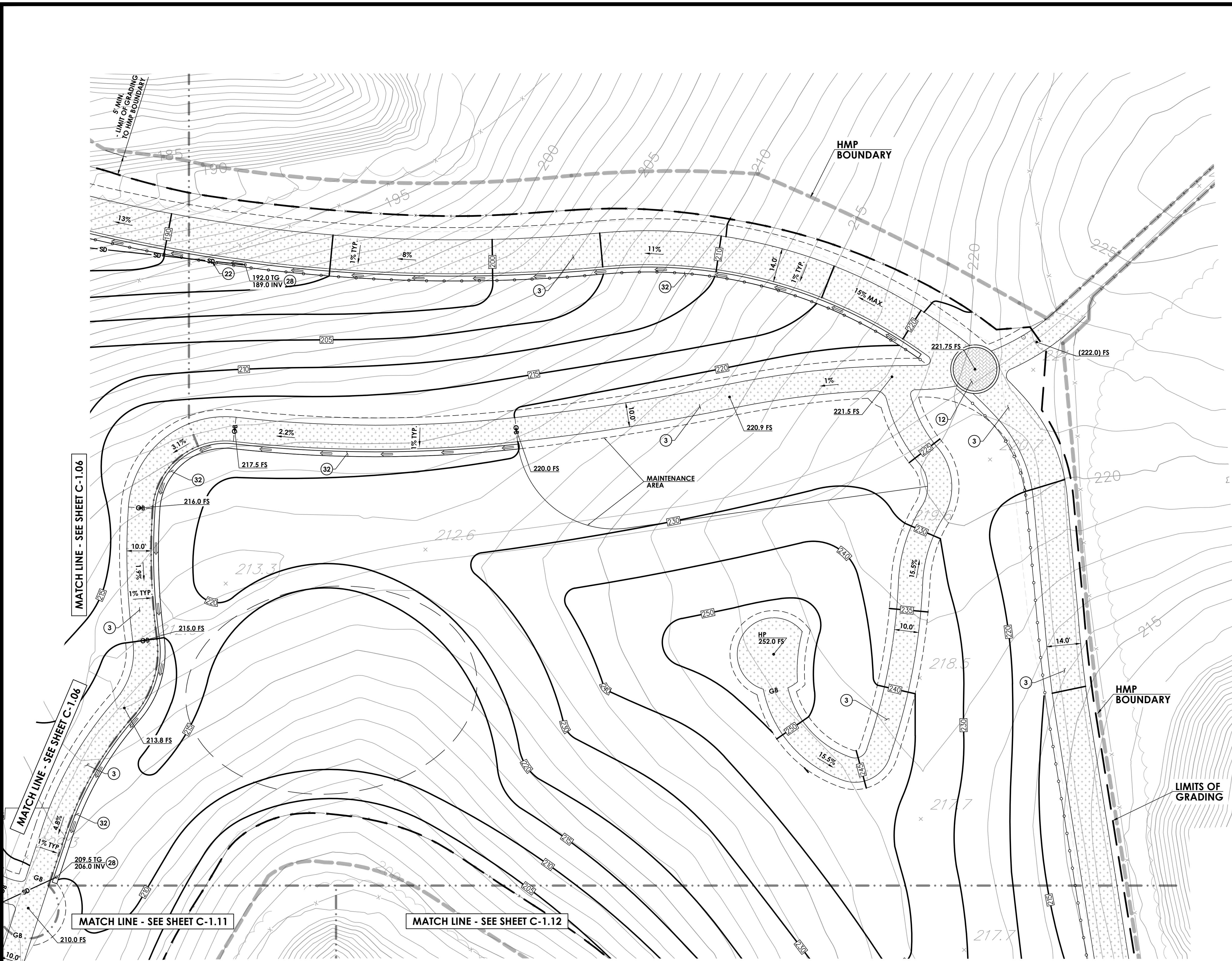
**LEGEND**

— — — — —	PROPERTY LINE	— / — / —	SLOPE
— · — · —	MATCH LINE	— — — — —	CURB
— 15 — 15 —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
— — — — —	PROP. RETAINING WALL	— — — — —	3-FOOT WIDE V-GUTTER
— — — — —	HMP BOUNDARY	— — — — —	PEDESTRIAN RAMP
— — — — —	20-FOOT BUFFER	— SD — SD —	PROPOSED STORM DRAIN
— — — — —	SIGHT DISTANCE	— WTR — WTR —	PROPOSED DOMESTIC WATER
— — — — —	CONCRETE PAVERS (IMPERVIOUS)	— RW — RW —	PROPOSED RECLAIMED WATER
— — — — —	D.G. PAVING (PERVIOUS)	— SW — SW —	PROPOSED SEWER
— — — — —	PAVERS (IMPERVIOUS)	— GED —	PROPOSED ELECTRIC LINE
— — — — —	RESILIENT SURFACE (IMPERVIOUS)	— — — — —	SPLIT RAIL FENCE
— — — — —	CONCRETE (IMPERVIOUS)	— — — — —	PERIMETER FENCE
— — — — —	A.C. PAVING (IMPERVIOUS)	— 140 —	EXISTING CONTOUR
— — — — —	BIOFILTRATION AREA	— — — — —	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
— — — — —	FLOW DIRECTION/BROW DITCH	+H+	EXISTING FIRE HYDRANT
□	TYPE 'F' CATCH BASIN	⊗	EXISTING WATER VALVE
□	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
□	RIP RAP		
□	TRUNCATED DOME PAVERS		



SHEET C-1.06

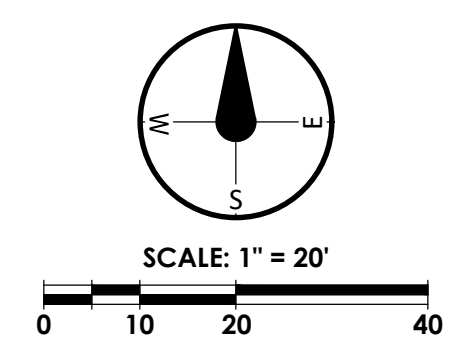
SHEET 12	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. CIP 4609		DRAWING NO.



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  - ㉜ CONSTRUCT BROW DITCH - TYPE 'B' - PER S.D.R.S.D. DWG. NO. D-75
  - ㉝ CONSTRUCT LEVEL PAD FOR BUS STOP
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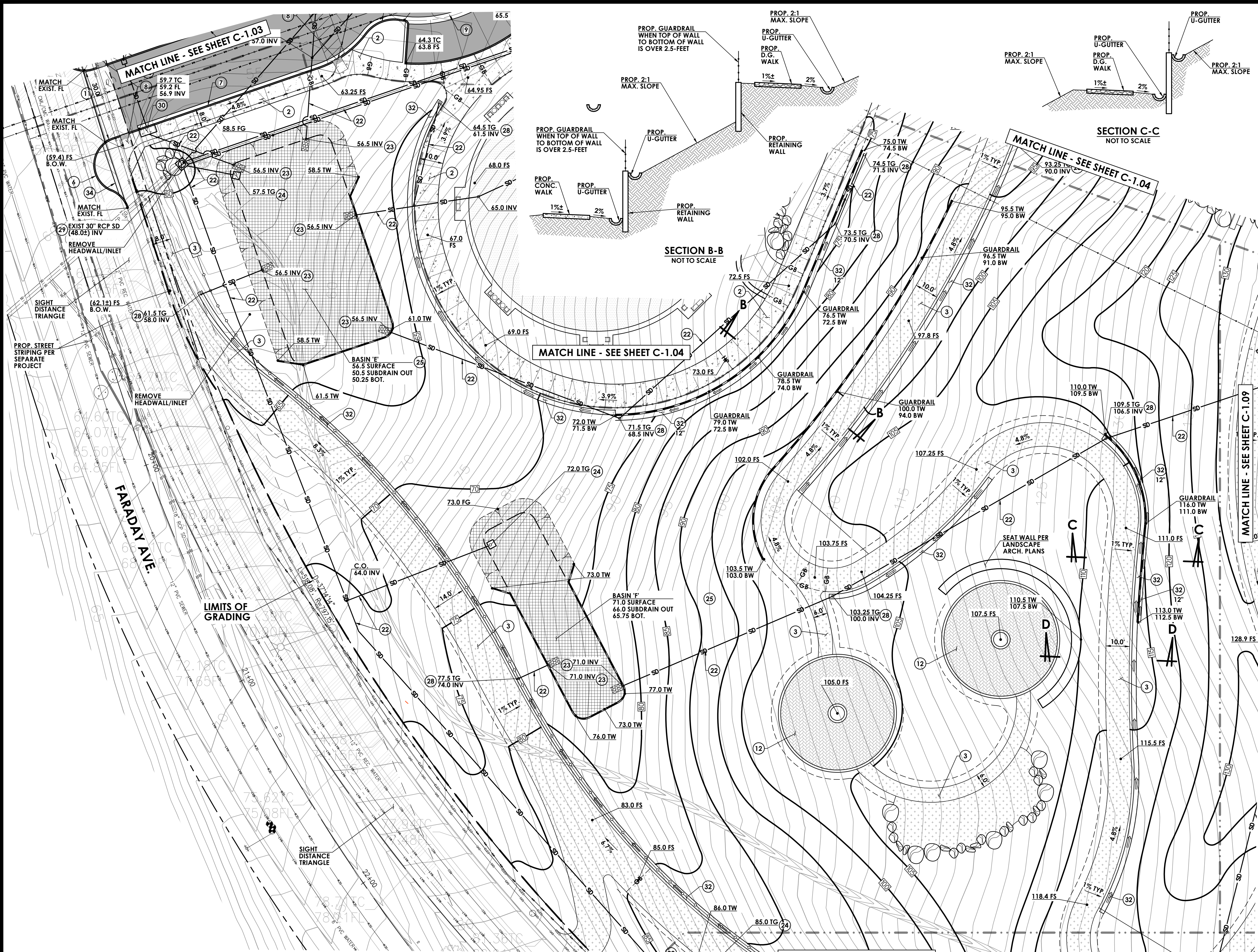
**LEGEND**

— — — — —	PROPERTY LINE	— — — — —	SLOPE
- - - - -	MATCH LINE	— — — — —	CURB
— — — — —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
— — — — —	PROP. RETAINING WALL	— — — — —	3-FOOT WIDE V-GUTTER
— — — — —	HMP BOUNDARY	— — — — —	PEDESTRIAN RAMP
— — — — —	20-FOOT BUFFER	— — — — —	PROPOSED STORM DRAIN
— — — — —	SIGHT DISTANCE	— — — — —	PROPOSED DOMESTIC WATER
— — — — —	CONCRETE PAVERS (IMPERVIOUS)	— — — — —	PROPOSED RECLAIMED WATER
— — — — —	D.G. PAVING (PERVIOUS)	— — — — —	PROPOSED SEWER
— — — — —	PAVERS (IMPERVIOUS)	— — — — —	PROPOSED ELECTRIC LINE
— — — — —	RESILIENT SURFACE (IMPERVIOUS)	— — — — —	SPLIT RAIL FENCE
— — — — —	CONCRETE (IMPERVIOUS)	— — — — —	PERIMETER FENCE
— — — — —	A.C. PAVING (IMPERVIOUS)	— — — — —	EXISTING CONTOUR
— — — — —	BIOFILTRATION AREA	— — — — —	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
→	FLOW DIRECTION/BROW DITCH	+	EXISTING FIRE HYDRANT
○	TYPE 'F' CATCH BASIN	⊕	EXISTING WATER VALVE
○	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
□	RIP RAP		
□	TRUNCATED DOME PAVERS		



SHEET C-1.07

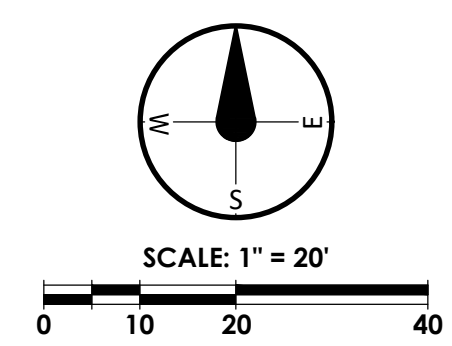
SHEET <b>13</b>	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS <b>40</b>
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. <b>CIP 4609</b>		DRAWING NO.



- GENERAL CONSTRUCTION NOTES**
- 1 CONSTRUCT A.C./A.B. PAVEMENT (DRIVE AISLES) PER SOILS ENGINEER RECOMMENDATIONS
  - 2 CONSTRUCT CONCRETE SURFACE PER LANDSCAPE ARCHITECT PLANS
  - 3 CONSTRUCT D.G. SURFACE PER LANDSCAPE ARCHITECT PLANS
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  - 5 CONSTRUCT A.C./A.B. PAVEMENT (PARKING STALLS) PER SOILS ENGINEER RECOMMENDATIONS
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  - 7 CONSTRUCT CURB & GUTTER PER S.D.R.S.D. STANDARD DETAIL
  - 8 CONSTRUCT CURB RAMP PER S.D.R.S.D. STANDARD DETAIL
  - 9 CONSTRUCT 3-FOOT WIDE V-GUTTER (IN PARKING AREAS)
  - 10 PROTECT IN PLACE
  - 11 CONSTRUCT ALLEY APRON PER S.D.R.S.D. DWG. NO. G-17
  - 12 CONSTRUCT DECORATIVE PAVING SURFACE PER LANDSCAPE ARCHITECT PLANS
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**LEGEND**

---	PROPERTY LINE	---	SLOPE
---	MATCH LINE	---	CURB
---	PROPOSED CONTOUR	---	CURB & GUTTER
---	PROP. RETAINING WALL	---	3-FOOT WIDE V-GUTTER
---	HMP BOUNDARY	---	PEDESTRIAN RAMP
---	20-FOOT BUFFER	---	PROPOSED STORM DRAIN
---	SIGHT DISTANCE	---	PROPOSED DOMESTIC WATER
---	CONCRETE PAVERS (IMPERVIOUS)	---	PROPOSED RECLAIMED WATER
---	D.G. PAVING (PERVIOUS)	---	PROPOSED SEWER
---	PAVERS (IMPERVIOUS)	---	PROPOSED ELECTRIC LINE
---	RESILIENT SURFACE (IMPERVIOUS)	---	SPLIT RAIL FENCE
---	CONCRETE (IMPERVIOUS)	---	PERIMETER FENCE
---	A.C. PAVING (IMPERVIOUS)	---	EXISTING CONTOUR
---	BIOFILTRATION AREA	---	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
---	FLOW DIRECTION/BROW DITCH	+	EXISTING FIRE HYDRANT
○	TYPE 'F' CATCH BASIN	+	EXISTING WATER VALVE
○	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
---	RIP RAP		
---	TRUNCATED DOME PAVERS		



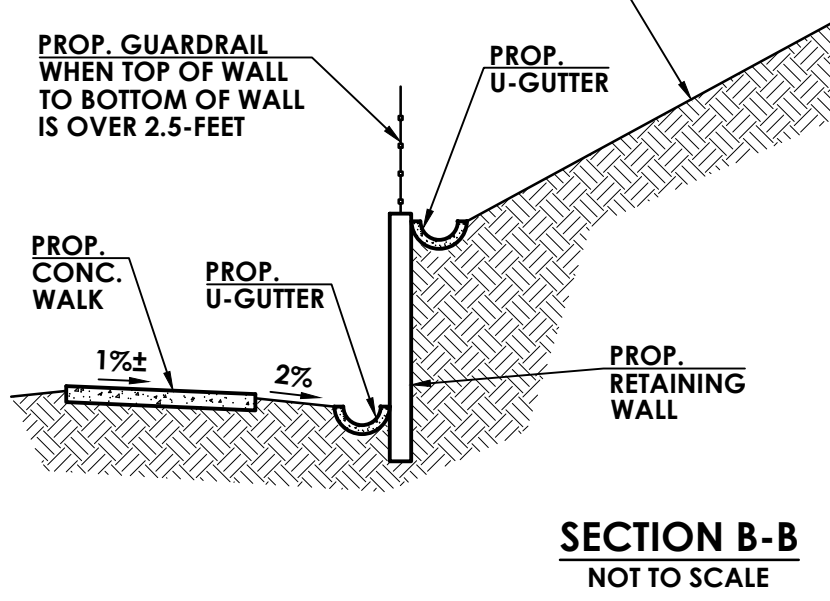
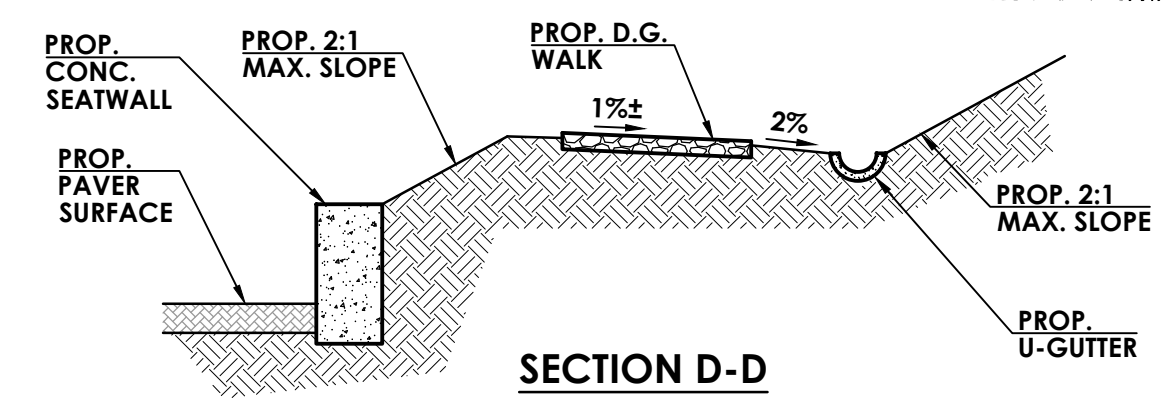
SHEET C-1.08

SHEET 14	CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK CONCEPTUAL GRADING EXHIBIT</b>		
PROJECT NO. CIP 4609		DRAWING NO.

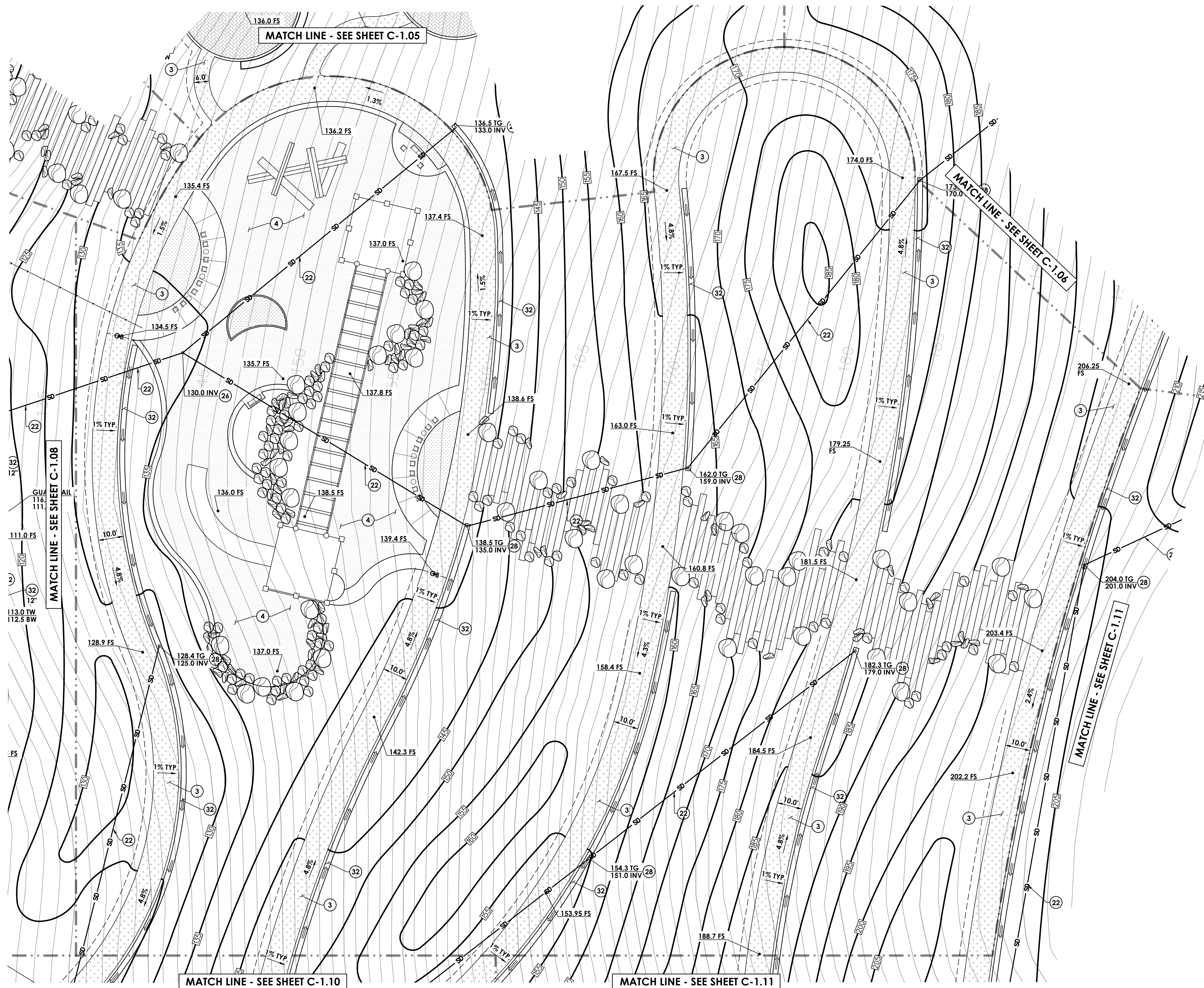
**CIVITEC** CIVIL ENGINEERING CONSULTING

999 CORPORATE DR., SUITE 100  
LADERA RANCH, CA 92694  
p: 949.463.8822  
e: tec@civitec.net

February 19, 2022



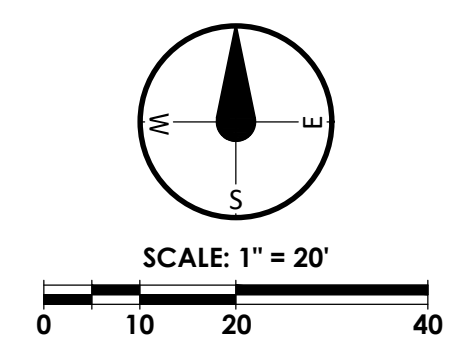




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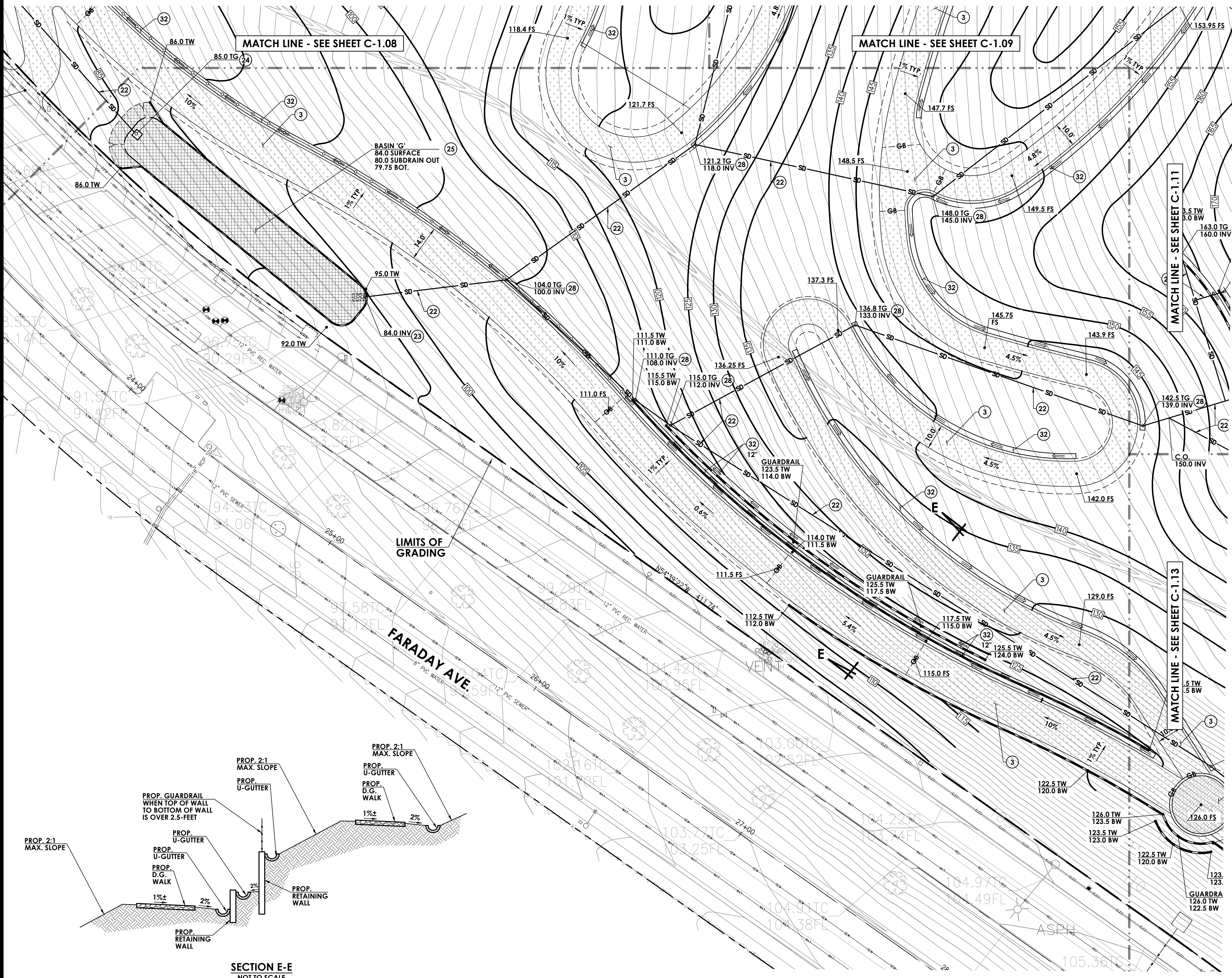
**LEGEND**

—	PROPERTY LINE	—	SLOPE
- - -	MATCH LINE	—	CURB
—	PROPOSED CONTOUR	—	CURB & GUTTER
—	PROP. RETAINING WALL	—	3-FOOT WIDE V-GUTTER
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—	CONCRETE PAVERS (IMPERVIOUS)	—	PROPOSED RECLAIMED WATER
—	D.G. PAVING (PERVIOUS)	—	PROPOSED SEWER
—	PAVERS (IMPERVIOUS)	—	PROPOSED ELECTRIC LINE
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—	FLOW DIRECTION/BROW DITCH	—	EXISTING FIRE HYDRANT
□	TYPE 'F' CATCH BASIN	—	EXISTING WATER VALVE
□	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
—	RIP RAP		
—	TRUNCATED DOME PAVERS		



SHEET C-1.09

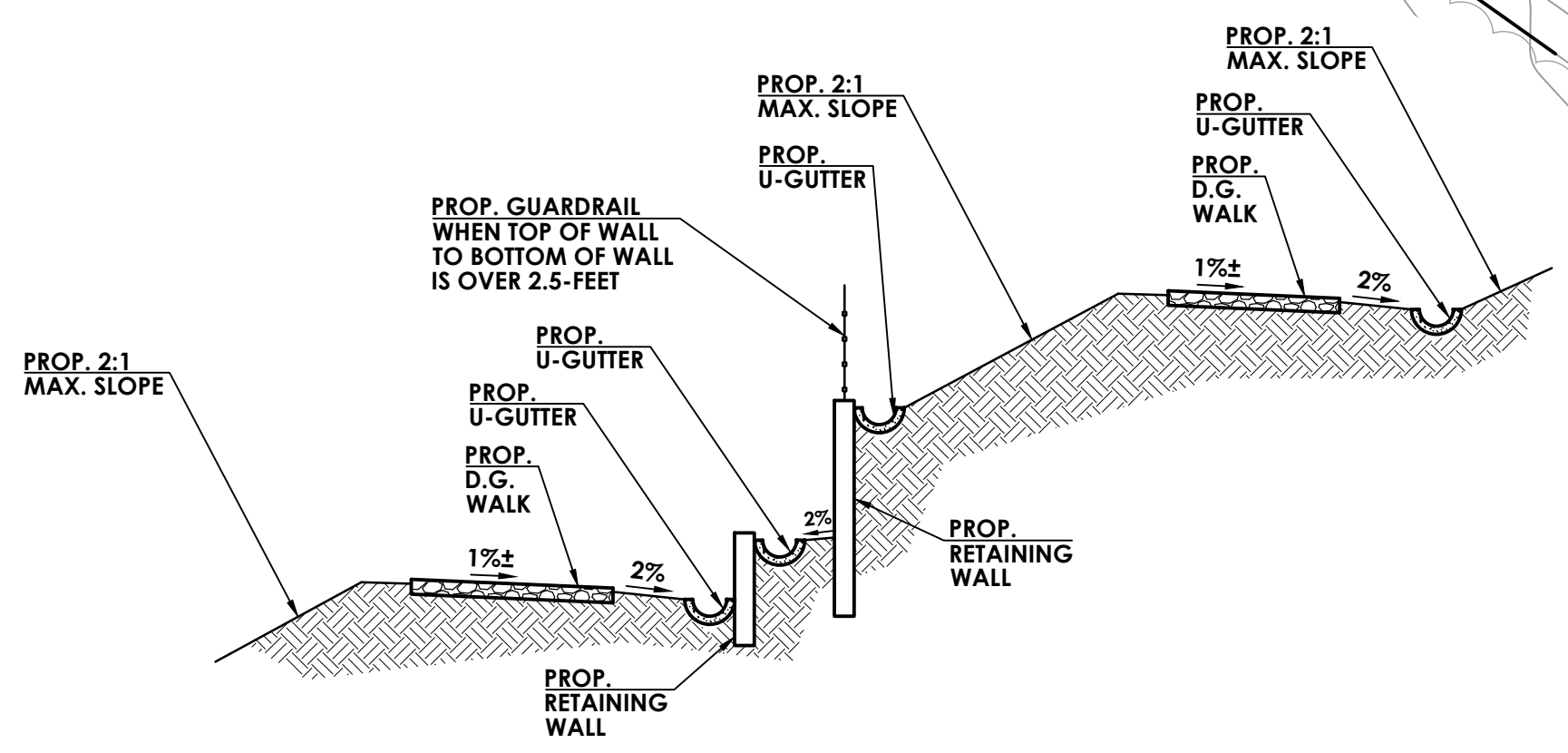
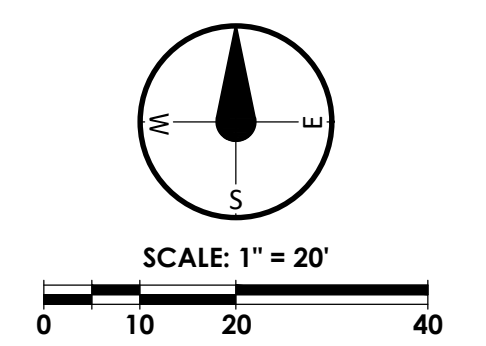
SHEET 15	CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK CONCEPTUAL GRADING EXHIBIT</b>		
PROJECT NO. CIP 4609		DRAWING NO.



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**LEGEND**

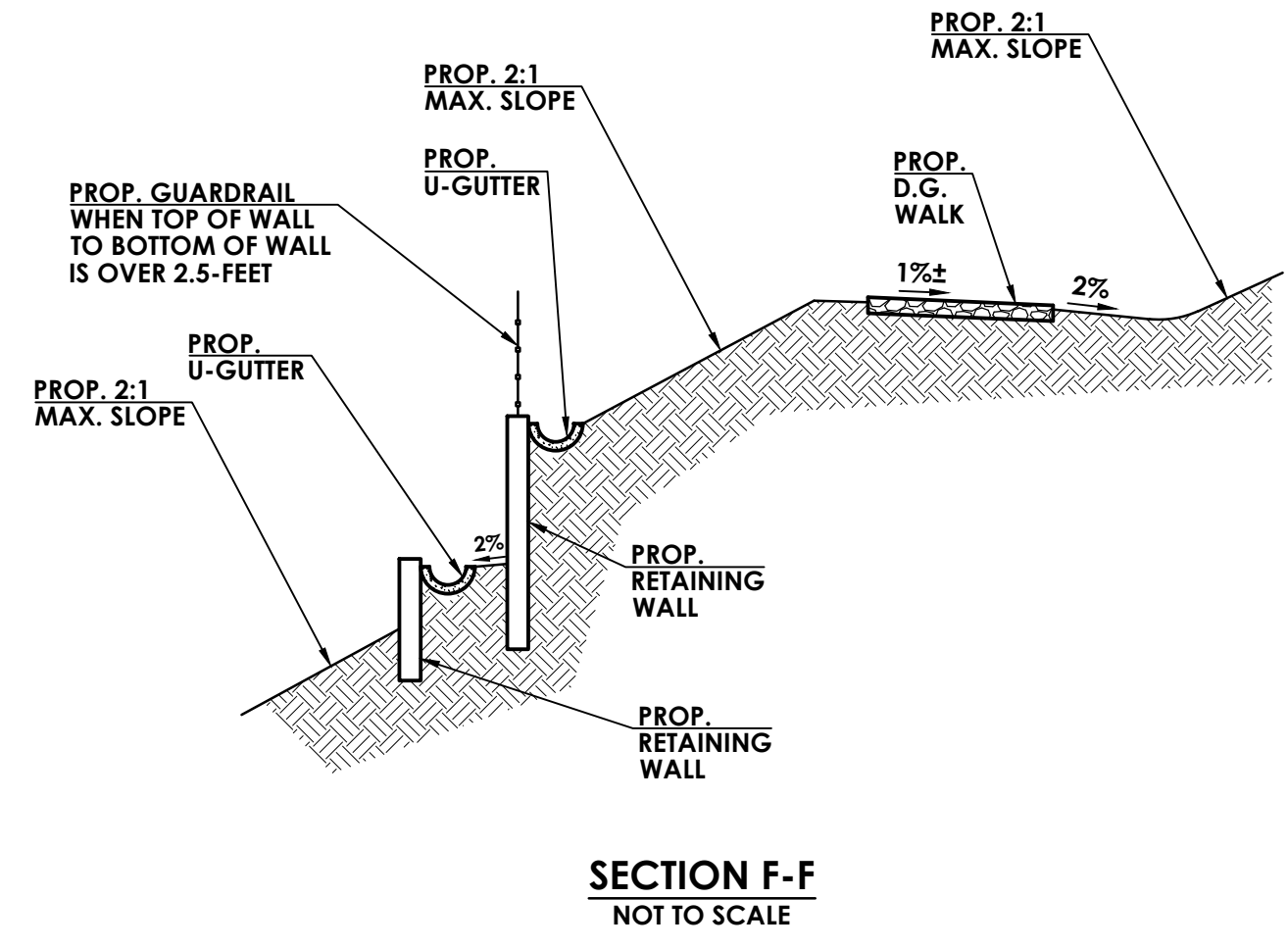
— — — — —	PROPERTY LINE	— — — — —	SLOPE
- - - - -	MATCH LINE	=====	CURB
— 95 —	PROPOSED CONTOUR	=====	CURB & GUTTER
— — — — —	PROP. RETAINING WALL	=====	3-FOOT WIDE V-GUTTER
— — — — —	HMP BOUNDARY	=====	PEDESTRIAN RAMP
— — — — —	20-FOOT BUFFER	—SD—SD—	PROPOSED STORM DRAIN
— — — — —	SIGHT DISTANCE	—WTR—WTR—	PROPOSED DOMESTIC WATER
=====	CONCRETE PAVERS (IMPERVIOUS)	—RW—RW—	PROPOSED RECLAIMED WATER
=====	D.G. PAVING (PERVIOUS)	—SW—SW—	PROPOSED SEWER
=====	PAVERS (IMPERVIOUS)	—EEO—	PROPOSED ELECTRIC LINE
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**SECTION E-E**  
NOT TO SCALE

SHEET C-1.10

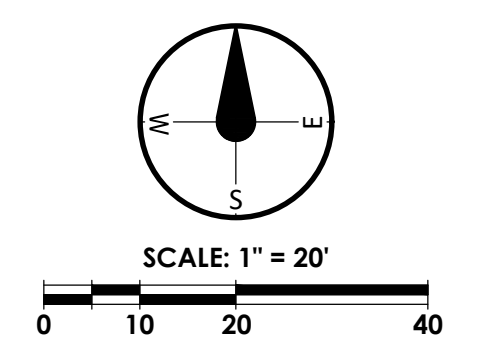
SHEET <b>16</b>	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS <b>40</b>
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. <b>CIP 4609</b>		DRAWING NO.

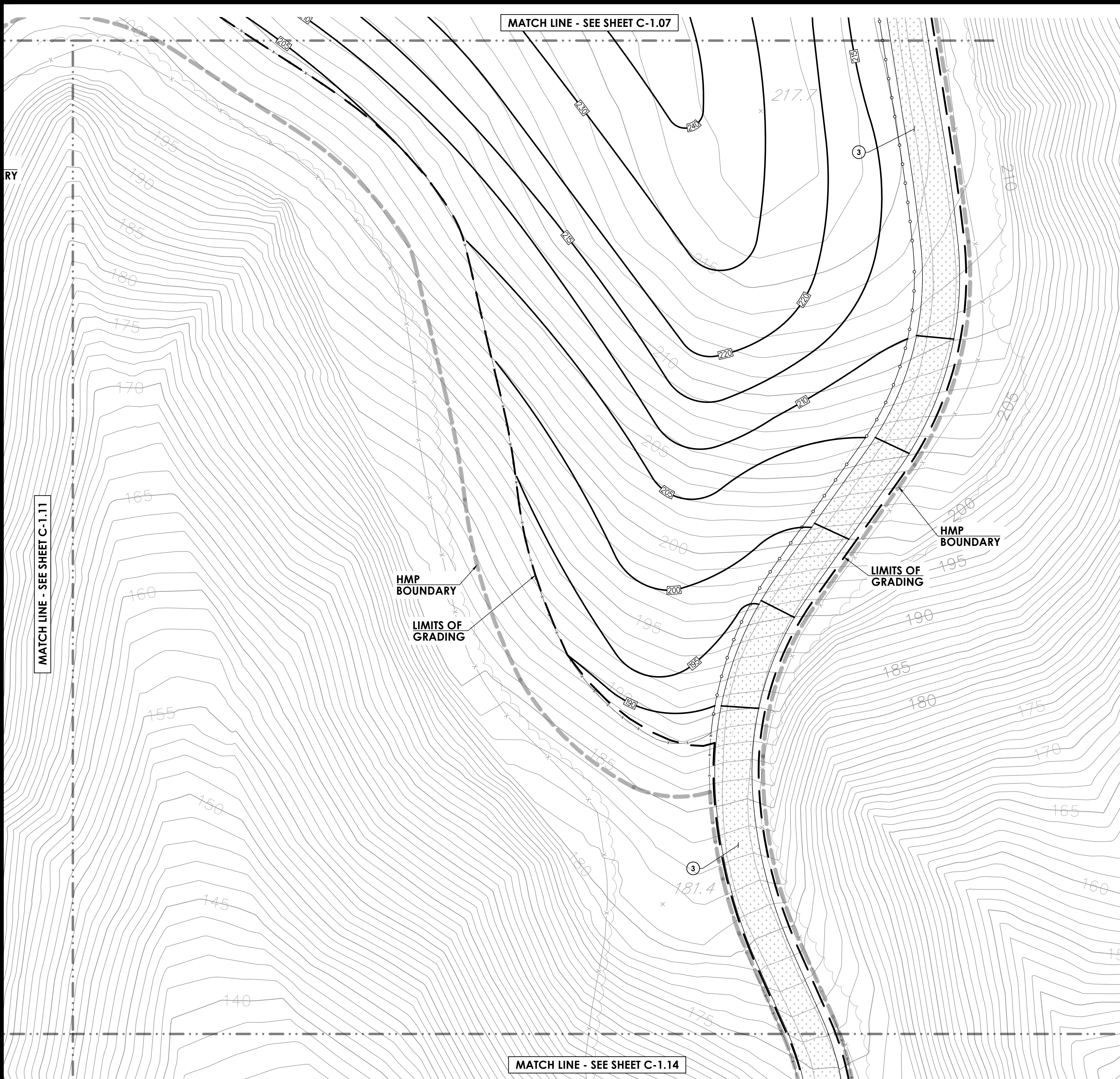


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**LEGEND**

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- - - - -	MATCH LINE	— — — — —	CURB
— — — — —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
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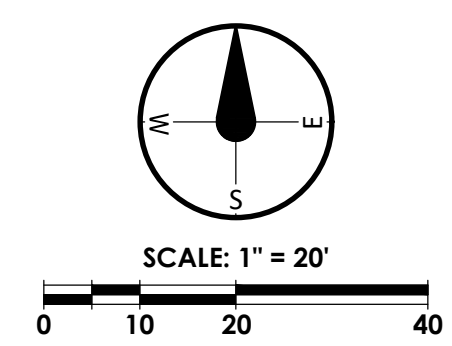




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  - ㉛ CONSTRUCT CATCH BASIN - TYPE 'F' - PER S.D.R.S.D. DWG. NO. D-07
  - ㉜ CONSTRUCT BROW DITCH - TYPE 'B' - PER S.D.R.S.D. DWG. NO. D-75
  - ㉝ CONSTRUCT LEVEL PAD FOR BUS STOP
  - ㉞ CONSTRUCT 18" WIDE U-CHANNEL WITH SOLID METAL COVER

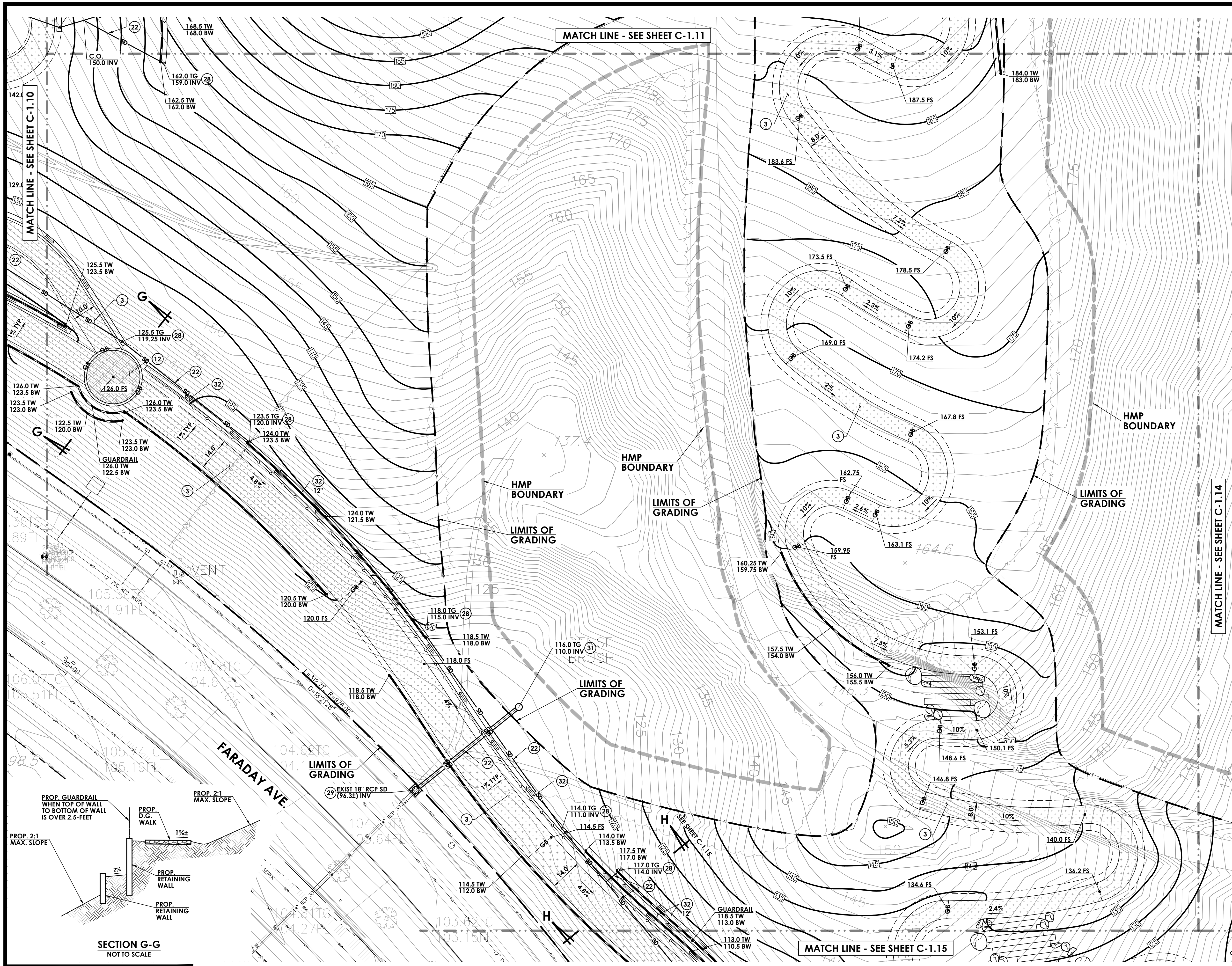
**LEGEND**

— — — — —	PROPERTY LINE	— — — — —	SLOPE
- - - - -	MATCH LINE	— — — — —	CURB
— — — — —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
— — — — —	PROP. RETAINING WALL	— — — — —	3-FOOT WIDE V-GUTTER
— — — — —	HMP BOUNDARY	— — — — —	PEDESTRIAN RAMP
— — — — —	20-FOOT BUFFER	— — — — —	PROPOSED STORM DRAIN
— — — — —	SIGHT DISTANCE	— — — — —	PROPOSED DOMESTIC WATER
— — — — —	CONCRETE PAVERS (IMPERVIOUS)	— — — — —	PROPOSED RECLAIMED WATER
— — — — —	D.G. PAVING (PERVIOUS)	— — — — —	PROPOSED SEWER
— — — — —	PAVERS (IMPERVIOUS)	— — — — —	PROPOSED ELECTRIC LINE
— — — — —	RESILIENT SURFACE (IMPERVIOUS)	— — — — —	SPLIT RAIL FENCE
— — — — —	CONCRETE (IMPERVIOUS)	— — — — —	PERIMETER FENCE
— — — — —	A.C. PAVING (IMPERVIOUS)	— — — — —	EXISTING CONTOUR
— — — — —	BIOFILTRATION AREA	— — — — —	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
— — — — —	FLOW DIRECTION/BROW DITCH	+H+	EXISTING FIRE HYDRANT
□	TYPE 'F' CATCH BASIN	⊕	EXISTING WATER VALVE
□	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
□	RIP RAP		
□	TRUNCATED DOME PAVERS		



SHEET C-1.12

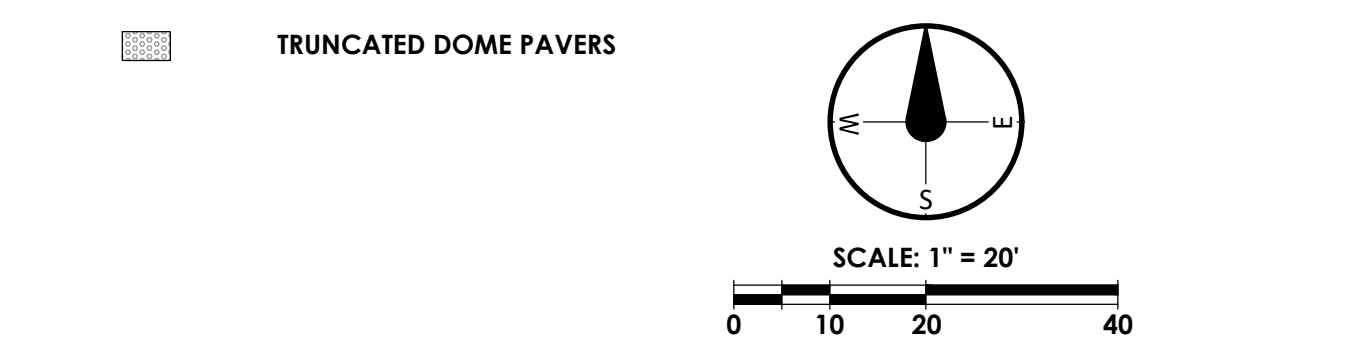
SHEET <b>18</b>	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS <b>40</b>
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. <b>CIP 4609</b>		DRAWING NO.

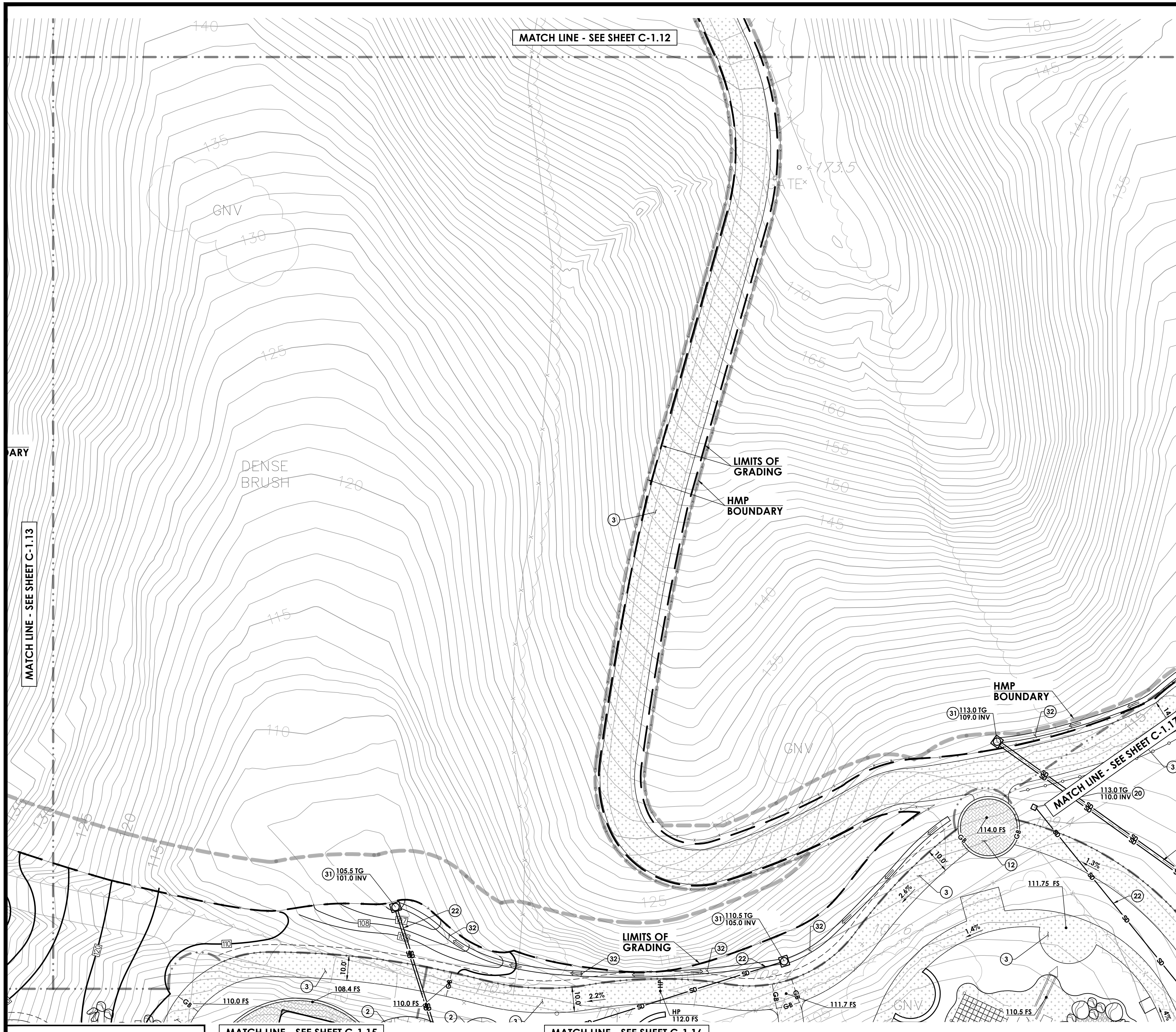


- GENERAL CONSTRUCTION NOTES**
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  - CONSTRUCT CURB PER S.D.R.S.D. STANDARD DETAIL
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  - CONSTRUCT CURB RAMP PER S.D.R.S.D. STANDARD DETAIL
  - CONSTRUCT 3-FOOT WIDE V-GUTTER (IN PARKING AREAS)
  - PROTECT IN PLACE
  - CONSTRUCT ALLEY APRON PER S.D.R.S.D. DWG. NO. G-17
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  - CONSTRUCT 18" WIDE U-CHANNEL WITH SOLID METAL COVER

**LEGEND**

	PROPERTY LINE		SLOPE
	MATCH LINE		CURB
	PROPOSED CONTOUR		CURB & GUTTER
	PROP. RETAINING WALL		3-FOOT WIDE V-GUTTER
	HMP BOUNDARY		PEDESTRIAN RAMP
	20-FOOT BUFFER		PROPOSED STORM DRAIN
	SIGHT DISTANCE		PROPOSED DOMESTIC WATER
	CONCRETE PAVERS (IMPERVIOUS)		PROPOSED RECLAIMED WATER
	D.G. PAVING (PERVIOUS)		PROPOSED SEWER
	PAVERS (IMPERVIOUS)		PROPOSED ELECTRIC LINE
	RESILIENT SURFACE (IMPERVIOUS)		SPLIT RAIL FENCE
	CONCRETE (IMPERVIOUS)		PERIMETER FENCE
	A.C. PAVING (IMPERVIOUS)		EXISTING CONTOUR
	BIOFILTRATION AREA		EXISTING STREET LIGHT
	CATCH BASIN & GRATE		EXISTING MISC. UTIL. BOX
	ATRIUM DRAIN		EXISTING MANHOLE
	FLOW DIRECTION/BROW DITCH		EXISTING FIRE HYDRANT
	TYPE 'F' CATCH BASIN		EXISTING WATER VALVE
	TYPE 'A' CLEAN OUT		
	CURB INLET CATCH BASIN		
	RIP RAP		
	TRUNCATED DOME PAVERS		

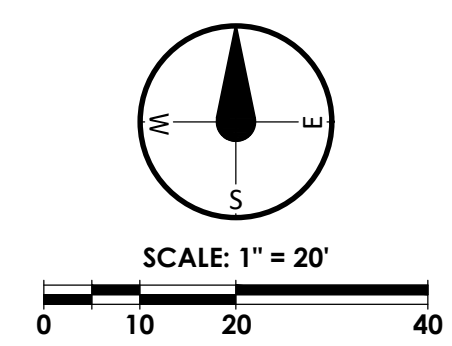




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**LEGEND**

— — — — —	PROPERTY LINE	— — — — —	SLOPE
- - - - -	MATCH LINE	— — — — —	CURB
— — — — —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
— — — — —	PROP. RETAINING WALL	— — — — —	3-FOOT WIDE V-GUTTER
— — — — —	HMP BOUNDARY	— — — — —	PEDESTRIAN RAMP
— — — — —	20-FOOT BUFFER	— — — — —	PROPOSED STORM DRAIN
— — — — —	SIGHT DISTANCE	— — — — —	PROPOSED DOMESTIC WATER
— — — — —	CONCRETE PAVERS (IMPERVIOUS)	— — — — —	PROPOSED RECLAIMED WATER
— — — — —	D.G. PAVING (PERVIOUS)	— — — — —	PROPOSED SEWER
— — — — —	PAVERS (IMPERVIOUS)	— — — — —	PROPOSED ELECTRIC LINE
— — — — —	RESILIENT SURFACE (IMPERVIOUS)	— — — — —	SPLIT RAIL FENCE
— — — — —	CONCRETE (IMPERVIOUS)	— — — — —	PERIMETER FENCE
— — — — —	A.C. PAVING (IMPERVIOUS)	— — — — —	EXISTING CONTOUR
— — — — —	BIOFILTRATION AREA	— — — — —	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
— — — — —	FLOW DIRECTION/BROW DITCH	+	EXISTING FIRE HYDRANT
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□	CURB INLET CATCH BASIN		
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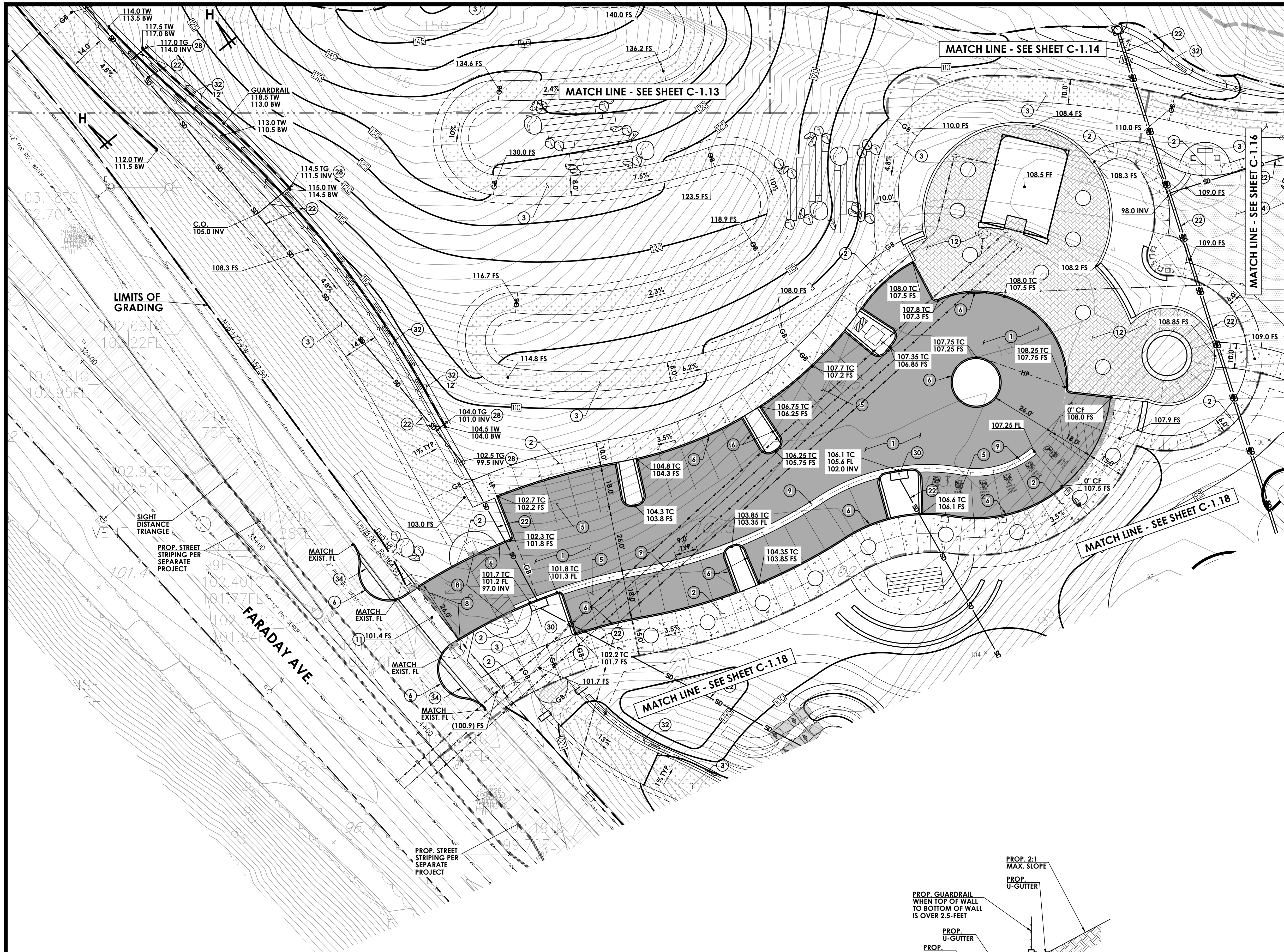


**CIVTEC** CIVIL ENGINEERING CONSULTING  
 999 CORPORATE DR., SUITE 100  
 LADERA RANCH, CA 92694  
 p: 949.463.8822  
 e: tec@civtec.net

February 19, 2022

SHEET C-1.14

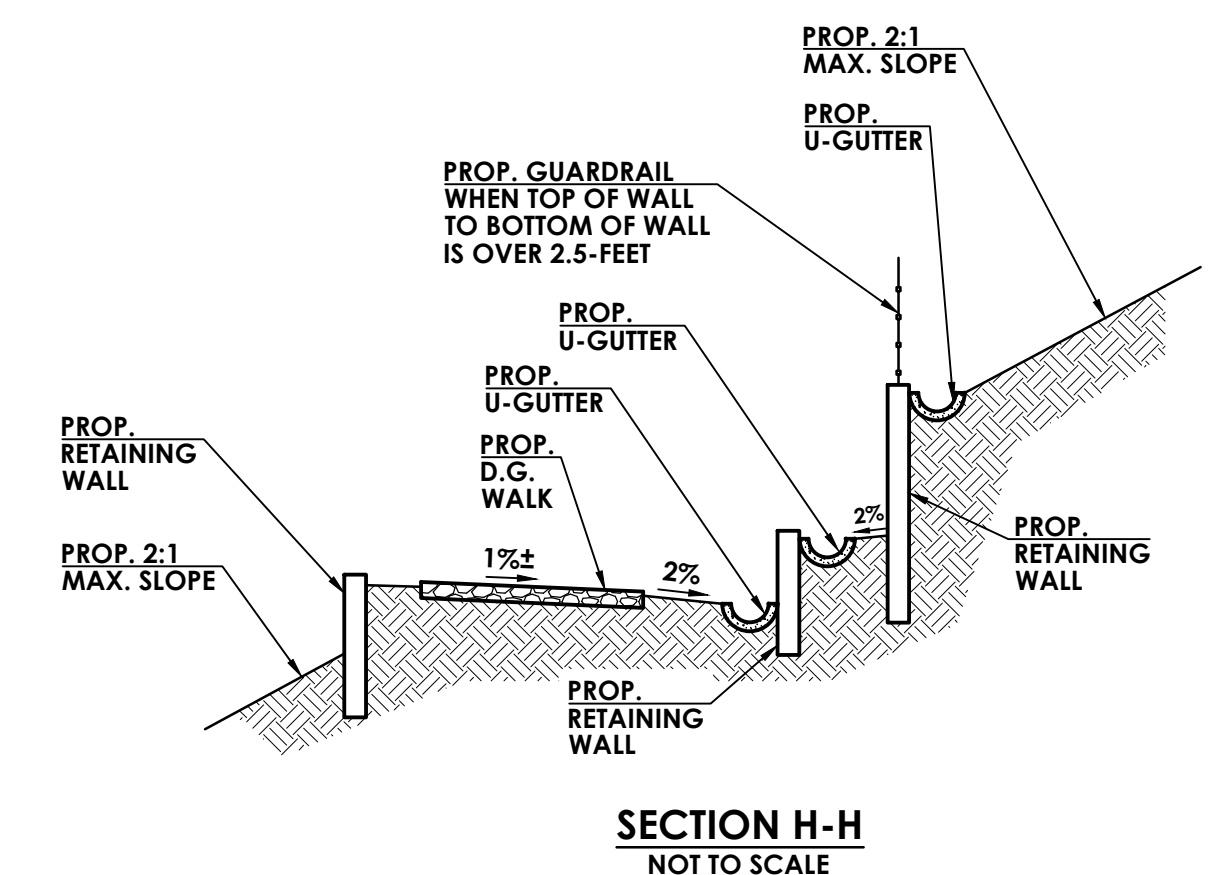
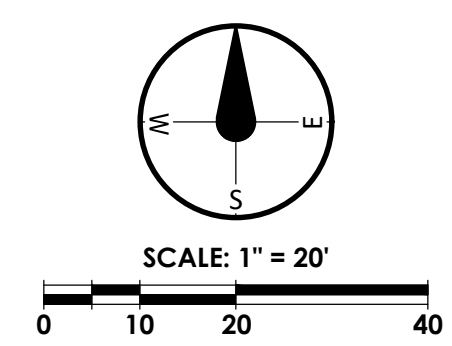
SHEET 20	CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. CIP 4609		DRAWING NO.



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**LEGEND**

	PROPERTY LINE		SLOPE
	MATCH LINE		CURB
	PROPOSED CONTOUR		CURB & GUTTER
	PROP. RETAINING WALL		3-FOOT WIDE V-GUTTER
	HMP BOUNDARY		PEDESTRIAN RAMP
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	SIGHT DISTANCE		PROPOSED DOMESTIC WATER
	CONCRETE PAVERS (IMPERVIOUS)		PROPOSED RECLAIMED WATER
	D.G. PAVING (PERVIOUS)		PROPOSED SEWER
	PAVERS (IMPERVIOUS)		PROPOSED ELECTRIC LINE
	RESILIENT SURFACE (IMPERVIOUS)		SPLIT RAIL FENCE
	CONCRETE (IMPERVIOUS)		PERIMETER FENCE
	A.C. PAVING (IMPERVIOUS)		EXISTING CONTOUR
	BIOFILTRATION AREA		EXISTING STREET LIGHT
	CATCH BASIN & GRATE		EXISTING MISC. UTIL. BOX
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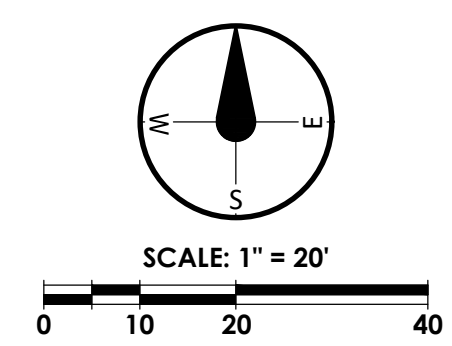




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**LEGEND**

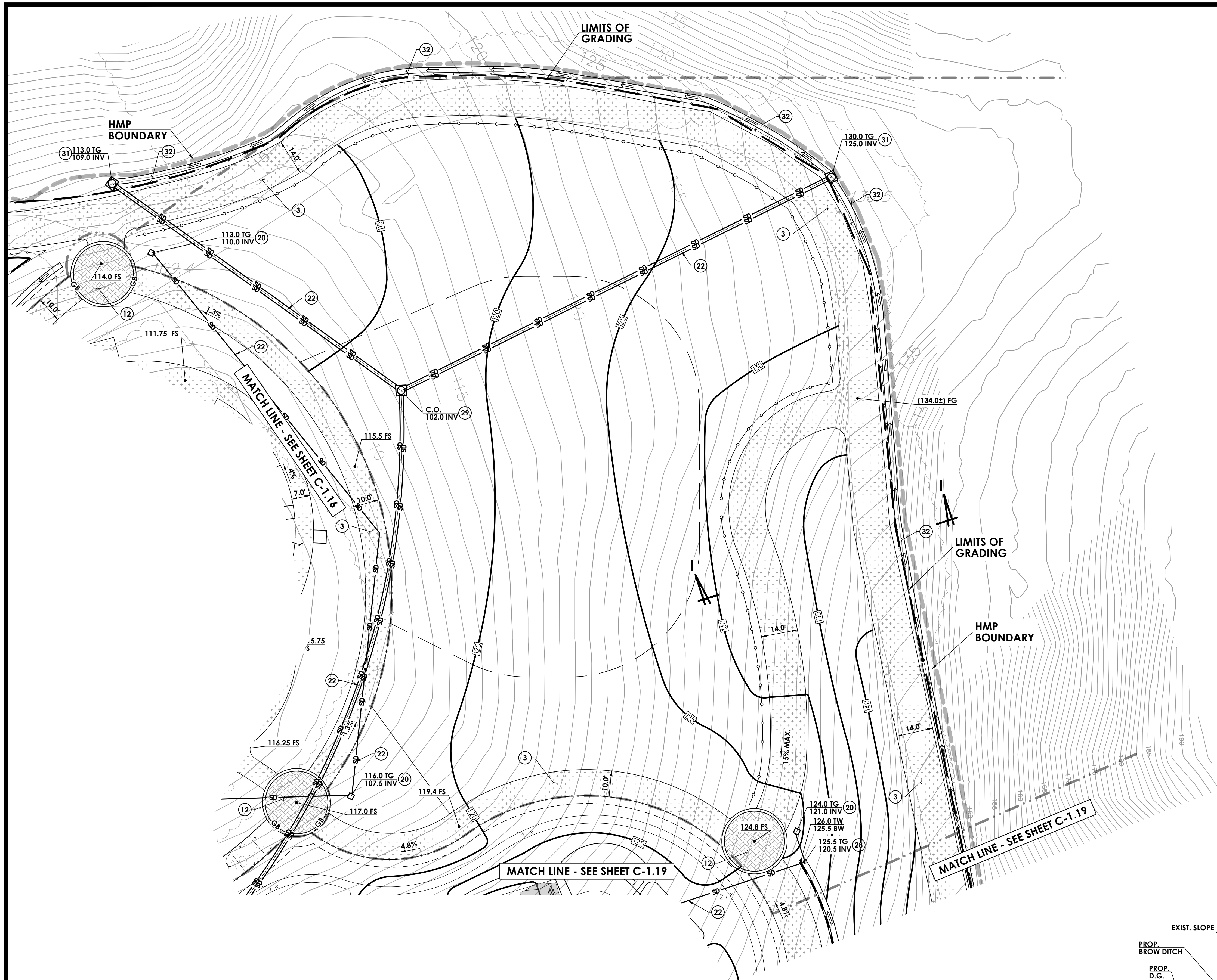
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SHEET C-1.16

SHEET 22	CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK CONCEPTUAL GRADING EXHIBIT</b>		
PROJECT NO. CIP 4609		DRAWING NO.

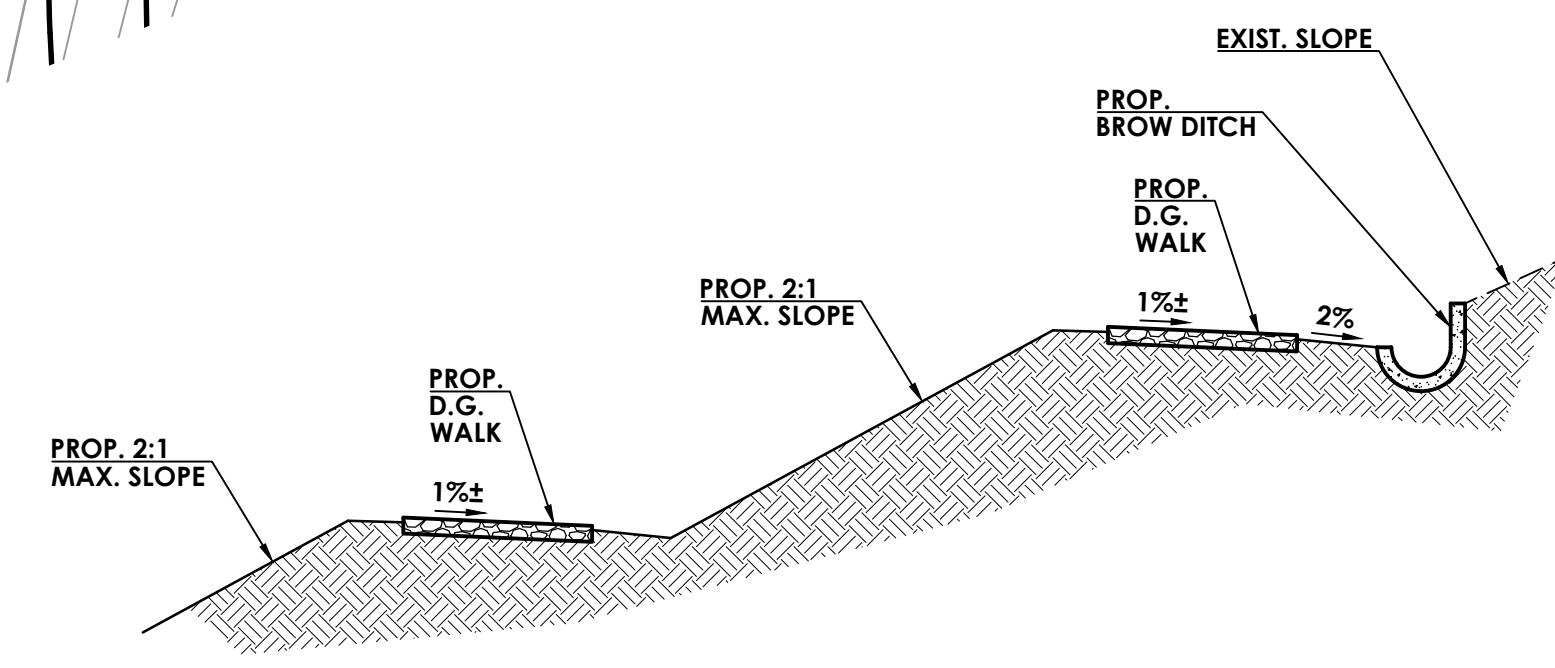
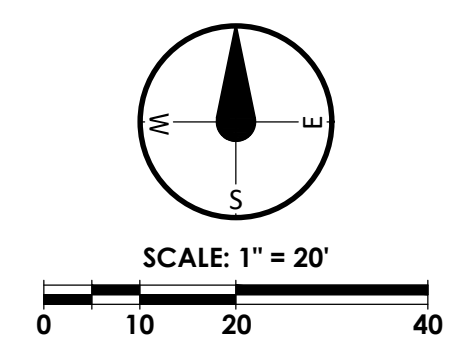




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— — — — —	PROPERTY LINE	— — — — —	SLOPE
- - - - -	MATCH LINE	— — — — —	CURB
— — — — —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
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— — — — —	HMP BOUNDARY	— — — — —	PEDESTRIAN RAMP
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— — — — —	CONCRETE PAVERS (IMPERVIOUS)	— — — — —	PROPOSED RECLAIMED WATER
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— — — — —	PAVERS (IMPERVIOUS)	— — — — —	PROPOSED ELECTRIC LINE
— — — — —	RESILIENT SURFACE (IMPERVIOUS)	— — — — —	SPLIT RAIL FENCE
— — — — —	CONCRETE (IMPERVIOUS)	— — — — —	PERIMETER FENCE
— — — — —	A.C. PAVING (IMPERVIOUS)	— — — — —	EXISTING CONTOUR
— — — — —	BIOFILTRATION AREA	— — — — —	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
→	FLOW DIRECTION/BROW DITCH	+	EXISTING FIRE HYDRANT
○	TYPE 'F' CATCH BASIN	⊕	EXISTING WATER VALVE
○	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
□	RIP RAP		
□	TRUNCATED DOME PAVERS		



**CIVITEC** CIVIL ENGINEERING CONSULTING  
 999 CORPORATE DR., SUITE 100  
 LADERA RANCH, CA 92694  
 p: 949.463.8822  
 e: lec@civitec.net

February 19, 2022

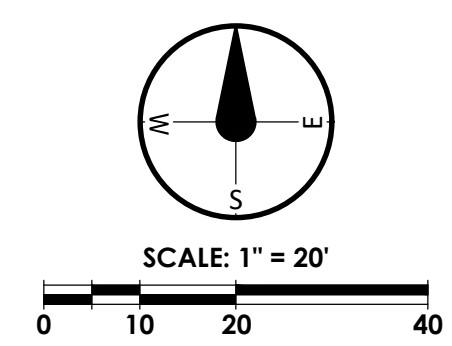
SHEET 23	CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK CONCEPTUAL GRADING EXHIBIT</b>		
PROJECT NO. <b>CIP 4609</b>		DRAWING NO.



- GENERAL CONSTRUCTION NOTES**
- 1 CONSTRUCT A.C./A.B. PAVEMENT (DRIVE AISLES) PER SOILS ENGINEER RECOMMENDATIONS
  - 2 CONSTRUCT CONCRETE SURFACE PER LANDSCAPE ARCHITECT PLANS
  - 3 CONSTRUCT D.G. SURFACE PER LANDSCAPE ARCHITECT PLANS
  - 4 CONSTRUCT RESILIENT SURFACE PER LANDSCAPE ARCHITECT PLANS
  - 5 CONSTRUCT A.C./A.B. PAVEMENT (PARKING STALLS) PER SOILS ENGINEER RECOMMENDATIONS
  - 6 CONSTRUCT CURB PER S.D.R.S.D. STANDARD DETAIL
  - 7 CONSTRUCT CURB & GUTTER PER S.D.R.S.D. STANDARD DETAIL
  - 8 CONSTRUCT CURB RAMP PER S.D.R.S.D. STANDARD DETAIL
  - 9 CONSTRUCT 3-FOOT WIDE V-GUTTER (IN PARKING AREAS)
  - 10 PROTECT IN PLACE
  - 11 CONSTRUCT ALLEY APRON PER S.D.R.S.D. DWG. NO. G-17
  - 12 CONSTRUCT DECORATIVE PAVING SURFACE PER LANDSCAPE ARCHITECT PLANS
- STORM DRAIN CONSTRUCTION NOTES**
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  - 21 CONSTRUCT ATRIUM DRAIN
  - 22 CONSTRUCT PVC (SDR 35) OR H.D.P.E. STORM DRAIN PIPE, BEDDING PER S.D.R.S.D. DWG. NO. D-60
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  - 24 CONSTRUCT 24"x24" CATCH BASIN & GRATE (OUTLET) PER DETAIL ON SHEET C-0.02
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  - 33 CONSTRUCT LEVEL PAD FOR BUS STOP
  - 34 CONSTRUCT 18" WIDE U-CHANNEL WITH SOLID METAL COVER

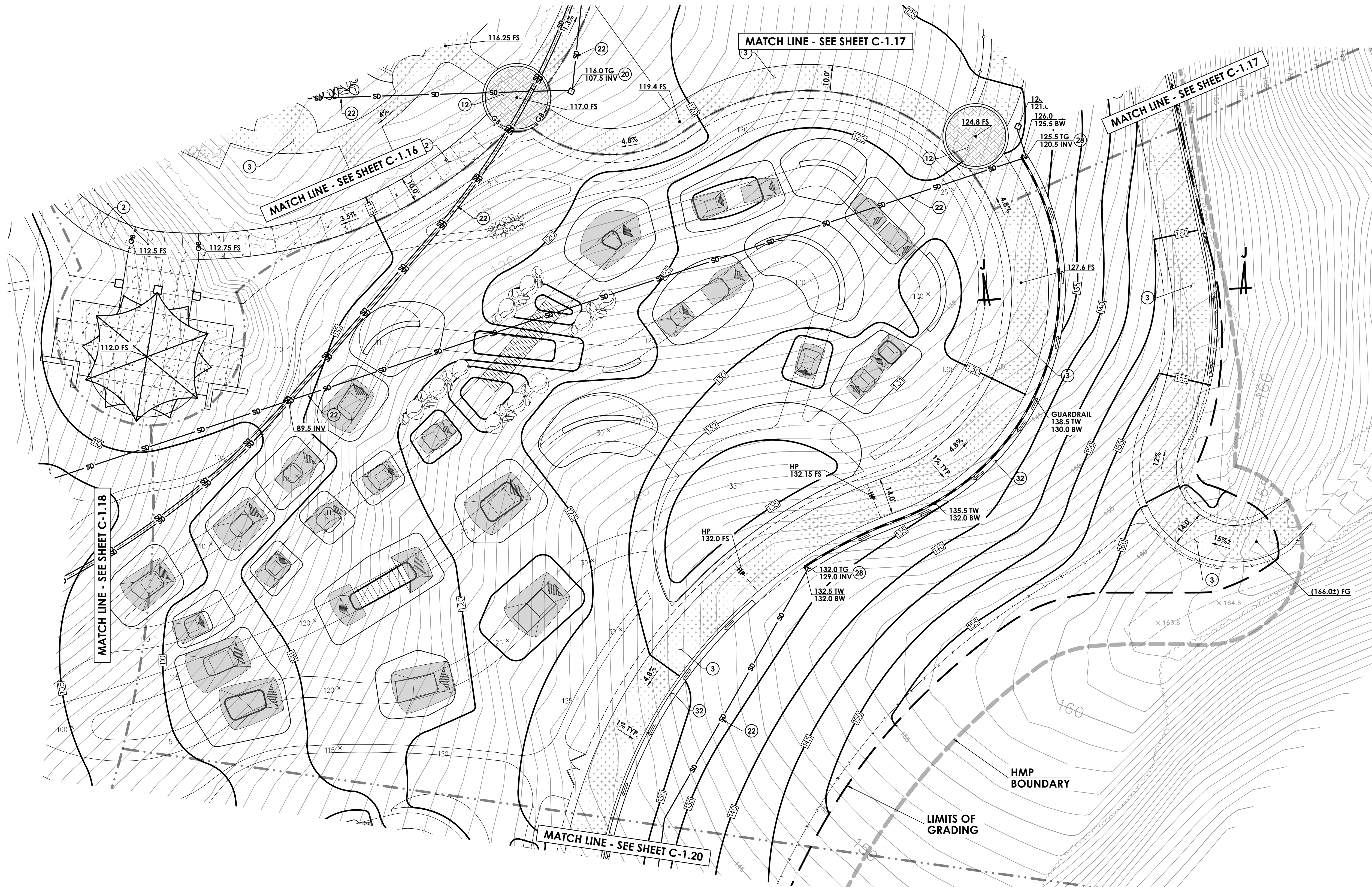
**LEGEND**

— — — — —	PROPERTY LINE	— / — / —	SLOPE
- - - - -	MATCH LINE	— — — — —	CURB
— 95 —	PROPOSED CONTOUR	— — — — —	CURB & GUTTER
— — — — —	PROP. RETAINING WALL	— — — — —	3-FOOT WIDE V-GUTTER
— — — — —	HMP BOUNDARY	— — — — —	PEDESTRIAN RAMP
— — — — —	20-FOOT BUFFER	— — — — —	PROPOSED STORM DRAIN
— — — — —	SIGHT DISTANCE	— — — — —	PROPOSED DOMESTIC WATER
— — — — —	CONCRETE PAVERS (IMPERVIOUS)	— — — — —	PROPOSED RECLAIMED WATER
— — — — —	D.G. PAVING (PERVIOUS)	— — — — —	PROPOSED SEWER
— — — — —	PAVERS (IMPERVIOUS)	— — — — —	PROPOSED ELECTRIC LINE
— — — — —	RESILIENT SURFACE (IMPERVIOUS)	— — — — —	SPLIT RAIL FENCE
— — — — —	CONCRETE (IMPERVIOUS)	— — — — —	PERIMETER FENCE
— — — — —	A.C. PAVING (IMPERVIOUS)	— — — — —	EXISTING CONTOUR
— — — — —	BIOFILTRATION AREA	— — — — —	EXISTING STREET LIGHT
□	CATCH BASIN & GRATE	□	EXISTING MISC. UTIL. BOX
○	ATRIUM DRAIN	○	EXISTING MANHOLE
— — — — —	FLOW DIRECTION/BROW DITCH	+	EXISTING FIRE HYDRANT
□	TYPE 'F' CATCH BASIN	⊕	EXISTING WATER VALVE
□	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
□	RIP RAP		
□	TRUNCATED DOME PAVERS		



SHEET C-1.18

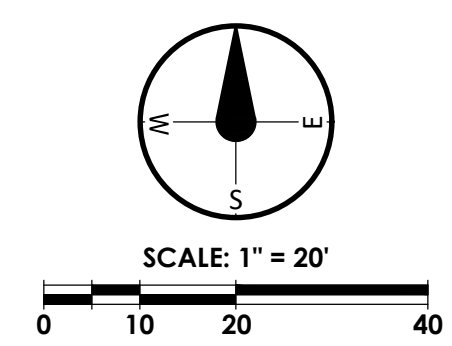
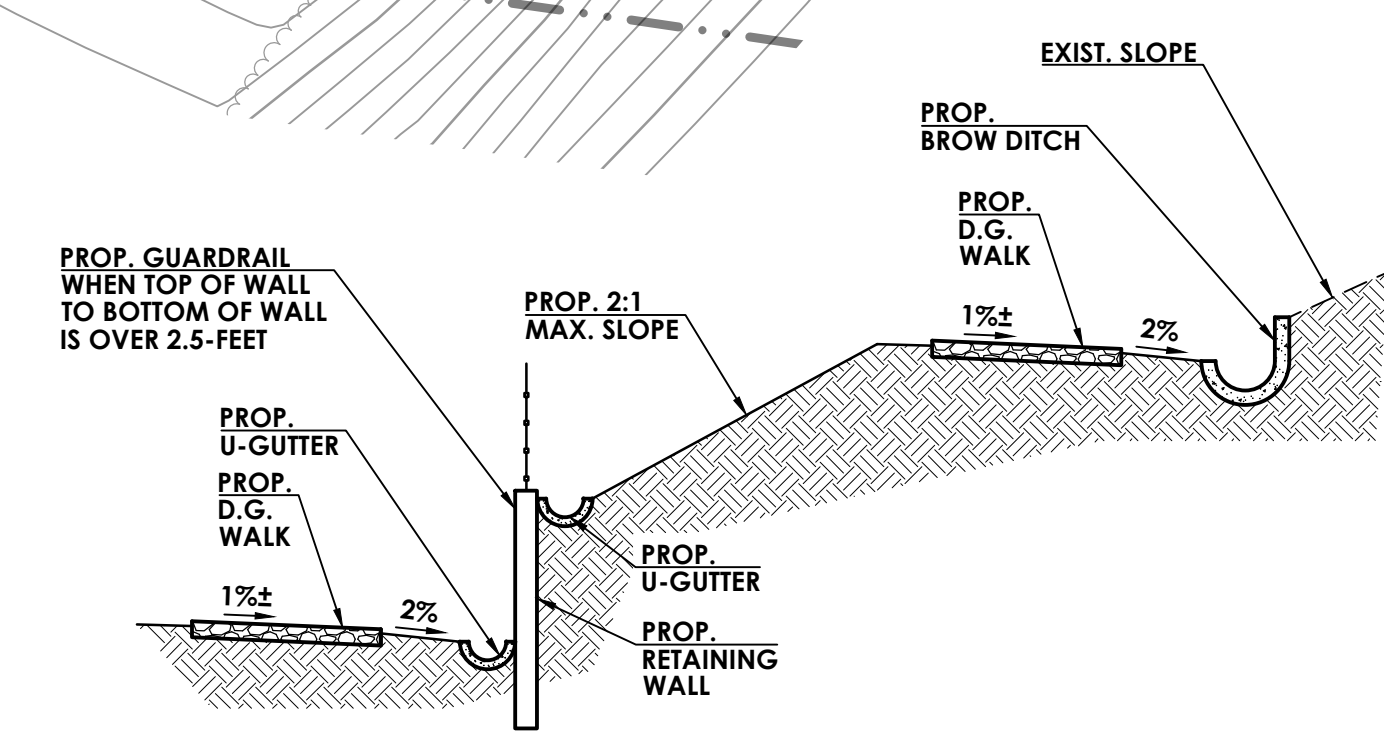
SHEET 24	CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK CONCEPTUAL GRADING EXHIBIT</b>		
PROJECT NO. CIP 4609		DRAWING NO.



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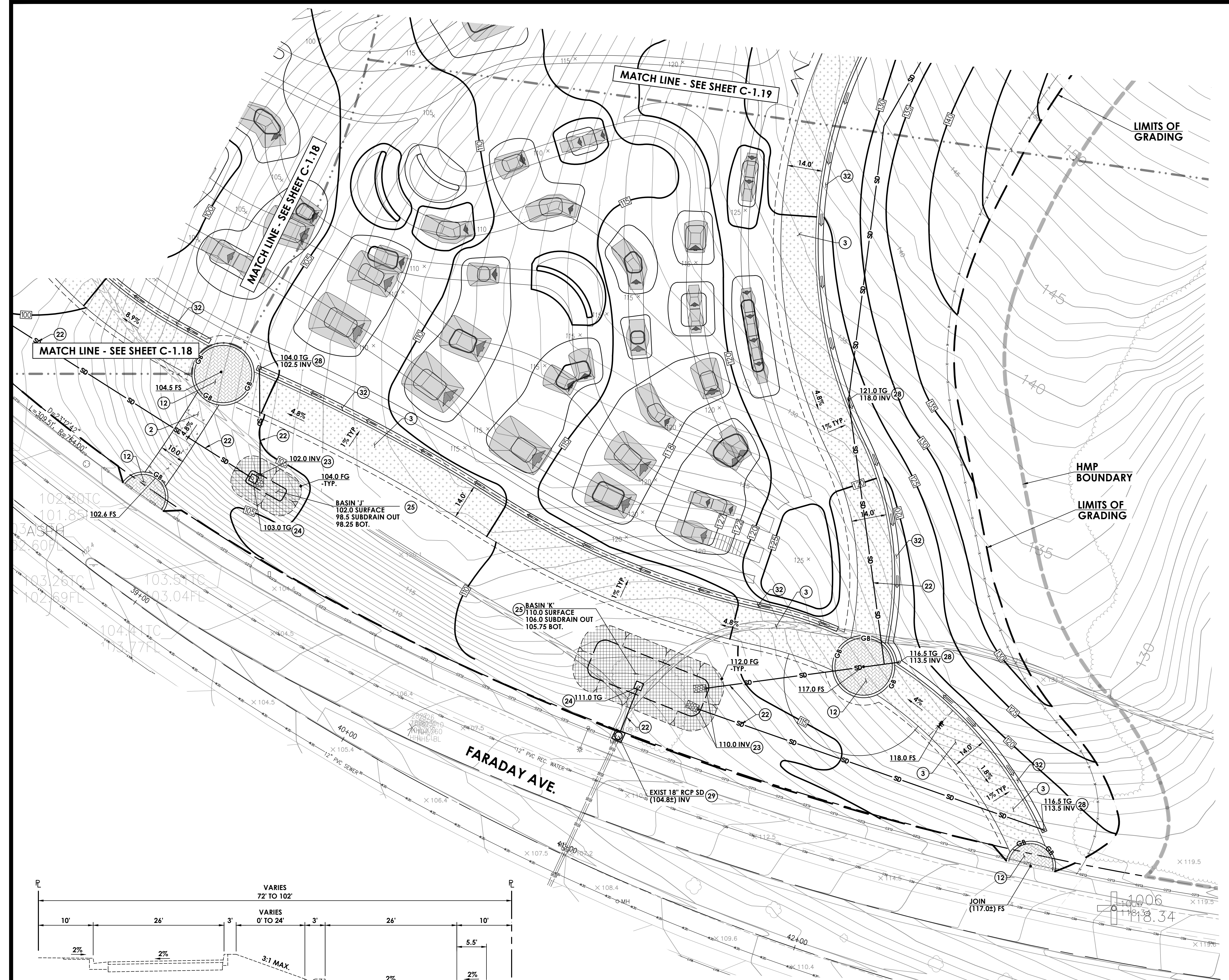
**LEGEND**

—	PROPERTY LINE	—	SLOPE
- - -	MATCH LINE	—	CURB
—	PROPOSED CONTOUR	—	CURB & GUTTER
—	PROP. RETAINING WALL	—	3-FOOT WIDE V-GUTTER
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—	20-FOOT BUFFER	—	PROPOSED STORM DRAIN
—	SIGHT DISTANCE	—	PROPOSED DOMESTIC WATER
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—	A.C. PAVING (IMPERVIOUS)	—	EXISTING CONTOUR
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○	ATRIUM DRAIN	—	EXISTING MANHOLE
—	FLOW DIRECTION/BROW DITCH	—	EXISTING FIRE HYDRANT
□	TYPE 'F' CATCH BASIN	—	EXISTING WATER VALVE
□	TYPE 'A' CLEAN OUT		
□	CURB INLET CATCH BASIN		
—	RIP RAP		
—	TRUNCATED DOME PAVERS		



SHEET C-1.19

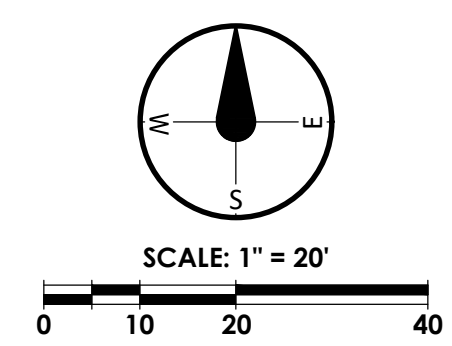
SHEET 25	CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT	SHEETS 40
<b>VETERANS MEMORIAL PARK CONCEPTUAL GRADING EXHIBIT</b>		
PROJECT NO. CIP 4609		DRAWING NO.



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**LEGEND**

---	PROPERTY LINE	---	SLOPE
- - -	MATCH LINE	---	CURB
---	PROPOSED CONTOUR	---	CURB & GUTTER
---	PROP. RETAINING WALL	---	3-FOOT WIDE V-GUTTER
---	HMP BOUNDARY	---	PEDESTRIAN RAMP
---	20-FOOT BUFFER	---	PROPOSED STORM DRAIN
---	SIGHT DISTANCE	---	PROPOSED DOMESTIC WATER
---	CONCRETE PAVERS (IMPERVIOUS)	---	PROPOSED RECLAIMED WATER
---	D.G. PAVING (PERVIOUS)	---	PROPOSED SEWER
---	PAVERS (IMPERVIOUS)	---	PROPOSED ELECTRIC LINE
---	RESILIENT SURFACE (IMPERVIOUS)	---	SPLIT RAIL FENCE
---	CONCRETE (IMPERVIOUS)	---	PERIMETER FENCE
---	A.C. PAVING (IMPERVIOUS)	---	EXISTING CONTOUR
---	BIOFILTRATION AREA	---	EXISTING STREET LIGHT
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---	RIP RAP		
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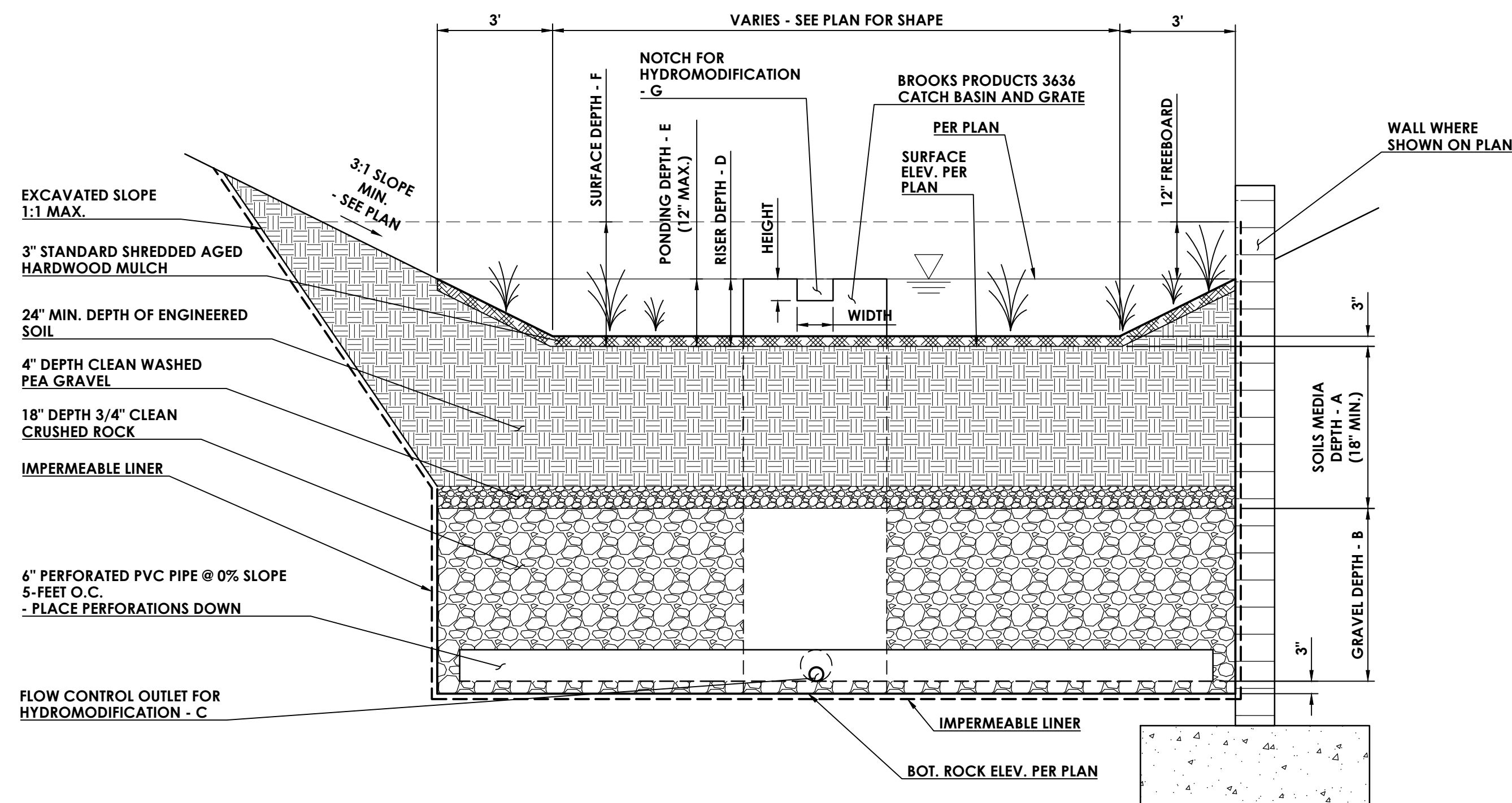


SHEET C-1.20

**FARADAY AVENUE**  
 TYPICAL SECTION  
 WITH CENTER MEDIAN  
 NOT TO SCALE

February 19, 2022

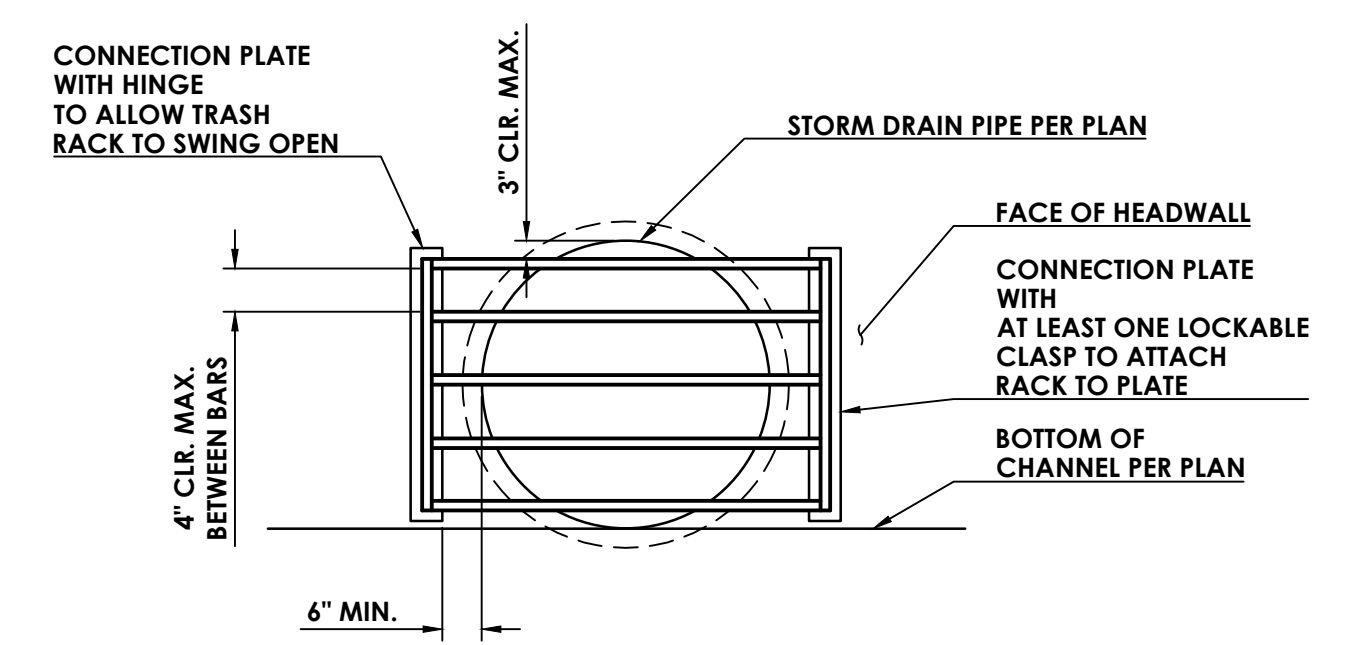
SHEET <b>26</b>	<b>CITY OF CARLSBAD</b> PARKS & RECREATION DEPARTMENT	SHEETS <b>40</b>
<b>VETERANS MEMORIAL PARK</b> CONCEPTUAL GRADING EXHIBIT		
PROJECT NO. <b>CIP 4609</b>		DRAWING NO.



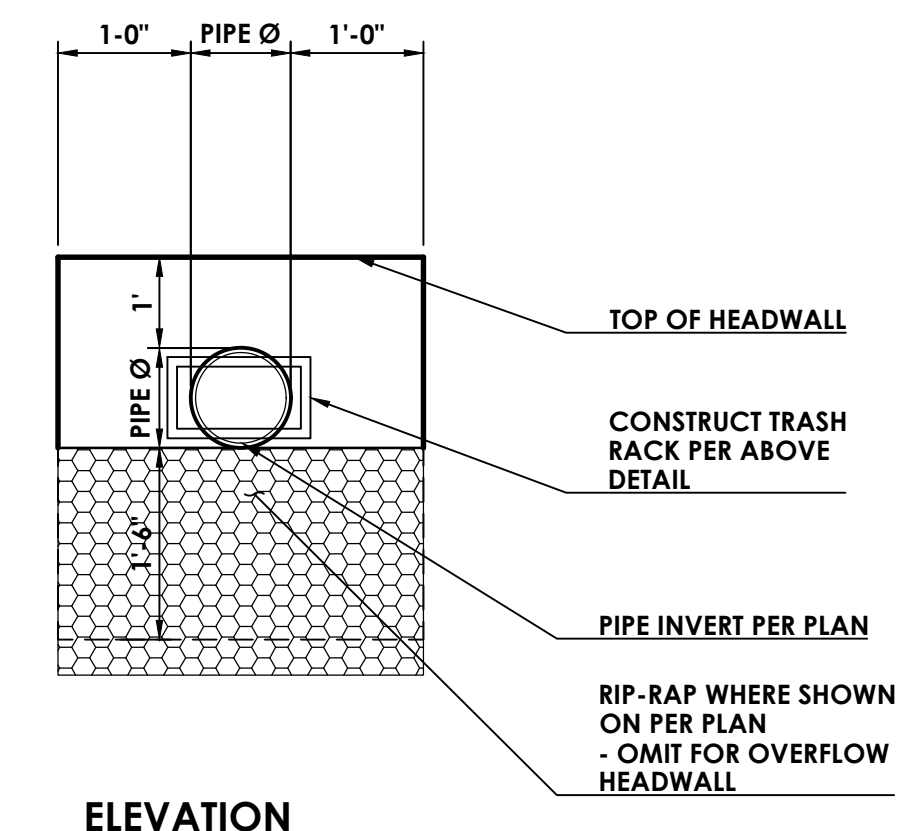
BMP SUMMARY TABLE									
BMP	TRIBUTARY AREA (ACRES)	DIMENSIONS							
		BMP AREA (SQUARE FEET)	SOILS MEDIA DEPTH - A (INCHES)	GRAVEL DEPTH - B (INCHES)	LOWER ORIFICE DIAMETER - C (INCHES)	RISER DEPTH - D (INCHES)	PONDING DEPTH - E (INCHES)	SURFACE DEPTH - F (INCHES)	RISER NOTCH DIMENSIONS [WIDTH X 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**

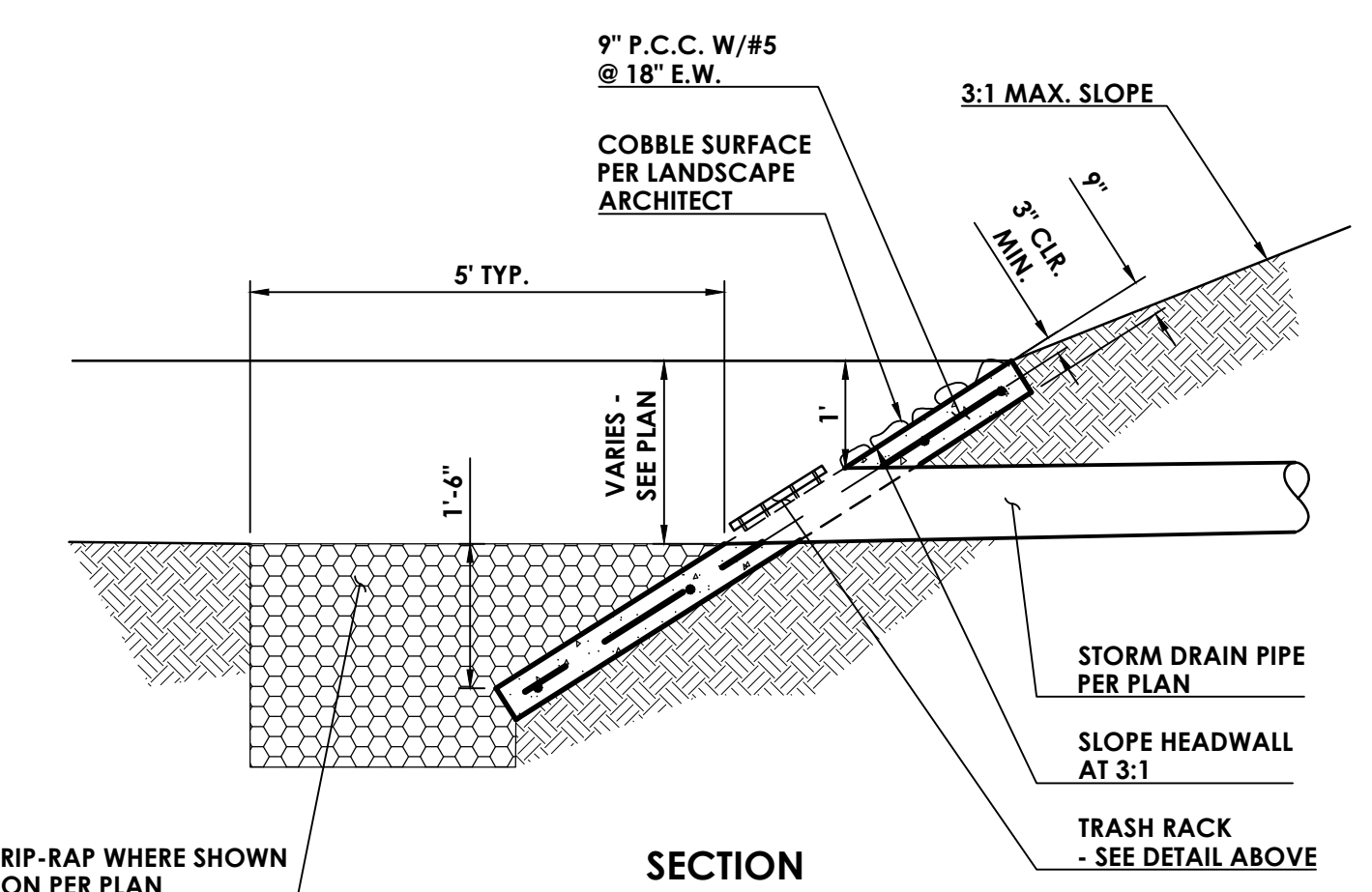
- NOTES:**
- TRASH RACKS SHALL BE CONSTRUCTED WITH RECTANGULAR SMOOTH STEEL TUBE WITH A MIN. 1-INCH BY 0.5-INCH BY 16 GA CROSS SECTION. THE TUBE STEEL SHALL MEET THE ASTM A513 REQUIREMENTS.
  - THE HEADWALL CONNECTION PLATES SHALL BE 1/2-INCH X 6-INCH PLATE AND SHALL BE A36 STEEL. THE HEADWALL CONNECTION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



**TRASH RACK**



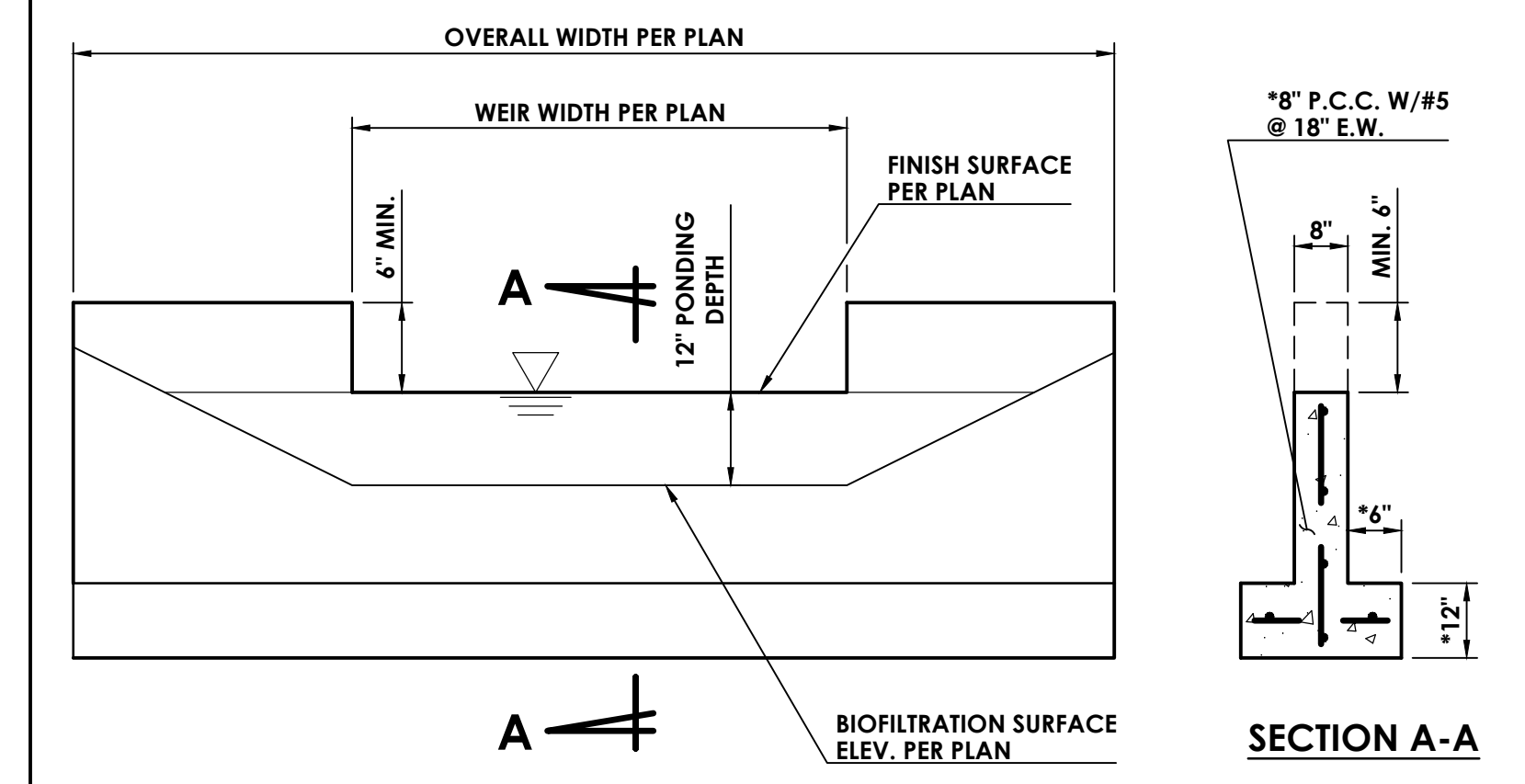
**ELEVATION**



**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:**
- CONCRETE:  $F_c = 3,250$  p.s.i., TYPE V
  - STEEL: ASTM A615, Gr60
  - POUR FOOTING AGAINST UNDISTURBED OR COMPACTED SOIL

**CONCRETE HEADWALL (INLET) W/TRASH RACK**

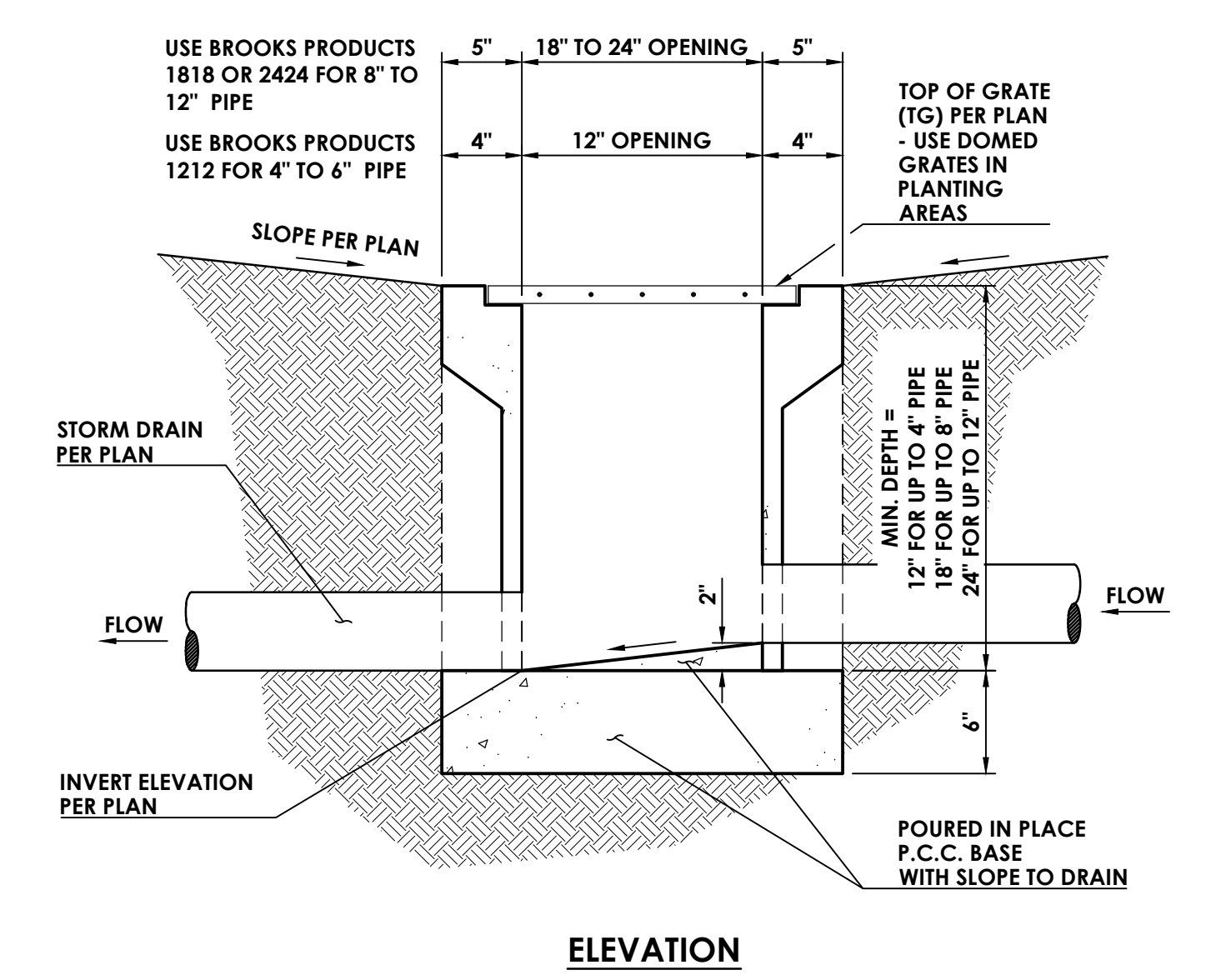


**NOTE TO CONTRACTOR:**

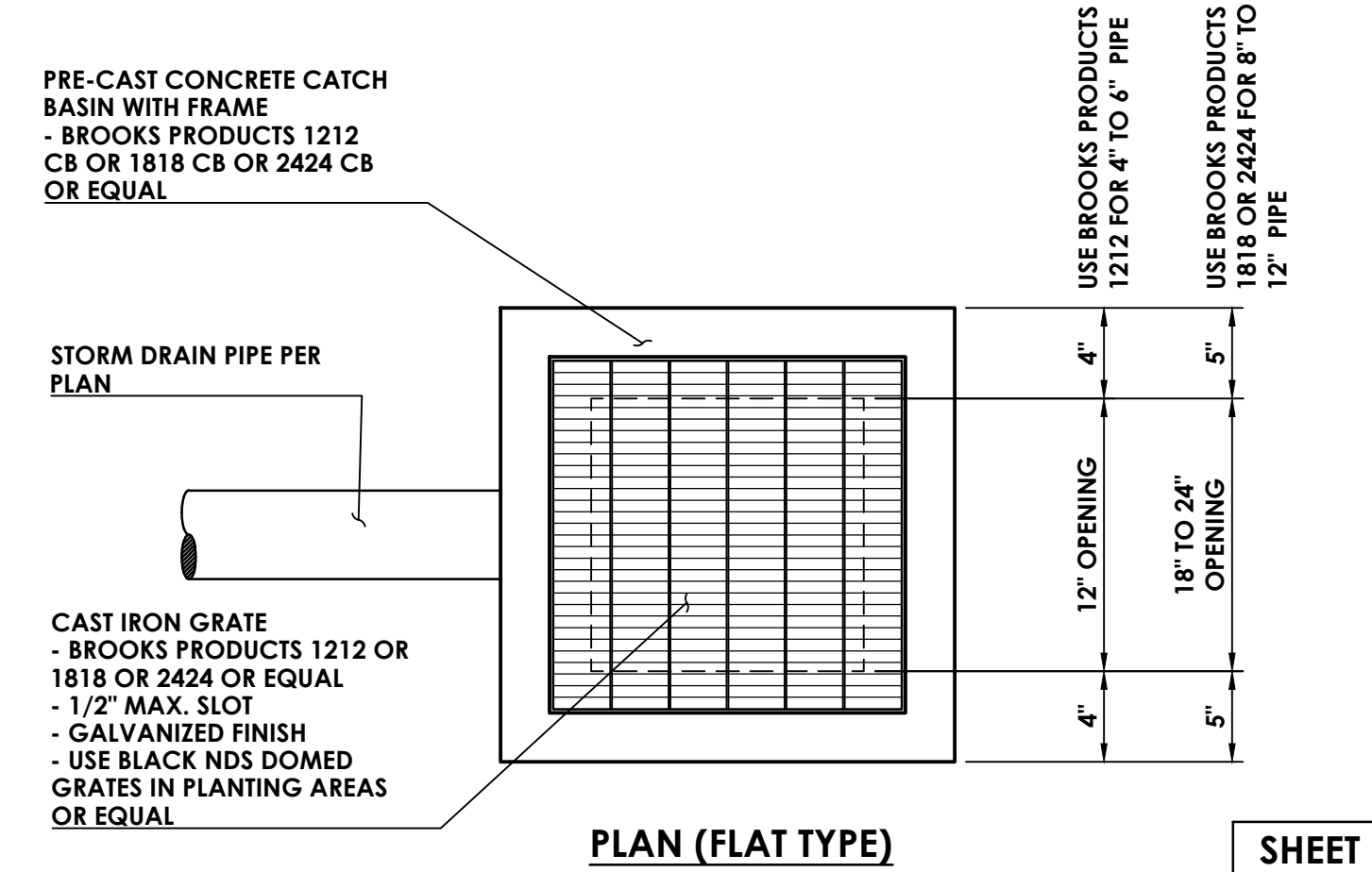
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  - STEEL: ASTM A615, Gr60
  - POUR FOOTING AGAINST UNDISTURBED OR COMPACTED SOIL
  - \* CONC. DIMENSIONS AND REINF. TO BE CONFIRMED BY STRUCTURAL ENGINEER

**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**

SHEET 27 CITY OF CARLSBAD PARKS & RECREATION DEPARTMENT SHEETS 40

**VETERANS MEMORIAL PARK**  
 CONCEPTUAL GRADING EXHIBIT - DETAILS

PROJECT NO. CIP 4609 DRAWING NO.