CITY OF SANTEE

PRIORITY DEVELOPMENT PROJECT (PDP)

STORM WATER QUALITY MANAGEMENT PLAN (SWQMP)

FOR

Santee Community Center

[INSERT PERMIT APPLICATION NUMBERS]

10129 Riverwalk Drive
Santee, CA 92071

ASSESSOR'S PARCEL NUMBER(S):
381-051-14-00
ENGINEER OF WORK:

Sarah Curran C69620
[PROVIDE WET SIGNATURE AND STAMP ABOVE LINE]

PREPARED FOR:

City of Santee
10601 Magnolia Ave.
Santee, CA 92071
(619) 258-4100

PDP SWQMP PREPARED BY:

Psomas
401 B St., Suite 1600
San Diego, CA 92101
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DATE OF SWQMP:
February 2025

PLANS PREPARED BY:
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TABLE OF CONTENTS

Acronym Sheet

PDP SWQMP Preparer's Certification Page

PDP SWQMP Project Owner's Certification Page

Submittal Record

Project Vicinity Map

FORM I-1 Applicability of Permanent, Post-Construction Storm Water BMP Requirements

FORM I-2 Project Type Determination Checklist (Standard Project or PDP)

FORM I-3B Site Information Checklist for PDPs

FORM I-4 Source Control BMP Checklist for All Development Projects

FORM I-5 Site Design BMP Checklist for All Development Projects

FORM I-6 Summary of PDP Structural BMPs

Attachment 1: Backup for PDP Pollutant Control BMPs

- Attachment 1a: DMA Exhibit
- Attachment 1b: Tabular Summary of DMAs and Design Capture Volume Calculations
- Attachment 1c: Harvest and Use Feasibility Screening (when applicable)
- Attachment 1d: Categorization of Infiltration Feasibility Condition (when applicable)
- Attachment 1e: Pollutant Control BMP Design Worksheets / Calculations

Attachment 2: Backup for PDP Hydromodification Control Measures

- Attachment 2a: Hydromodification Management Exhibit
- Attachment 2b: Management of Critical Coarse Sediment Yield Areas
- Attachment 2c: Geomorphic Assessment of Receiving Channels
- Attachment 2d: Flow Control Facility Design

Attachment 3: Structural BMP Maintenance Plan

- Attachment 3a: B Structural BMP Maintenance Thresholds and Actions
- Attachment 3b: Draft Maintenance Agreement (when applicable)

Attachment 4: Copy of Plan Sheets Showing Permanent Storm Water BMPs

ACRONYMS

APN	Assessor's Parcel Number
BMP	Best Management Practice
HMP	Hydromodification Management Plan
HSG	Hydrologic Soil Group
MS4	Municipal Separate Storm Sewer System
N/A	Not Applicable
NRCS	Natural Resources Conservation Service
PDP	Priority Development Project
PE	Professional Engineer
SC	Source Control
SD	Site Design
SDRWQCB	San Diego Regional Water Quality Control Board
SIC	Standard Industrial Classification
SWQMP	Storm Water Quality Management Plan

SWQMP PREPARER'S
CERTIFICATION PAGE

Project Name: Santee Community Center
Permit Application Number: CIP 2018-31

PREPARER'S CERTIFICATION

I hereby declare that I am the Engineer in Responsible Charge of design of storm water best management practices (BMPs) for this project, and that I have exercised responsible charge over the design of the BMPs as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with the PDP requirements of the City of Santee BMP Design Manual, which is a design manual for compliance with local City of San Diego and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

I have read and understand that the City of Santee has adopted minimum requirements for managing urban runoff, including storm water, from land development activities, as described in the BMP Design Manual. I certify that this PDP SWQMP has been completed to the best of my ability and accurately reflects the project being proposed and the applicable BMPs proposed to minimize the potentially negative impacts of this project's land development activities on water quality. I understand and acknowledge that the plan check review of this PDP SWQMP by the City Engineer is confined to a review and does not relieve me, as the Engineer in Responsible Charge of design of storm water BMPs for this project, of my responsibilities for project design.

C69620 Exp. 06/30/26

Engineer of Work's Signature, PE Number & Expiration Date

Sarah Curran

Print Name

Psomas

Company

07/07/2025

Date

Engineer's Seal:

PDP SWQMP Preparation Date: February 2025

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SWQMP PROJECT OWNER'S
CERTIFICATION PAGE

Project Name: Santee Community Center
Permit Application Number: CIP 2018-31

PROJECT OWNER'S CERTIFICATION

This PDP SWQMP has been prepared for City of Santee by Psomas. The PDP SWQMP is intended to comply with the PDP requirements of the City of Santee BMP Design Manual, which is a design manual for compliance with local City of San Diego and regional MS4 Permit (California Regional Water Quality Control Board San Diego Region Order No. R9-2015-0100) requirements for storm water management.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan. Once the undersigned transfers its interests in the property, its successor-in-interest shall bear the aforementioned responsibility to implement the best management practices (BMPs) described within this plan, including ensuring on-going operation and maintenance of structural BMPs. A signed copy of this document shall be available on the subject property into perpetuity.

_____
Project Owner's Signature

_____
Print Name

_____
Company

_____
Date

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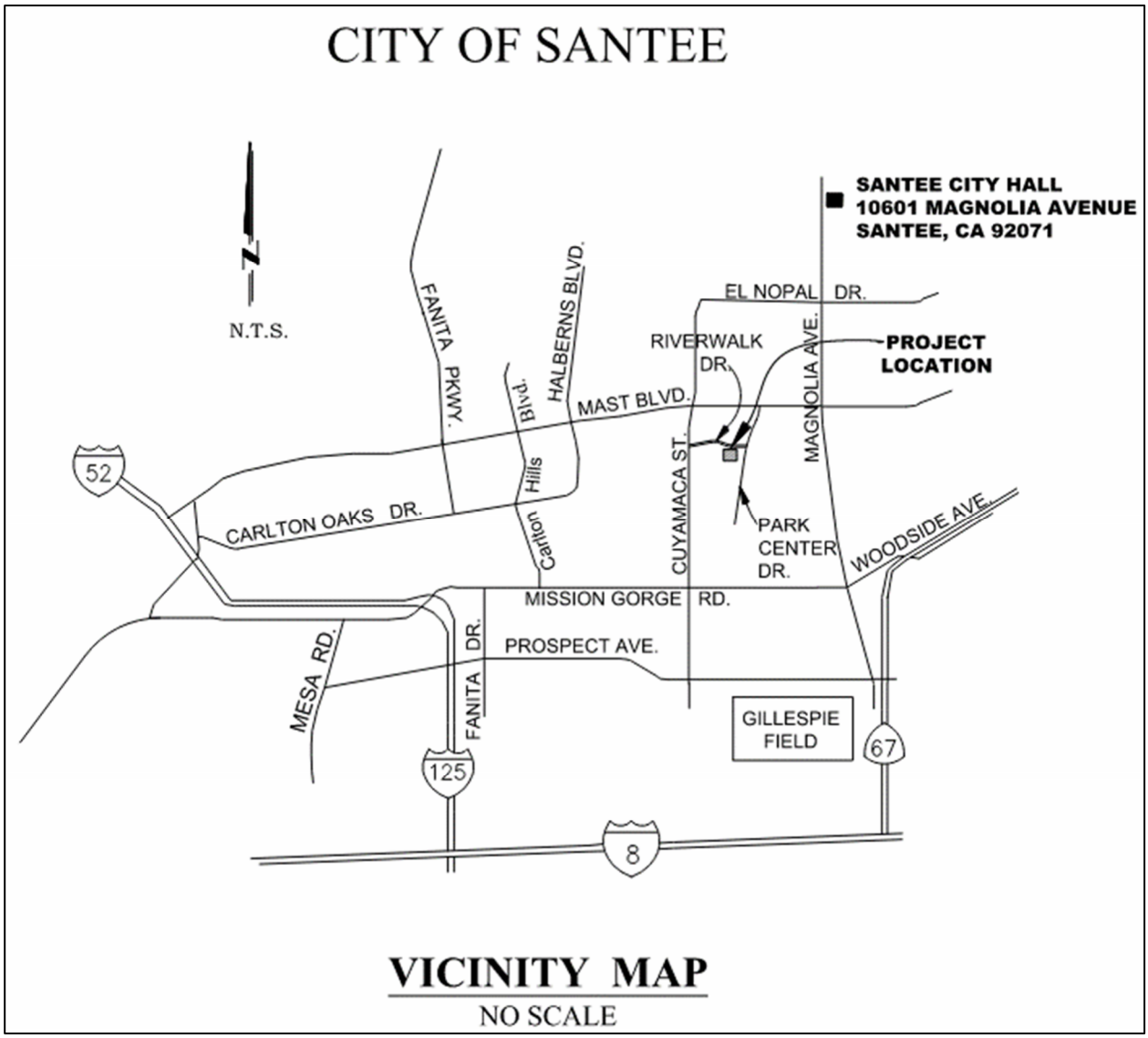
SUBMITTAL RECORD

Use this Table to keep a record of submittals of this PDP SWQMP. Each time the PDP SWQMP is re-submitted, provide the date and status of the project. In column 4 summarize the changes that have been made or indicate if response to plancheck comments is included. When applicable, insert response to plancheck comments behind this page.

Submittal Number	Date	Project Status	Summary of Changes
1	May 26, 2023	☒ Preliminary Design / Planning/ CEQA ☐ Final Design	Initial Submittal
2	January 12, 2024	☐ Preliminary Design / Planning/ CEQA ☒ Final Design	2nd Submittal
3		☐ Preliminary Design / Planning/ CEQA ☐ Final Design	
4		☐ Preliminary Design / Planning/ CEQA ☐ Final Design	

PROJECT VICINITY MAP

Project Name: Santee Community Center
Permit Application Number: CIP 2018-31



Applicability of Permanent, Post-Construction Storm Water BMP Requirements **(Storm Water Intake Form for all Development Permit Applications)**	**Form I-1** Model BMP Design Manual [August 31, 2015]

Project Identification

Project Name: Santee Community Center	
Permit Application Number:	Date:
Project Address: 10129 Riverwalk Drive Santee, CA 92071	

Determination of Requirements

The purpose of this form is to identify permanent, post-construction requirements that apply to the project. This form serves as a short summary of applicable requirements, in some cases referencing separate forms that will serve as the backup for the determination of requirements.

Answer each step below, starting with Step 1 and progressing through each step until reaching "Stop". **Upon reaching a Stop, do not complete further Steps beyond the Stop.**

Refer to BMP Design Manual sections and/or separate forms referenced in each step below.

Step	Answer	Progression
Step 1: Is the project a "development project"? See Section 1.3 of the BMP Design Manual for guidance.	☒ Yes	Go to Step 2.
	☐ No	Stop. Permanent BMP requirements do not apply. No SWQMP will be required. Provide discussion below.
Discussion / justification if the project is not a "development project" (e.g., the project includes *only* interior remodels within an existing building):		
Step 2: Is the project a Standard Project, Priority Development Project (PDP), or exception to PDP definitions? To answer this item, see Section 1.4 of the BMP Design Manual *in its entirety* for guidance, AND complete Form I-2, Project Type Determination.	☐ Standard Project	Stop. Only Standard Project requirements apply, including Standard Project SWQMP.
	☒ PDP	Standard and PDP requirements apply, including PDP SWQMP. Go to Step 3.
	☐ Exception to PDP definitions	Stop. Standard Project requirements apply, and any additional requirements specific to the type of project. Provide discussion and list any additional requirements below. Prepare Standard Project SWQMP.

Form I-1 Page 2, Form Template Date: August 31, 2015		
[Step 2 Continued from Page 1] Discussion / justification, and additional requirements for exceptions to PDP definitions, if applicable:		
Step 3 (PDPs only). Is the project subject to earlier PDP requirements due to a prior lawful approval? See Section 1.10 of the BMP Design Manual for guidance.	☐ Yes	Consult the [City Engineer] to determine requirements. Provide discussion and identify requirements below. Go to Step 4.
	☒ No	BMP Design Manual PDP requirements apply. Go to Step 4.
Discussion / justification of prior lawful approval, and identify requirements (*not required if prior lawful approval does not apply*):		
Step 4 (PDPs only). Do hydromodification control requirements apply? See Section 1.6 of the BMP Design Manual for guidance.	☒ Yes	PDP structural BMPs required for pollutant control (Chapter 5) and hydromodification control (Chapter 6). Go to Step 5.
	☐ No	Stop. PDP structural BMPs required for pollutant control (Chapter 5) only. Provide brief discussion of exemption to hydromodification control below.
Discussion / justification if hydromodification control requirements do <u>not</u> apply:		
Step 5 (PDPs subject to hydromodification control requirements only). Does protection of critical coarse sediment yield areas apply based on review of WMAA Potential Critical Coarse Sediment Yield Area Map? See Section 6.2 of the BMP Design Manual for guidance.	☐ Yes	Management measures required for protection of critical coarse sediment yield areas (Chapter 6.2). Stop.
	☒ No	Management measures not required for protection of critical coarse sediment yield areas. Provide brief discussion below. Stop.
Discussion / justification if protection of critical coarse sediment yield areas requirements do <u>not</u> apply: Critical coarse sediment not located near project site.		

Priority Determination Form	Form I-2 Model BMP Design Manual [August 31, 2015]
Project Information	
Project Name: Santee Community Center	
Permit Application Number:	Date:
Project Address: 10129 Riverwalk Drive Santee, CA 92071	

Project Type Determination: Standard Project or Priority Development Project (PDP)			
The project is (select one): New Development ☒ Redevelopment			
The total proposed newly created or replaced impervious area is: 111,283 ft^2 (2.56) acres			
Is the project in any of the following categories, (a) through (f)?			
Yes	No ☒	(a)	New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes ☒	No	(b)	Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
Yes	No ☒	(c)	New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses: (i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (Standard Industrial Classification (SIC) code 5812). (ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater. (iii) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce. (iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

Form I-2 Page 2, Form Template Date: August 31, 2015			
Yes	No ☒	(d)	New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). "Discharging directly to" includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands). *Note: ESAs are areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. See BMP Design Manual Section 1.4.2 for additional guidance.*
Yes	No ☒	(e)	New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses: (i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following SIC codes: 5013, 5014, 5541, 7532-7534, or 7536-7539. (ii) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.
Yes	No ☒	(f)	New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post construction. *Note: See BMP Design Manual Section 1.4.2 for additional guidance.*

Does the project meet the definition of one or more of the Priority Development Project categories (a) through (f) listed above?

No – the project is <u>not</u> a Priority Development Project (Standard Project).

☒ Yes – the project is a Priority Development Project (PDP).

The following is for redevelopment PDPs only:

The area of existing (pre-project) impervious area at the project site is: 235,224 acres ft^2 (A)
The total proposed newly created or replaced impervious area is 111,283 ft^2 (B)
Percent impervious surface created or replaced (B/A)*100: 47.3%
The percent impervious surface created or replaced is (select one based on the above calculation):

☒ less than or equal to fifty percent (50%) – only new impervious areas are considered PDP

OR

☐ greater than fifty percent (50%) – the entire project site is a PDP

Site Design Checklist For PDPs	Form I-3B (PDPs) Model BMP Design Manual [August 31, 2015]
Project Summary Information	
Project Name	Santee Community Center
Project Address	10129 Riverwalk Drive Santee, CA 92071
Assessor's Parcel Number(s) (APN(s))	381-051-14-00
Permit Application Number	CIP 2018-31
Project Hydrologic Unit	Select One: ☐ Santa Margarita 902 ☐ San Luis Rey 903 ☐ Carlsbad 904 ☐ San Dieguito 905 ☐ Penasquitos 906 ☒ San Diego 907 ☐ Pueblo San Diego 908 ☐ Sweetwater 909 ☐ Otay 910 ☐ Tijuana 911
Project Watershed (Complete Hydrologic Unit, Area, and Subarea Name with Numeric Identifier)	San Diego River Basin, 434 mi^2 907.1
Parcel Area (total area of Assessor's Parcel(s) associated with the project)	53.81 Acres (2,343,963 Square Feet)
Area to be Disturbed by the Project (Project Area)	3.31 Acres (144,344 Square Feet)
Project Proposed Impervious Area (subset of Project Area)	2.56 Acres (111,283 Square Feet)
Project Proposed Pervious Area (subset of Project Area)	0.76 Acres (33,061 Square Feet)
Note: Proposed Impervious Area + Proposed Pervious Area = Area to be Disturbed by the Project. This may be less than the Parcel Area.	

Description of Existing Site Condition

Current Status of the Site (select all that apply):

☒ Existing development

☐ Previously graded but not built out

☐ Demolition completed without new construction

☐ Agricultural or other non-impervious use

☒ Vacant, undeveloped/natural

Description / Additional Information:
Existing parking lot used by the Cameron Family YMCA.
Existing vacant area North of the Cameron Family YMCA.

Existing Land Cover Includes (select all that apply):

☒ Vegetative Cover

☒ Non-Vegetated Pervious Areas

☒ Impervious Areas

Description / Additional Information:
Existing AC parking lot with landscaped buffer areas.
Proposed parking lot location has existing pervious areas.

Underlying Soil belongs to Hydrologic Soil Group (select all that apply):

☐ NRCS Type A

☐ NRCS Type B

☐ NRCS Type C

☒ NRCS Type D

Approximate Depth to Groundwater (GW):

☐ GW Depth < 5 feet

☐ 5 feet < GW Depth < 10 feet

☒ 10 feet < GW Depth < 20 feet

☐ GW Depth > 20 feet

Existing Natural Hydrologic Features (select all that apply):

☐ Watercourses

☐ Seeps

☐ Springs

☐ Wetlands

☒ None

Description / Additional Information:

Description of Existing Site Drainage Patterns

How is storm water runoff conveyed from the site? At a minimum, this description should answer:

(1) whether existing drainage conveyance is natural or urban;

(2) Is runoff from offsite conveyed through the site? if yes, quantify all offsite drainage areas, design flows, and locations where offsite flows enter the project site, and summarize how such flows are conveyed through the site;

(3) Provide details regarding existing project site drainage conveyance network, including any existing storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels; and

(4) Identify all discharge locations from the existing project site along with a summary of conveyance system size and capacity for each of the discharge locations. Provide summary of the pre-project drainage areas and design flows to each of the existing runoff discharge locations.

Describe existing site drainage patterns:

The entire existing parking lot south of Riverwalk Drive conveys stormwater to the south of the lot. Runoff surface flow is then conveyed into an existing earthen swale then discharged into Woodglen Vista Creek. The creek eventually discharges into the San Diego River. A summary of the pre-project drainage areas and design flows can be found in the Project's hydrology report.

The vacant area north of the Cameron Family YMCA currently sheet flows south to catch basins located in an earthen swale. From there the drainage is conveyed via pipe to the west where the pipe daylights and outlets into an earthen open channel that flows southerly into Woodglen Vista Creek and eventually into the San Diego River. A summary of the pre-project drainage areas and design flows can be found in the Project's hydrology report.

Description of Proposed Site Development

Project Description / Proposed Land Use and/or Activities:

The community center will be constructed on City-owned property in the Santee Town Center Community Park adjacent to an existing City-owned YMCA facility located at 10129 Riverwalk Drive. The Project will include dedicated facilities for teens and seniors, lobby space, multi-purpose rooms, administrative offices and storage, occupying approximately 12,500 square feet. The Project's site improvements will include complimentary drought tolerant landscape architecture, storm water compliance, environmental documentation, addition of new parking lot area, realignment of adjacent parking facilities (but not replacement of displaced parking) and accessibility compatibility with adjacent features and the new building.

List/describe proposed impervious features of the project (e.g., buildings, roadways, parking lots, courtyards, athletic courts, other impervious features):

The proposed site features one building with support areas and two covered outdoor event spaces and courtyards. The project will also redesign a portion of the existing parking lot. The proposed site will also include the development of a new parking lot to the North of the Cameron Family YMCA.

List/describe proposed pervious features of the project (e.g., landscape areas):

There are four landscaped islands located in the redesigned parking lot as well as planted common areas around the proposed building.

For the proposed new parking lot, there are eight landscaped islands.

Does the project include grading and changes to site topography?

☒ Yes

☐ No

Description / Additional Information:

Grading of the site involves remedial grading per the Project Geotechnical Report requirements and grading to achieve drainage and accessibility compliance requirements around the building and proposed new parking lot area.

Description of Proposed Site Drainage Patterns

Does the project include changes to site drainage (e.g., installation of new storm water conveyance systems)?

☒ Yes
☐ No

If yes, provide details regarding the proposed project site drainage conveyance network, including storm drains, concrete channels, swales, detention facilities, storm water treatment facilities, natural or constructed channels, and the method for conveying offsite flows through or around the proposed project site. Identify all discharge locations from the proposed project site along with a summary of the conveyance system size and capacity for each of the discharge locations. Provide a summary of pre- and post-project drainage areas and design flows to each of the runoff discharge locations. Reference the drainage study for detailed calculations.

Describe proposed site drainage patterns:

Drainage from parking lot areas tributary to our site will be rerouted around our site via a concrete V-gutter that directs the flows to the existing earthen swale and continue to match existing flow conditions. The site has proposed catch basins located in the outdoor event areas to collect surface flows away from the building entryways. There are three biofiltration basins that have a total provided area of 11,000 square feet in order to treat the site and provide hydromodification benefits. Drainage of the site conveys the water to the biofiltration basins and eventually will discharge into Woodglen Vista Creek via surface overflow. A summary of the post-project drainage areas and design flows can be found in the Project's hydrology report.

For the northern new parking lot, water will be conveyed to the west and to the south of the site into three new biofiltration basins then discharged into and earthen open channel to the west which then flows southerly into Woodglen Vista Creek. The creek eventually discharges into the San Diego River. A summary of the post-project drainage areas and design flows can be found in the Project's hydrology report.

Identify whether any of the following features, activities, and/or pollutant source areas will be present (select all that apply):

☒ On-site storm drain inlets

☐ Interior floor drains and elevator shaft sump pumps

☐ Interior parking garages

☒ Need for future indoor & structural pest control

☒ Landscape/Outdoor Pesticide Use

☐ Pools, spas, ponds, decorative fountains, and other water features

☒ Food service

☒ Refuse areas

☐ Industrial processes

☐ Outdoor storage of equipment or materials

☐ Vehicle and Equipment Cleaning

☐ Vehicle/Equipment Repair and Maintenance

☐ Fuel Dispensing Areas

☐ Loading Docks

☒ Fire Sprinkler Test Water

☒ Miscellaneous Drain or Wash Water

☒ Plazas, sidewalks, and parking lots

Description / Additional Information:

There are three catch basins on the project site. The site will have a kitchen area for food service, trash enclosure, and features an outdoor plaza, seating, sidewalks, and parking lot.

Identification and Narrative of Receiving Water and Pollutants of Concern

Describe flow path of storm water from the project site discharge location(s), through urban storm conveyance systems as applicable, to receiving creeks, rivers, and lagoons as applicable, and ultimate discharge to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable):

The site has two proposed catch basins located in the outdoor event areas. There are two biofiltration basins that have a required area of 2,000 square feet in order to treat the site. Drainage of the site conveys the water to the biofiltration basins and eventually will discharge into Woodglen Vista Creek. From the creek, the water will be discharged into the San Diego River.

List any 303(d) impaired water bodies within the path of storm water from the project site to the Pacific Ocean (or bay, lagoon, lake or reservoir, as applicable), identify the pollutant(s)/stressor(s) causing impairment, and identify any TMDLs and/or Highest Priority Pollutants from the WQIP for the impaired water bodies:

303(d) Impaired Water Body	Pollutant(s)/Stressor(s)	TMDLs / WQIP Highest Priority Pollutant
San Diego River	Phosphorus	
	Total Dissolved Solids	
	Nitrogen	
	Indicator Bacteria	Highest Priority Pollutant
	Cadmium	
	Benthic Community Effects	
	Oxygen, Dissolved	
	Toxicity	
	Sulfates	

Identification of Project Site Pollutants*

***Identification of project site pollutants is only required if flow-thru treatment BMPs are implemented onsite in lieu of retention or biofiltration BMPs (note the project must also participate in an alternative compliance program unless prior lawful approval to meet earlier PDP requirements is demonstrated)**

Identify pollutants expected from the project site based on all proposed use(s) of the site (see BMP Design Manual Appendix B.6):

Pollutant	Not Applicable to the Project Site	Expected from the Project Site	Also a Receiving Water Pollutant of Concern
Sediment		X	
Nutrients	X		
Heavy Metals	X		
Organic Compounds		X	
Trash & Debris		X	

Oxygen Demanding Substances	X		
Oil & Grease		X	
Bacteria & Viruses	X		
Pesticides		X	

Form I-3B Page 8 of 10, Form Template Date: August 31, 2015
Hydromodification Management Requirements
Do hydromodification management requirements apply (see Section 1.6 of the BMP Design Manual)? ☒ Yes, hydromodification management flow control structural BMPs required. ☐ No, the project will discharge runoff directly to existing underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean. ☐ No, the project will discharge runoff directly to conveyance channels whose bed and bank are concrete-lined all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean. ☐ No, the project will discharge runoff directly to an area identified as appropriate for an exemption by the WMAA for the watershed in which the project resides. Description / Additional Information (to be provided if a 'No' answer has been selected above):
Critical Coarse Sediment Yield Areas* ***This Section only required if hydromodification management requirements apply**

Based on the maps provided within the WMAA, do potential critical coarse sediment yield areas exist within the project drainage boundaries?

☐ Yes

☒ No, No critical coarse sediment yield areas to be protected based on WMAA maps

If yes, have any of the optional analyses presented in Section 6.2 of the BMP Design Manual been performed?

☐ 6.2.1 Verification of Geomorphic Landscape Units (GLUs) Onsite

☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment

☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite

☐ No optional analyses performed, the project will avoid critical coarse sediment yield areas identified based on WMAA maps

If optional analyses were performed, what is the final result?

☐ No critical coarse sediment yield areas to be protected based on verification of GLUs onsite

☐ Critical coarse sediment yield areas exist but additional analysis has determined that protection is not required. Documentation attached in Attachment 2.b of the SWQMP.

☐ Critical coarse sediment yield areas exist and require protection. The project will implement management measures described in Sections 6.2.4 and 6.2.5 as applicable, and the areas are identified on the SWQMP Exhibit.

Discussion / Additional Information:

The City of San Diego Regional Watershed Management Area analysis provided mapping of Critical Coarse Sediment Yield areas. The location of our project is not near a Coarse Sediment Yield area. Refer to Attachment 2b.

Flow Control for Post-Project Runoff*

***This Section only required if hydromodification management requirements apply**

List and describe point(s) of compliance (POCs) for flow control for hydromodification management (see Section 6.3.1). For each POC, provide a POC identification name or number correlating to the project's HMP Exhibit and a receiving channel identification name or number correlating to the project's HMP Exhibit.

Drainage of the site is conveyed via catch basins and daylighted roof drainage is piped to the biofiltration basins and will then discharge into Woodglen Vista Creek. From the creek, the water will flow to the San Diego River. Biofiltration basins are sized for hydromodification. Please refer to the HMP exhibit for the discharge area.

Has a geomorphic assessment been performed for the receiving channel(s)?

☒ No, the low flow threshold is 0.1Q2 (default low flow threshold)

☐ Yes, the result is the low flow threshold is 0.1Q2

☐ Yes, the result is the low flow threshold is 0.3Q2

☐ Yes, the result is the low flow threshold is 0.5Q2

If a geomorphic assessment has been performed, provide title, date, and preparer:

Discussion / Additional Information: (optional)

Form I-3B Page 10 of 10, Form Template Date: August 31, 2015
Other Site Requirements and Constraints
When applicable, list other site requirements or constraints that will influence storm water management design, such as zoning requirements including setbacks and open space, or local codes governing minimum street width, sidewalk construction, allowable pavement types, and drainage requirements. None.
Optional Additional Information or Continuation of Previous Sections As Needed
This space provided for additional information or continuation of information from previous sections as needed.

Source Control BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)	Form I-4 Model BMP Design Manual [August 31, 2015]

Project Identification

Project Name: Santee Community Center

Permit Application Number: CIP 2018-31

Source Control BMPs

All development projects must implement source control BMPs SC-1 through SC-6 where applicable and feasible. See Chapter 4 and Appendix E of the Model BMP Design Manual for information to implement source control BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the source control BMP as described in Chapter 4 and/or Appendix E of the Model BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project has no outdoor materials storage areas). Discussion / justification may be provided.

Source Control Requirement	Applied?		
SC-1 Prevention of Illicit Discharges into the MS4	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-1 not implemented:			
SC-2 Storm Drain Stenciling or Signage	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-2 not implemented:			
SC-3 Protect Outdoor Materials Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-3 not implemented:			
SC-4 Protect Materials Stored in Outdoor Work Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-4 not implemented:			

Form I-4 Page 2 of 2, Form Template Date: August 31, 2015			
Source Control Requirement	**Applied?**		
SC-5 Protect Trash Storage Areas from Rainfall, Run-On, Runoff, and Wind Dispersal	☒ Yes	☐ No	☐ N/A
Discussion / justification if SC-5 not implemented:			
SC-6 Additional BMPs Based on Potential Sources of Runoff Pollutants (must answer for each source listed below)			
☐ On-site storm drain inlets	☒ Yes	☐ No	☐ N/A
☐ Interior floor drains and elevator shaft sump pumps	☐ Yes	☐ No	☒ N/A
☐ Interior parking garages	☐ Yes	☐ No	☒ N/A
☐ Need for future indoor & structural pest control	☒ Yes	☐ No	☐ N/A
☐ Landscape/Outdoor Pesticide Use	☒ Yes	☐ No	☐ N/A
☐ Pools, spas, ponds, decorative fountains, and other water features	☐ Yes	☐ No	☒ N/A
☐ Food service	☒ Yes	☐ No	☐ N/A
☐ Refuse areas	☒ Yes	☐ No	☐ N/A
☐ Industrial processes	☐ Yes	☐ No	☒ N/A
☐ Outdoor storage of equipment or materials	☐ Yes	☐ No	☒ N/A
☐ Vehicle and Equipment Cleaning	☐ Yes	☐ No	☒ N/A
☐ Vehicle/Equipment Repair and Maintenance	☐ Yes	☐ No	☒ N/A
☐ Fuel Dispensing Areas	☐ Yes	☐ No	☒ N/A
☐ Loading Docks	☐ Yes	☐ No	☒ N/A
☐ Fire Sprinkler Test Water	☒ Yes	☐ No	☐ N/A
☐ Miscellaneous Drain or Wash Water	☒ Yes	☐ No	☐ N/A
☐ Plazas, sidewalks, and parking lots	☒ Yes	☐ No	☐ N/A

Discussion / justification if SC-6 not implemented. Clearly identify which sources of runoff pollutants are discussed. Justification must be provided for all "No" answers shown above.

Additional BMPs Based on Potential Sources of Runoff Pollutants not applicable to our site.

Site Design BMP Checklist for All Development Projects (Standard Projects and Priority Development Projects)	Form I-5 Model BMP Design Manual [August 31, 2015]

Project Identification

Project Name: Santee Community Center

Permit Application Number: CIP 2018-31

Site Design BMPs

All development projects must implement site design BMPs SD-1 through SD-8 where applicable and feasible. See Chapter 4 and Appendix E of the Model BMP Design Manual for information to implement site design BMPs shown in this checklist.

Answer each category below pursuant to the following.

- "Yes" means the project will implement the site design BMP as described in Chapter 4 and/or Appendix E of the Model BMP Design Manual. Discussion / justification is not required.
- "No" means the BMP is applicable to the project but it is not feasible to implement. Discussion / justification must be provided.
- "N/A" means the BMP is not applicable at the project site because the project does not include the feature that is addressed by the BMP (e.g., the project site has no existing natural areas to conserve). Discussion / justification may be provided.

Site Design Requirement	Applied?		
SD-1 Maintain Natural Drainage Pathways and Hydrologic Features	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-1 not implemented:			
SD-2 Conserve Natural Areas, Soils, and Vegetation	☐ Yes	☒ No	☐ N/A
Discussion / justification if SD-2 not implemented: Existing landscaped planters in the parking lot are being removed. Existing pervious area to the south of the project site is being modified to incorporate the Biofiltration BMPs			
SD-3 Minimize Impervious Area	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-3 not implemented:			
SD-4 Minimize Soil Compaction	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-4 not implemented:			
SD-5 Impervious Area Dispersion	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-5 not implemented:			

Form I-5 Page 2 of 2, Form Template Date: August 31, 2015			
Site Design Requirement	**Applied?**		
SD-6 Runoff Collection	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-6 not implemented:			
SD-7 Landscaping with Native or Drought Tolerant Species	☒ Yes	☐ No	☐ N/A
Discussion / justification if SD-7 not implemented:			
SD-8 Harvesting and Using Precipitation	☐ Yes	☐ No	☒ N/A
Discussion / justification if SD-8 not implemented: Harvest and Use BMP is not feasible for the project site.			

Summary of PDP Structural BMPs	Form I-6 (PDPs) Model BMP Design Manual [August 31, 2015]
Project Identification	
Project Name: Santee Community Center	
Permit Application Number: CIP 2018-31	
PDP Structural BMPs	
All PDPs must implement structural BMPs for storm water pollutant control (see Chapter 5 of the BMP Design Manual). Selection of PDP structural BMPs for storm water pollutant control must be based on the selection process described in Chapter 5. PDPs subject to hydromodification management requirements must also implement structural BMPs for flow control for hydromodification management (see Chapter 6 of the BMP Design Manual). Both storm water pollutant control and flow control for hydromodification management can be achieved within the same structural BMP(s). PDP structural BMPs must be verified by the local jurisdiction at the completion of construction. This may include requiring the project owner or project owner's representative and engineer of record to certify construction of the structural BMPs (see Section 1.12 of the BMP Design Manual). PDP structural BMPs must be maintained into perpetuity, and the local jurisdiction must confirm the maintenance (see Section 7 of the BMP Design Manual). Use this form to provide narrative description of the general strategy for structural BMP implementation at the project site in the box below. Then complete the PDP structural BMP summary information sheet (page 3 of this form) for each structural BMP within the project (copy the BMP summary information page as many times as needed to provide summary information for each individual structural BMP).	
Bio-1 Biofiltration BMPs were selected for this site due to the ample site area to accommodate these basins. Drainage flows are directed to the basins via surface flow and pipes from catch basins throughout the site. These basins are being utilized for flow and pollutant control. (Continue on page 2 as necessary.)	

Form I-6 Page 2 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. BF-1B
Construction Plan Sheet No. C1.9
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 3 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**
Structural BMP ID No. BF-1C
Construction Plan Sheet No. C1.9
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)

Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 4 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-1D	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 4 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-1E	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 4 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-1F	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 5 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-2A	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

Form I-6 Page 6 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-2B	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

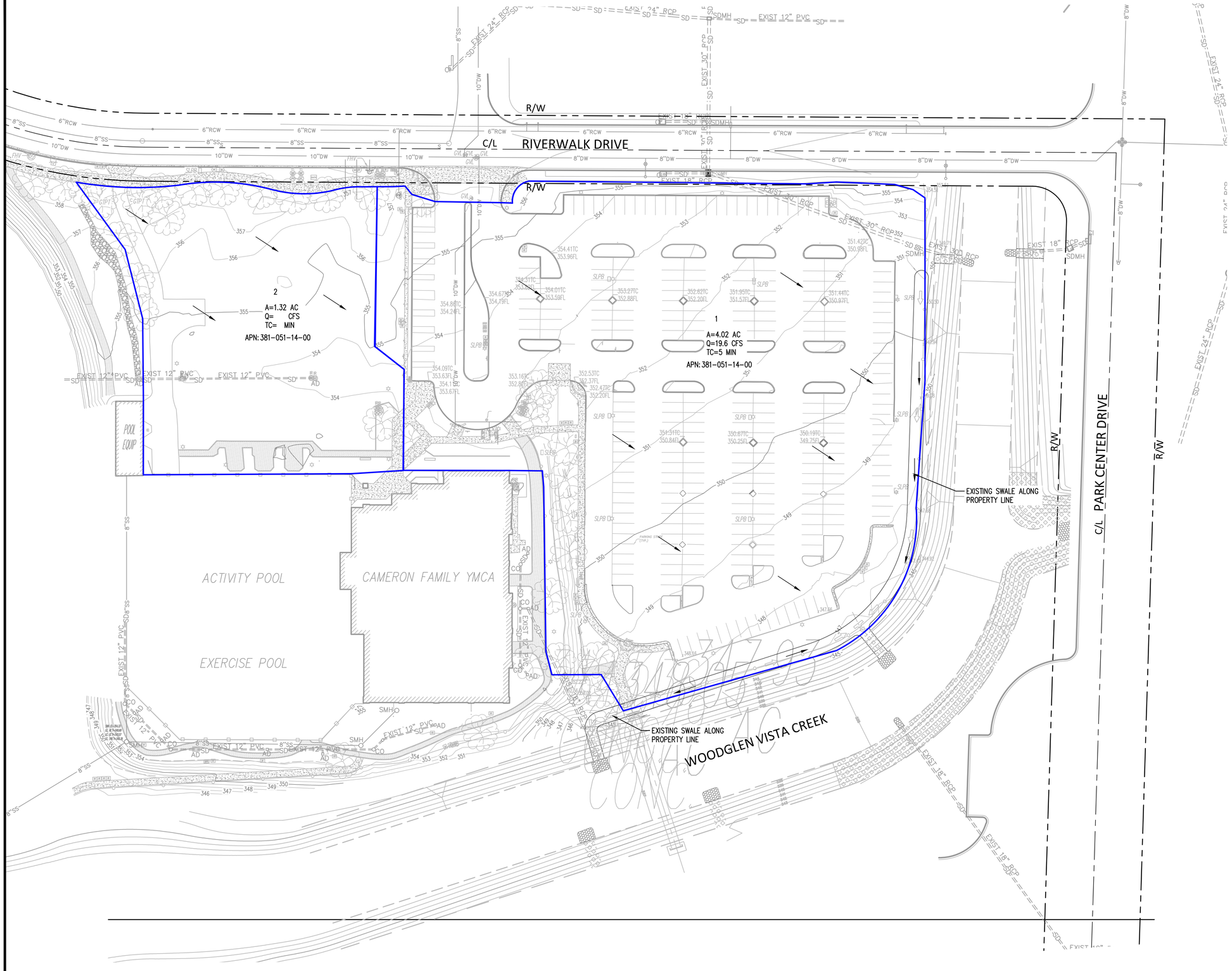
Form I-6 Page 7 of 7 (Copy as many as needed) , Form Template Date: August 31, 2015	
Structural BMP Summary Information **(Copy this page as needed to provide information for each individual proposed structural BMP)**	
Structural BMP ID No. BF-2C	
Construction Plan Sheet No. C1.9	
Type of structural BMP: ☐ Retention by harvest and use (HU-1) ☐ Retention by infiltration basin (INF-1) ☐ Retention by bioretention (INF-2) ☐ Retention by permeable pavement (INF-3) ☐ Partial retention by biofiltration with partial retention (PR-1) ☒ Biofiltration (BF-1) ☐ Biofiltration with Nutrient Sensitive Media Design (BF-2) ☐ Proprietary Biofiltration (BF-3) meeting all requirements of Appendix F ☐ Flow-thru treatment control with prior lawful approval to meet earlier PDP requirements (provide BMP type/description in discussion section below) ☐ Flow-thru treatment control included as pre-treatment/forebay for an onsite retention or biofiltration BMP (provide BMP type/description and indicate which onsite retention or biofiltration BMP it serves in discussion section below) ☐ Flow-thru treatment control with alternative compliance (provide BMP type/description in discussion section below) ☐ Detention pond or vault for hydromodification management ☐ Other (describe in discussion section below)	
Purpose: ☐ Pollutant control only ☐ Hydromodification control only ☒ Combined pollutant control and hydromodification control ☐ Pre-treatment/forebay for another structural BMP ☐ Other (describe in discussion section below)	
Who will certify construction of this BMP? Provide name and contact information for the party responsible to sign BMP verification forms if required by the [City Engineer] (See Section 1.12 of the BMP Design Manual)	City of Santee
Who will be the final owner of this BMP?	City of Santee
Who will maintain this BMP into perpetuity?	City of Santee
What is the funding mechanism for maintenance?	City of Santee

ATTACHMENT 1
BACKUP FOR PDP POLLUTANT CONTROL BMPS

This is the cover sheet for Attachment 1.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 1a	DMA Exhibit (Required) See DMA Exhibit Checklist on the back of this Attachment cover sheet.	☒ Included
Attachment 1b	Tabular Summary of DMAs Showing DMA ID matching DMA Exhibit, DMA Area, and DMA Type (Required)* *Provide table in this Attachment OR on DMA Exhibit in Attachment 1a	☒ Included on DMA Exhibit in Attachment 1a ☐ Included as Attachment 1b, separate from DMA Exhibit
Attachment 1c	Form I-7, Harvest and Use Feasibility Screening Checklist (Required unless the entire project will use infiltration BMPs) Refer to Appendix B.3-1 of the BMP Design Manual to complete Form I-7.	☒ Included ☐ Not included because the entire project will use infiltration BMPs
Attachment 1d	Form I-8, Categorization of Infiltration Feasibility Condition (Required unless the project will use harvest and use BMPs) Refer to Appendices C and D of the BMP Design Manual to complete Form I-8.	☒ Included ☐ Not included because the entire project will use harvest and use BMPs
Attachment 1e	Pollutant Control BMP Design Worksheets / Calculations (Required) Refer to Appendices B and E of the BMP Design Manual for structural pollutant control BMP design guidelines	☒ Included



LEGEND

- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- SIDEWALK UNDERDRAIN
- CATCH BASIN
- CLEANOUT
- X% — SLOPE ARROW
- 500 — NEW CONTOUR
- x 505.50 — NEW SPOT ELEVATION
- 500 — EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 — EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 × — EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 — NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE — RIDGE LINE
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- PUBLIC UTILITIES EASEMENT LINE
- DRAINAGE FLOW ARROW
- DRAINAGE AREA BOUNDARY
- XX — SUBCATCHMENT IDENTIFICATION

A=AREA (ACRES)
Q=6-HOUR, 100-YEAR STORM EVENT (CFS)
TC=TIME OF CONCENTRATION (MIN)

NORTH 1" = 20'

20' 0' 20' 40' 60'

GRAPHIC SCALE
1 INCH = 20 FEET

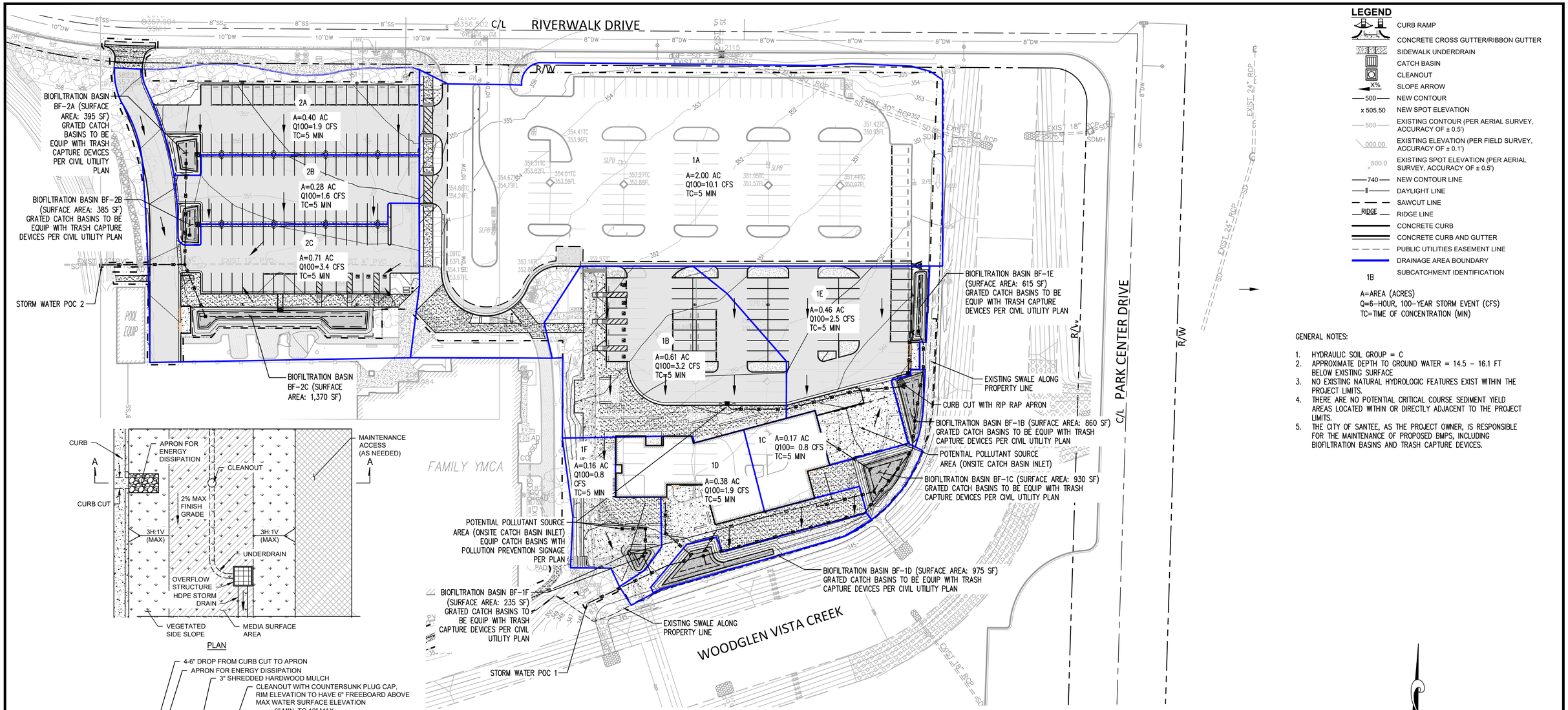
SANTEE COMMUNITY CENTER

PRE-DEVELOPMENT DRAINAGE CONDITION

FIGURE A1

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961-2800 (619) 961-2392 fax
www.psomas.com

Attachment 1a



BIOFILTRATION PROTECTION DURING CONSTRUCTION:

1. PREVENT OVER-COMPACTION OF NATIVE SOILS IN AREAS OF THE BASIN WHERE INFILTRATION WILL OCCUR. DELINEATE THE BIOFILTRATION AREA AND KEEP CONSTRUCTION TRAFFIC OFF. PROTECT SOILS WITH FENCING, PLYWOOD, ETC.
2. PROVIDE EROSION CONTROL IN THE CONTRIBUTING DRAINAGE AREAS OF THE DESIGNATED BIOFILTRATION AREA. STABILIZE UPSLOPE AREAS.
3. DRAINAGE SHOULD BE DIRECTED AWAY FROM BIORETENTION FACILITIES UNTIL UPSLOPE AREAS ARE STABILIZED. THE CONCENTRATION OF FINES COULD PREVENT POST-CONSTRUCTION INFILTRATION AND CAUSE DESIGN FAILURE.
4. IF DRAINAGE IS TO BE ALLOWED THROUGH THE FACILITY DURING CONSTRUCTION LEAVE OR BACKFILL AT LEAST 6 INCHES ABOVE THE FINAL GRADE. TEMPORARILY COVER THE UNDERDRAIN WITH PLASTIC OR FABRIC. LINE OR MULCH THE BIOFILTRATION AREA.
5. BIORETENTION FACILITIES SHOULD REMAIN OUTSIDE THE LIMIT OF DISTURBANCE TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. PROTECT BIORETENTION AREAS WITH SILT FENCE AND CONSTRUCTION FENCING.
6. VERIFY INSTALLATION OF UNDERDRAIN IS CORRECT PRIOR TO PLACING SOIL.

FOR REFERENCE ONLY
BIOFILTRATION BASIN DETAIL
N.T.S.

FOR REFERENCE ONLY
FLOGARD CATCH BASIN INSERT FILTER
NTS

GENERAL NOTES:

1. HYDRAULIC SOIL GROUP = C
2. APPROXIMATE DEPTH TO GROUND WATER = 14.5 – 16.1 FT BELOW EXISTING SURFACE
3. NO EXISTING NATURAL HYDROLOGIC FEATURES EXIST WITHIN THE PROJECT LIMITS.
4. THERE ARE NO POTENTIAL CRITICAL COURSE SEDIMENT YIELD AREAS LOCATED WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.
5. THE CITY OF SANTEE, AS THE PROJECT OWNER, IS RESPONSIBLE FOR THE MAINTENANCE OF PROPOSED BMPS, INCLUDING BIOFILTRATION BASINS AND TRASH CAPTURE DEVICES.

DMA DATA TABLE		
DMA TITLE	TRIBUTARY SIZE (AC)	DRAINS TO
1A	2.00	EXISTING POINT OF DISCHARGE (NO IMPROVEMENTS PROPOSED)
1B	0.61	BF-1B
1C	0.17	BF-1C
1D	0.38	BF-1D
1E	0.46	BF-1E
1F	0.16	BF-1F
2A	0.40	BF-2A
2B	0.28	BF-2B
2C	0.71	BF-2C

SANTEE COMMUNITY CENTER

POST-DEVELOPMENT DRAINAGE CONDITION

FIGURE A2

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961–2800 (619) 961–2392 fax
www.psomas.com

Attachment 1a

Attachment 1c

Worksheet 0-2. Harvest and Use Feasibility Screening

Harvest and Use Feasibility Screening	Worksheet B.3-1

1. Is there a demand for harvested water (check all that apply) at the project site that is reliably present during the wet season? Waiting on flush volume from plumbing.

☒ Toilet and urinal flushing
☐ Landscape irrigation
☐ Other:_____

Due to the use of reclaimed water for the entirety of landscape irrigation, there is no irrigation demand for Harvest and Use (per City of Santee BMP Manual, Section B.3.2.2, bullet 1)

2. If there is a demand; estimate the anticipated average wet season demand over a period of 36 hours. Guidance for planning level demand calculations for toilet/urinal flushing and landscape irrigation is provided in Section B.3.2.

Daily Occupancy - 190
Total daily toilet/urinal use (based on office/retail space (7 per occupant)) - 1330 uses per day - 1995 uses in 36 hours
Average 0.7 gal/flush = 1397 gallons used in 36 hours

3. Calculate the DCV using worksheet B-2.1.

DCV = 4514 cu-ft = 33,767 gallons

3a. Is the 36-hour demand greater than or equal to the DCV?	3b. Is the 36-hour demand greater than 0.25DCV but less than the full DCV?	3c. Is the 36-hour demand less than 0.25DCV?
Yes ⇩ / No ⇨	Yes ⇩ / No ⇨	Yes ⇩
Harvest and use appears to be feasible. Conduct more detailed evaluation and sizing calculations to confirm that DCV can be used at an adequate rate to meet drawdown criteria.	Harvest and use may be feasible. Conduct more detailed evaluation and sizing calculations to determine feasibility. Harvest and use may only be able to be used for a portion of the site, or (optionally) the storage may need to be upsized to meet long term capture targets while draining in longer than 36 hours.	Harvest and use is considered to be infeasible.

Worksheet 0-1: Categorization of Infiltration Feasibility Condition

Categorization of Infiltration Feasibility Condition			Worksheet C.4-1
Part 1 - Full Infiltration Feasibility Screening Criteria **Would infiltration of the full design volume be feasible from a physical perspective without any undesirable consequences that cannot be reasonably mitigated?**			
Criteria	Screening Question	**Yes**	**No**
1	**Is the estimated reliable infiltration rate below proposed facility locations greater than 0.5 inches per hour?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
2	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			

Worksheet C.4-1 Page 2 of 4			
Criteria	Screening Question	**Yes**	**No**
3	**Can infiltration greater than 0.5 inches per hour be allowed without increasing risk of groundwater contamination (shallow water table, storm water pollutants or other factors) that cannot be mitigated to an acceptable level?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
4	**Can infiltration greater than 0.5 inches per hour be allowed without causing potential water balance issues such as change of seasonality of ephemeral streams or increased discharge of contaminated groundwater to surface waters?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability.			
Part 1 Result*	If all answers to rows 1 - 4 are "**Yes**" a full infiltration design is potentially feasible. The feasibility screening category is **Full Infiltration** If any answer from row 1-4 is "**No**", infiltration may be possible to some extent but would not generally be feasible or desirable to achieve a "full infiltration" design. Proceed to Part 2		

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the MS4 Permit. Additional testing and/or studies may be required by City Engineer to substantiate findings.

Worksheet C.4-1 Page 3 of 4

Part 2 – Partial Infiltration vs. No Infiltration Feasibility Screening Criteria

Would infiltration of water in any appreciable amount be physically feasible without any negative consequences that cannot be reasonably mitigated?

Criteria	Screening Question	Yes	No
5	**Do soil and geologic conditions allow for infiltration in any appreciable rate or volume?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2 and Appendix D.		☒

Provide basis:

Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

6	**Can Infiltration in any appreciable quantity be allowed without increasing risk of geotechnical hazards (slope stability, groundwater mounding, utilities, or other factors) that cannot be mitigated to an acceptable level**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.2.		☒

Provide basis:

Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour.

Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.

Worksheet C.4-1 Page 4 of 4			
Criteria	Screening Question	**Yes**	**No**
7	**Can Infiltration in any appreciable quantity be allowed without posing significant risk for groundwater related concerns (shallow water table, storm water pollutants or other factors)?** The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
8	**Can infiltration be allowed without violating downstream water rights**? The response to this Screening Question shall be based on a comprehensive evaluation of the factors presented in Appendix C.3.		☒
Provide basis: Per the project specific Geotechnical Report, the infiltration rate is less than 0.001 inches per hour. Summarize findings of studies; provide reference to studies, calculations, maps, data sources, etc. Provide narrative discussion of study/data source applicability and why it was not feasible to mitigate low infiltration rates.			
Part 2 Result*	If all answers from row 1-4 are yes then partial infiltration design is potentially feasible. The feasibility screening category is **Partial Infiltration.** If any answer from row 5-8 is no, then infiltration of any volume is considered to be **infeasible** within the drainage area. The feasibility screening category is **No Infiltration.**		No Infiltration

*To be completed using gathered site information and best professional judgment considering the definition of MEP in the Permit. Additional testing and/or studies may be required by Agency/Jurisdictions to substantiate findings

Attachment 1e

Automated Worksheet B.1: Calculation of Design Capture Volume (V2.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*viii*	*ix*	*x*	Units
Standard Drainage Basin Inputs	1	Drainage Basin ID or Name	DMA 1B	DMA 1C	DMA 1D	DMA 2A	DMA 2B	DMA 2C					unitless
	2	85th Percentile 24-hr Storm Depth	0.50	0.50	0.50	0.50	0.50	0.50					inches
	3	Impervious Surfaces Not Directed to Dispersion Area (C=0.90)	33,565	4,810	22,685	13,250	9,276	24,188					sq-ft
	4	Semi-Pervious Surfaces Not Serving as Dispersion Area (C=0.30)											sq-ft
	5	Engineered Pervious Surfaces Not Serving as Dispersion Area (C=0.10)											sq-ft
	6	Natural Type A Soil Not Serving as Dispersion Area (C=0.10)											sq-ft
	7	Natural Type B Soil Not Serving as Dispersion Area (C=0.14)											sq-ft
	8	Natural Type C Soil Not Serving as Dispersion Area (C=0.23)											sq-ft
	9	Natural Type D Soil Not Serving as Dispersion Area (C=0.30)	8,385	2,640	10,790	4,185	2,930	7,639					sq-ft
Dispersion Area, Tree Well & Rain Barrel Inputs (Optional)	10	Does Tributary Incorporate Dispersion, Tree Wells, and/or Rain Barrels?	No	No	No	No	No	No	No	No	No	No	yes/no
	11	Impervious Surfaces **Directed to Dispersion Area** per SD-B (Ci=0.90)											sq-ft
	12	Semi-Pervious Surfaces **Serving as Dispersion Area** per SD-B (Ci=0.30)											sq-ft
	13	Engineered Pervious Surfaces **Serving as Dispersion Area** per SD-B (Ci=0.10)											sq-ft
	14	Natural Type A Soil **Serving as Dispersion Area** per SD-B (Ci=0.10)											sq-ft
	15	Natural Type B Soil **Serving as Dispersion Area** per SD-B (Ci=0.14)											sq-ft
	16	Natural Type C Soil **Serving as Dispersion Area** per SD-B (Ci=0.23)											sq-ft
	17	Natural Type D Soil **Serving as Dispersion Area** per SD-B (Ci=0.30)											sq-ft
	18	Number of Tree Wells Proposed per SD-A											#
	19	Average Mature Tree Canopy Diameter											ft
	20	Number of Rain Barrels Proposed per SD-E											#
	21	Average Rain Barrel Size											gal
Initial Runoff Factor Calculation	22	Total Tributary Area	41,950	7,450	33,475	17,435	12,206	31,827	0	0	0	0	sq-ft
	23	Initial Runoff Factor for Standard Drainage Areas	0.78	0.69	0.71	0.76	0.76	0.76	0.00	0.00	0.00	0.00	unitless
	24	Initial Runoff Factor for Dispersed & Dispersion Areas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	unitless
	25	Initial Weighted Runoff Factor	0.78	0.69	0.71	0.76	0.76	0.76	0.00	0.00	0.00	0.00	unitless
	26	Initial Design Capture Volume	1,363	214	990	552	387	1,008	0	0	0	0	cubic-feet
Dispersion Area Adjustments	27	Total Impervious Area Dispersed to Pervious Surface	0	0	0	0	0	0	0	0	0	0	sq-ft
	28	Total Pervious Dispersion Area	0	0	0	0	0	0	0	0	0	0	sq-ft
	29	Ratio of Dispersed Impervious Area to Pervious Dispersion Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	ratio
	30	Adjustment Factor for Dispersed & Dispersion Areas	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	ratio
	31	Runoff Factor After Dispersion Techniques	0.78	0.69	0.71	0.76	0.76	0.76	n/a	n/a	n/a	n/a	unitless
	32	Design Capture Volume After Dispersion Techniques	1,363	214	990	552	387	1,008	0	0	0	0	cubic-feet
Tree & Barrel Adjustments	33	Total Tree Well Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
	34	Total Rain Barrel Volume Reduction	0	0	0	0	0	0	0	0	0	0	cubic-feet
Results	35	Final Adjusted Runoff Factor	0.78	0.69	0.71	0.76	0.76	0.76	0.00	0.00	0.00	0.00	unitless
	36	Final Effective Tributary Area	32,721	5,141	23,767	13,251	9,277	24,189	0	0	0	0	sq-ft
	37	Initial Design Capture Volume Retained by Site Design Elements	0	0	0	0	0	0	0	0	0	0	cubic-feet
	38	Final Design Capture Volume Tributary to BMP	1,363	214	990	552	387	1,008	0	0	0	0	cubic-feet

No Warning Messages

Attachment 1e

Automated Worksheet B.2: Retention Requirements (V2.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*viii*	*ix*	*x*	Units
Basic Analysis	1	Drainage Basin ID or Name	DMA 1B	DMA 1C	DMA 1D	DMA 2A	DMA 2B	DMA 2C	-	-	-	-	unitless
	2	85th Percentile Rainfall Depth	0.50	0.50	0.50	0.50	0.50	0.50	-	-	-	-	inches
	3	Predominant NRCS Soil Type Within BMP Location	D	D	D	D	D	D					unitless
	4	Is proposed BMP location Restricted or Unrestricted for Infiltration Activities?	Restricted	Restricted	Restricted	Restricted	Restricted	Restricted					unitless
	5	Nature of Restriction	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater					unitless
	6	Do Minimum Retention Requirements Apply to this Project?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	yes/no
	7	Are Habitable Structures Greater than 9 Stories Proposed?	No	No	No	No	No	No					yes/no
Advanced Analysis	8	Has Geotechnical Engineer Performed an Infiltration Analysis?	Yes	Yes	Yes	Yes	Yes	Yes					yes/no
	9	Design Infiltration Rate Recommended by Geotechnical Engineer	0.001	0.001	0.001	0.001	0.001	0.001					in/hr
Result	10	Design Infiltration Rate Used To Determine Retention Requirements	0.000	0.000	0.000	0.000	0.000	0.000	-	-	-	-	in/hr
	11	Percent of Average Annual Runoff that Must be Retained within DMA	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	-	-	-	-	percentage
	12	Fraction of DCV Requiring Retention	0.02	0.02	0.02	0.02	0.02	0.02	-	-	-	-	ratio
	13	Required Retention Volume	27	4	20	11	8	20	-	-	-	-	cubic-feet

No Warning Messages

Attachment 1e

Automated Worksheet B.3: BMP Performance (V2.0)

Category	#	Description	*i*	*ii*	*iii*	*iv*	*v*	*vi*	*vii*	*viii*	*ix*	*x*	Units
BMP Inputs	1	Drainage Basin ID or Name	DMA 1B	DMA 1C	DMA 1D	DMA 2A	DMA 2B	DMA 2C	-	-	-	-	sq-ft
	2	Design Infiltration Rate Recommended	0.000	0.000	0.000	0.000	0.000	0.000	-	-	-	-	in/hr
	3	Design Capture Volume Tributary to BMP	1,363	214	990	552	387	1,008	-	-	-	-	cubic-feet
	4	Is BMP Vegetated or Unvegetated?	Vegetated	Vegetated	Vegetated	Vegetated	Vegetated	Vegetated					unitless
	5	Is BMP Impermeably Lined or Unlined?	Lined	Lined	Lined	Lined	Lined	Lined					unitless
	6	Does BMP Have an Underdrain?	Underdrain	Underdrain	Underdrain	Underdrain	Underdrain	Underdrain					unitless
	7	Does BMP Utilize Standard or Specialized Media?	Standard	Standard	Standard	Standard	Standard	Standard					unitless
	8	Provided Surface Area	860	930	2,795	685	460	3,150					sq-ft
	9	Provided Surface Ponding Depth	12	12	12	6	6	6					inches
	10	Provided Soil Media Thickness	27	27	27	27	27	27					inches
	11	Provided Gravel Thickness (Total Thickness)	27	27	27	27	27	27					inches
	12	Underdrain Offset	3	3	3	3	3	3					inches
	13	Diameter of Underdrain or Hydromod Orifice (Select Smallest)	0.90	0.90	0.90	0.90	0.90	0.90					inches
	14	Specialized Soil Media Filtration Rate											in/hr
	15	Specialized Soil Media Pore Space for Retention											unitless
	16	Specialized Soil Media Pore Space for Biofiltration											unitless
	17	Specialized Gravel Media Pore Space											unitless
Retention Calculations	18	Volume Infiltrated Over 6 Hour Storm	0	0	0	0	0	0	0	0	0	0	cubic-feet
	19	Ponding Pore Space Available for Retention	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	unitless
	20	Soil Media Pore Space Available for Retention	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	unitless
	21	Gravel Pore Space Available for Retention (Above Underdrain)	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.40	0.40	0.40	unitless
	22	Gravel Pore Space Available for Retention (Below Underdrain)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	unitless
	23	Effective Retention Depth	2.55	2.55	2.55	2.55	2.55	2.55	0.00	0.00	0.00	0.00	inches
	24	Fraction of DCV Retained (Independent of Drawdown Time)	0.13	0.92	0.60	0.26	0.25	0.66	0.00	0.00	0.00	0.00	ratio
	25	Calculated Retention Storage Drawdown Time	120	120	120	120	120	120	0	0	0	0	hours
	26	Efficacy of Retention Processes	0.15	0.71	0.53	0.27	0.26	0.57	0.00	0.00	0.00	0.00	ratio
	27	Volume Retained by BMP (Considering Drawdown Time)	206	152	529	150	102	574	0	0	0	0	cubic-feet
	28	Design Capture Volume Remaining for Biofiltration	1,157	62	461	402	285	434	0	0	0	0	cubic-feet
Biofiltration Calculations	29	Max Hydromod Flow Rate through Underdrain	0.0486	0.0486	0.0486	0.0462	0.0462	0.0462	0.0000	0.0000	0.0000	0.0000	cfs
	30	Max Soil Filtration Rate Allowed by Underdrain Orifice	2.44	2.26	0.75	2.91	4.34	0.63	0.00	0.00	0.00	0.00	in/hr
	31	Soil Media Filtration Rate per Specifications	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	in/hr
	32	Soil Media Filtration Rate to be used for Sizing	2.44	2.26	0.75	2.91	4.34	0.63	0.00	0.00	0.00	0.00	in/hr
	33	Depth Biofiltered Over 6 Hour Storm	14.64	13.54	4.50	17.47	26.02	3.80	0.00	0.00	0.00	0.00	inches
	34	Ponding Pore Space Available for Biofiltration	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	unitless
	35	Soil Media Pore Space Available for Biofiltration	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	unitless
	36	Gravel Pore Space Available for Biofiltration (Above Underdrain)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	unitless
	37	Effective Depth of Biofiltration Storage	27.00	27.00	27.00	21.00	21.00	21.00	0.00	0.00	0.00	0.00	inches
	38	Drawdown Time for Surface Ponding	5	5	16	2	1	9	0	0	0	0	hours
	39	Drawdown Time for Effective Biofiltration Depth	11	12	36	7	5	33	0	0	0	0	hours
	40	Total Depth Biofiltered	41.64	40.54	31.50	38.47	47.02	24.80	0.00	0.00	0.00	0.00	inches
	41	Option 1 - Biofilter 1.50 DCV: Target Volume	1,736	93	692	602	427	651	0	0	0	0	cubic-feet
	42	Option 1 - Provided Biofiltration Volume	1,736	93	692	602	427	651	0	0	0	0	cubic-feet
	43	Option 2 - Store 0.75 DCV: Target Volume	868	46	346	301	214	325	0	0	0	0	cubic-feet
	44	Option 2 - Provided Storage Volume	868	46	346	301	214	325	0	0	0	0	cubic-feet
	45	Portion of Biofiltration Performance Standard Satisfied	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	ratio
Result	46	Do Site Design Elements and BMPs Satisfy Annual Retention Requirements?	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	yes/no
	47	Overall Portion of Performance Standard Satisfied (BMP Efficacy Factor)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	ratio
	48	**Deficit of Effectively Treated Stormwater**	**0**	**0**	**0**	**0**	**0**	**0**	**n/a**	**n/a**	**n/a**	**n/a**	cubic-feet

Attention!

- BMPs sized at <3% of the effective tributary areas must be accompanied by Reduced Size BMP Maintenance calculations (see last tab)

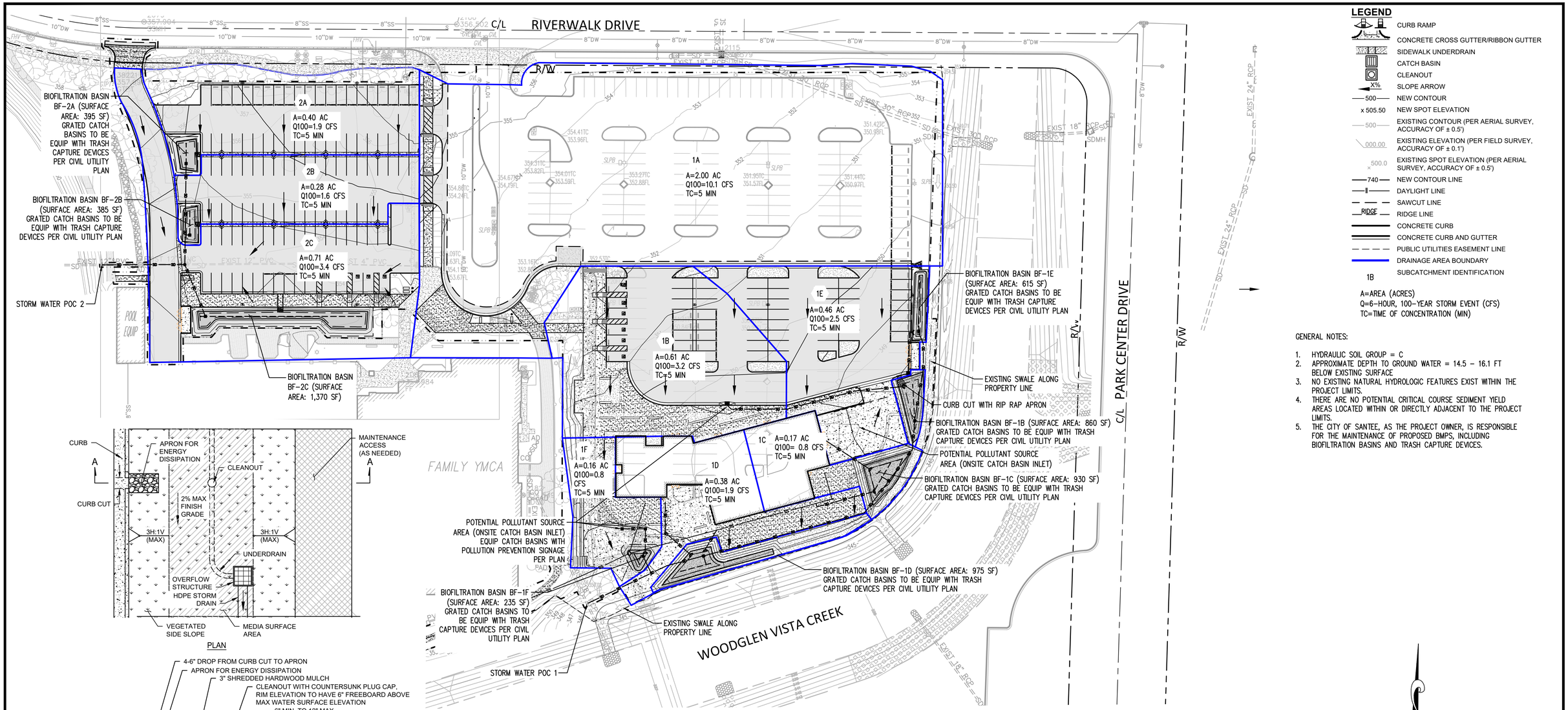
ATTACHMENT 2
BACKUP FOR PDP HYDROMODIFICATION CONTROL MEASURES

This is the cover sheet for Attachment 2.

☐ Mark this box if this attachment is empty because the project is exempt from PDP hydromodification management requirements.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	**Contents**	**Checklist**
Attachment 2a	Hydromodification Management Exhibit (Required)	☒ Included See Hydromodification Management Exhibit Checklist on the back of this Attachment cover sheet.
Attachment 2b	Management of Critical Coarse Sediment Yield Areas (WMAA Exhibit is required, additional analyses are optional) See Section 6.2 of the BMP Design Manual.	☒ Exhibit showing project drainage boundaries marked on WMAA Critical Coarse Sediment Yield Area Map (Required) Optional analyses for Critical Coarse Sediment Yield Area Determination ☐ 6.2.1 Verification of Geomorphic Landscape Units Onsite ☐ 6.2.2 Downstream Systems Sensitivity to Coarse Sediment ☐ 6.2.3 Optional Additional Analysis of Potential Critical Coarse Sediment Yield Areas Onsite
Attachment 2c	Geomorphic Assessment of Receiving Channels (Optional) See Section 6.3.4 of the BMP Design Manual.	☒ Not performed ☐ Included ☐ Submitted as separate stand-alone document
Attachment 2d	Flow Control Facility Design, including Structural BMP Drawdown Calculations and Overflow Design Summary (Required) See Chapter 6 and Appendix G of the BMP Design Manual	☒ Included ☐ Submitted as separate stand-alone document
Attachment 2e	Vector Control Plan (Required when structural BMPs will not drain in 96 hours)	☐ Included ☒ Not required because BMPs will drain in less than 96 hours



LEGEND

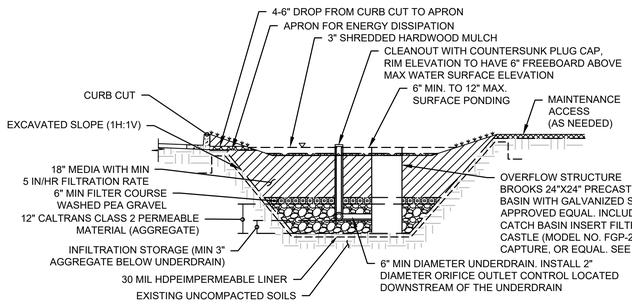
- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- SIDEWALK UNDERDRAIN
- CATCH BASIN
- CLEANOUT
- X% SLOPE ARROW
- 500 NEW CONTOUR
- x 505.50 NEW SPOT ELEVATION
- 500 EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE RIDGE LINE
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- PUBLIC UTILITIES EASEMENT LINE
- DRAINAGE AREA BOUNDARY
- 1B SUBCATCHMENT IDENTIFICATION

A=AREA (ACRES)
Q=6-HOUR, 100-YEAR STORM EVENT (CFS)
TC=TIME OF CONCENTRATION (MIN)

GENERAL NOTES:

1. HYDRAULIC SOIL GROUP = C
2. APPROXIMATE DEPTH TO GROUND WATER = 14.5 – 16.1 FT BELOW EXISTING SURFACE
3. NO EXISTING NATURAL HYDROLOGIC FEATURES EXIST WITHIN THE PROJECT LIMITS.
4. THERE ARE NO POTENTIAL CRITICAL COURSE SEDIMENT YIELD AREAS LOCATED WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.
5. THE CITY OF SANTEE, AS THE PROJECT OWNER, IS RESPONSIBLE FOR THE MAINTENANCE OF PROPOSED BMPS, INCLUDING BIOFILTRATION BASINS AND TRASH CAPTURE DEVICES.

PLAN

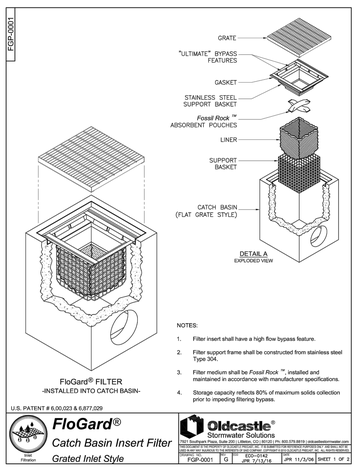


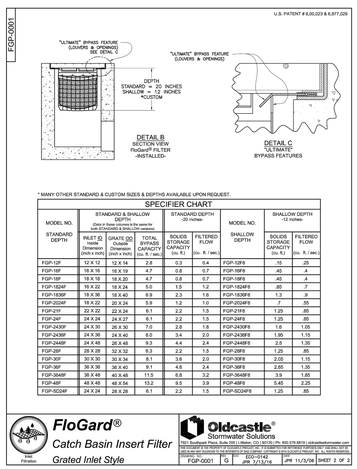
SECTION A-A

BIOFILTRATION PROTECTION DURING CONSTRUCTION:

1. PREVENT OVER-COMPACTION OF NATIVE SOILS IN AREAS OF THE BASIN WHERE INFILTRATION WILL OCCUR. DELINEATE THE BIOFILTRATION AREA AND KEEP CONSTRUCTION TRAFFIC OFF. PROTECT SOILS WITH FENCING, PLYWOOD, ETC.
2. PROVIDE EROSION CONTROL IN THE CONTRIBUTING DRAINAGE AREAS OF THE DESIGNATED BIOFILTRATION AREA. STABILIZE UPSLOPE AREAS.
3. DRAINAGE SHOULD BE DIRECTED AWAY FROM BIORETENTION FACILITIES UNTIL UPSLOPE AREAS ARE STABILIZED. THE CONCENTRATION OF FINES COULD PREVENT POST-CONSTRUCTION INFILTRATION AND CAUSE DESIGN FAILURE.
4. IF DRAINAGE IS TO BE ALLOWED THROUGH THE FACILITY DURING CONSTRUCTION LEAVE OR BACKFILL AT LEAST 6 INCHES ABOVE THE FINAL GRADE. TEMPORARILY COVER THE UNDERDRAIN WITH PLASTIC OR FABRIC. LINE OR MULCH THE BIOFILTRATION AREA.
5. BIORETENTION FACILITIES SHOULD REMAIN OUTSIDE THE LIMIT OF DISTURBANCE TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. PROTECT BIORETENTION AREAS WITH SILT FENCE AND CONSTRUCTION FENCING.
6. VERIFY INSTALLATION OF UNDERDRAIN IS CORRECT PRIOR TO PLACING SOIL.

FOR REFERENCE ONLY
BIOFILTRATION BASIN DETAIL
N.T.S.





STANDARD DEPTH	STANDARD & SHALLOW DEPTH (Units in Inches is the same for both STANDARD & SHALLOW versions) INLET (I) Inside Dimension (Inch X Inch)	GRATE (G) Outside Dimension (Inch X Inch)	TOTAL BYPASS CAPACITY (cu. ft. / sec.)	STANDARD DEPTH -20 inches- SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)	SHALLOW DEPTH -12 inches- SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25
FGP-15F	15 X 15	15 X 15	4.7	0.8	0.7	FGP-15F8	.45	.4
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4
FGP-1824F	18 X 18	18 X 24	5.0	1.0	1.2	FGP-18248F8	.65	.7
FGP-1836F	18 X 36	18 X 40	8.9	2.3	1.6	FGP-1836F8	1.3	.9
FGP-2024F	19 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55
FGP-22F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-22F8	1.25	.85
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35
FGP-28F	28 X 28	32 X 32	8.3	2.2	1.5	FGP-28F8	1.25	.85
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0	FGP-30F8	2.05	1.15
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25
FGP-5024F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-5024F8	1.25	.85

FOR REFERENCE ONLY
FLOGARD CATCH BASIN INSERT FILTER
NTS

DMA DATA TABLE		
DMA TITLE	TRIBUTARY SIZE (AC)	DRAINS TO
1A	2.00	EXISTING POINT OF DISCHARGE (NO IMPROVEMENTS PROPOSED)
1B	0.61	BF-1B
1C	0.17	BF-1C
1D	0.38	BF-1D
1E	0.46	BF-1E
1F	0.16	BF-1F
2A	0.40	BF-2A
2B	0.28	BF-2B
2C	0.71	BF-2C

SANTEE COMMUNITY CENTER

POST-DEVELOPMENT DRAINAGE CONDITION

FIGURE A2

PSOMAS
401 B Street, Suite 1600
San Diego, CA 92101
(619) 961–2800 (619) 961–2392 fax
www.psomas.com

Attachment 2a

REACH ID	NAME
1	Santa Margarita River
2	San Luis Rey River
3	Buena Vista Creek
4	Agua Hedionda Creek
5	San Marcos Creek
6	Encinitas Creek
7	Cottonwood Creek (Carlsbad WMA)
8	Escondido Creek
9	San Dieguito Creek - Reach 1
10	San Dieguito Creek - Reach 2
11	Lusardi Creek
12	Los Penasquitos / Poway Creek
13	Rattlesnake Creek
14	Carroll Canyon Creek
15	Rose Creek
16	San Diego River
17	Sycamore Creek
18	Woodglen Vista Creek
19	San Vicente Creek
20	Forester Creek
21	Chollas Creek
22	Sweetwater River - Reach 1
23	Sweetwater River - Reach 2
24	Otay River
25	Jamul / Dulzura Creek
26	Tijuana River
27	Cottonwood Creek (Tijuana WMA)

Legend

- Regional WMAA Streams
- Watershed Boundaries
- Municipal Boundaries
- Rivers & Streams
- Potential Critical Coarse Sediment Yield Areas

Aerial Imagery Source: DigitalGlobe, 06/2012

Miles 0 5 10 15

NORTH

Potential Critical Coarse Sediment Yield Areas

Regional San Diego County Watersheds

Exhibit Date: Sept. 8, 2014

Attachment 2b

Geosyntec consultants

RICK ENGINEERING COMPANY

Attachment 2d

SDHM 3.1

PROJECT REPORT

General Model Information

Project Name: 2025_SCC
Site Name: SCC
Site Address:
City:
Report Date: 2/24/2025
Gage: SANTEE
Data Start: 10/01/1973
Data End: 09/30/2004
Timestep: Hourly
Precip Scale: 1.000
Version Date: 2021/06/28

POC Thresholds

Low Flow Threshold for POC1:	10 Percent of the 2 Year
High Flow Threshold for POC1:	10 Year
Low Flow Threshold for POC2:	10 Percent of the 2 Year
High Flow Threshold for POC2:	10 Year

Landuse Basin Data

Predeveloped Land Use

Pre Basin 1

Bypass:	No
GroundWater:	No
Pervious Land Use	acre
C,NatVeg,Flat	1.79
Pervious Total	1.79
Impervious Land Use	acre
Impervious Total	0
Basin Total	1.79

Element Flows To:

Surface	Interflow	Groundwater

Pre Basin 2

Bypass:	No
GroundWater:	No
Pervious Land Use	acre
C,NatVeg,Flat	1.39
Pervious Total	1.39
Impervious Land Use	acre
Impervious Total	0
Basin Total	1.39

Element Flows To:

Surface	Interflow	Groundwater

Mitigated Land Use

Prop Basin 2

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
C,NatVeg,Flat	0.34
Pervious Total	0.34

Impervious Land Use	acre
IMPERVIOUS-FLAT	1.05
Impervious Total	1.05
Basin Total	1.39

Element Flows To:

Surface	Interflow	Groundwater
Surface rtial Ret 2	Surface rtial Ret 2	

Prop Basin 1

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
C,NatVeg,Flat	0.33
Pervious Total	0.33

Impervious Land Use	acre
IMPERVIOUS-FLAT	1.46
Impervious Total	1.46
Basin Total	1.79

Element Flows To:

Surface	Interflow	Groundwater
Surface rtial Ret 1	Surface rtial Ret 1	

Routing Elements
Predeveloped Routing

Mitigated Routing

Bio Partial Ret 2

Bottom Length:	161.93 ft.
Bottom Width:	161.93 ft.
Material thickness of first layer:	0.25
Material type for first layer:	Mulch
Material thickness of second layer:	1.5
Material type for second layer:	ESM
Material thickness of third layer:	1.5
Material type for third layer:	GRAVEL
Underdrain used	
Underdrain Diameter (feet):	0.5
Orifice Diameter (in.):	0.749612500000001
Offset (in.):	3
Flow Through Underdrain (ac-ft.):	21.954
Total Outflow (ac-ft.):	24.896
Percent Through Underdrain:	88.18
Discharge Structure	
Riser Height:	0.5 ft.
Riser Diameter:	12 in.
Element Flows To:	
Outlet 1	Outlet 2

Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.6019	0.0000	0.0000	0.0000
0.0467	0.6019	0.0084	0.0000	0.0000
0.0934	0.6019	0.0169	0.0000	0.0000
0.1401	0.6019	0.0253	0.0000	0.0000
0.1868	0.6019	0.0337	0.0000	0.0000
0.2335	0.6019	0.0422	0.0000	0.0000
0.2802	0.6019	0.0506	0.0000	0.0000
0.3269	0.6019	0.0590	0.0000	0.0000
0.3736	0.6019	0.0675	0.0000	0.0000
0.4203	0.6019	0.0759	0.0000	0.0000
0.4670	0.6019	0.0843	0.0000	0.0000
0.5137	0.6019	0.0928	0.0000	0.0000
0.5604	0.6019	0.1012	0.0000	0.0000
0.6071	0.6019	0.1096	0.0000	0.0000
0.6538	0.6019	0.1181	0.0000	0.0000
0.7005	0.6019	0.1265	0.0000	0.0000
0.7473	0.6019	0.1349	0.0000	0.0000
0.7940	0.6019	0.1434	0.0000	0.0000
0.8407	0.6019	0.1518	0.0000	0.0000
0.8874	0.6019	0.1602	0.0000	0.0000
0.9341	0.6019	0.1687	0.0000	0.0000
0.9808	0.6019	0.1771	0.0000	0.0000
1.0275	0.6019	0.1855	0.0000	0.0000
1.0742	0.6019	0.1940	0.0000	0.0000
1.1209	0.6019	0.2024	0.0000	0.0000
1.1676	0.6019	0.2108	0.0000	0.0000
1.2143	0.6019	0.2193	0.0000	0.0000
1.2610	0.6019	0.2277	0.0000	0.0000
1.3077	0.6019	0.2361	0.0000	0.0000

1.3544	0.6019	0.2446	0.0000	0.0000
1.4011	0.6019	0.2530	0.0000	0.0000
1.4478	0.6019	0.2614	0.0000	0.0000
1.4945	0.6019	0.2699	0.0000	0.0000
1.5412	0.6019	0.2783	0.0000	0.0000
1.5879	0.6019	0.2868	0.0000	0.0000
1.6346	0.6019	0.2952	0.0000	0.0000
1.6813	0.6019	0.3036	0.0000	0.0000
1.7280	0.6019	0.3121	0.0000	0.0000
1.7747	0.6019	0.3237	0.0000	0.0000
1.8214	0.6019	0.3354	0.0000	0.0000
1.8681	0.6019	0.3471	0.0000	0.0000
1.9148	0.6019	0.3587	0.0000	0.0000
1.9615	0.6019	0.3704	0.0000	0.0000
2.0082	0.6019	0.3821	0.0000	0.0000
2.0549	0.6019	0.3937	0.0000	0.0000
2.1016	0.6019	0.4054	0.0000	0.0000
2.1484	0.6019	0.4171	0.0000	0.0000
2.1951	0.6019	0.4287	0.0000	0.0000
2.2418	0.6019	0.4404	0.0000	0.0000
2.2885	0.6019	0.4521	0.0000	0.0000
2.3352	0.6019	0.4637	0.0000	0.0000
2.3819	0.6019	0.4754	0.0000	0.0000
2.4286	0.6019	0.4871	0.0000	0.0000
2.4753	0.6019	0.4987	0.0000	0.0000
2.5220	0.6019	0.5104	0.0000	0.0000
2.5687	0.6019	0.5221	0.0000	0.0000
2.6154	0.6019	0.5337	0.0000	0.0000
2.6621	0.6019	0.5454	0.0000	0.0000
2.7088	0.6019	0.5571	0.0000	0.0000
2.7555	0.6019	0.5687	0.0000	0.0000
2.8022	0.6019	0.5804	0.0000	0.0000
2.8489	0.6019	0.5921	0.0000	0.0000
2.8956	0.6019	0.6037	0.0000	0.0000
2.9423	0.6019	0.6154	0.0000	0.0000
2.9890	0.6019	0.6271	0.0000	0.0000
3.0357	0.6019	0.6387	0.0000	0.0000
3.0824	0.6019	0.6504	0.0000	0.0000
3.1291	0.6019	0.6621	0.0000	0.0000
3.1758	0.6019	0.6737	0.0000	0.0000
3.2225	0.6019	0.6854	0.0000	0.0000
3.2500	0.6019	0.6923	0.0000	0.0000

Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	To Amended(cfs)	Infilt(cfs)
3.2500	0.6019	0.6923	0.0000	0.0264	0.0000
3.2967	0.6019	0.7204	0.0000	0.0264	0.0000
3.3434	0.6019	0.7485	0.0000	0.0264	0.0000
3.3901	0.6019	0.7766	0.0000	0.0264	0.0000
3.4368	0.6019	0.8047	0.0000	0.0264	0.0000
3.4835	0.6019	0.8328	0.0000	0.0264	0.0000
3.5302	0.6019	0.8609	0.0000	0.0264	0.0000
3.5769	0.6019	0.8890	0.0000	0.0264	0.0000
3.6236	0.6019	0.9172	0.0000	0.0264	0.0000
3.6703	0.6019	0.9453	0.0000	0.0264	0.0000
3.7170	0.6019	0.9734	0.0000	0.0264	0.0000
3.7637	0.6019	1.0015	0.0000	0.0264	0.0000
3.8104	0.6019	1.0296	0.0000	0.0264	0.0000

3.8571	0.6019	1.0577	0.0000	0.0264	0.0000
3.9038	0.6019	1.0858	0.0000	0.0264	0.0000
3.9505	0.6019	1.1139	0.0000	0.0264	0.0000
3.9973	0.6019	1.1421	0.0000	0.0264	0.0000
4.0440	0.6019	1.1702	0.0000	0.0264	0.0000
4.0907	0.6019	1.1983	0.0000	0.0264	0.0000
4.1374	0.6019	1.2264	0.0000	0.0264	0.0000
4.1841	0.6019	1.2545	0.0000	0.0264	0.0000
4.2308	0.6019	1.2826	0.0000	0.0264	0.0000
4.2500	0.6019	1.2942	0.0000	0.0264	0.0000

Surface rtial Ret 2

Element Flows To:

Outlet 1	Outlet 2
	Bio Partial Ret 2

Bio Partial Ret 1

Bottom Length:	197.29 ft.
Bottom Width:	197.29 ft.
Material thickness of first layer:	0.25
Material type for first layer:	Mulch
Material thickness of second layer:	1.5
Material type for second layer:	ESM
Material thickness of third layer:	1.5
Material type for third layer:	GRAVEL
Underdrain used	
Underdrain Diameter (feet):	0.5
Orifice Diameter (in.):	0.830401500000001
Offset (in.):	3
Flow Through Underdrain (ac-ft.):	27.587
Total Outflow (ac-ft.):	31.943
Percent Through Underdrain:	86.36
Discharge Structure	
Riser Height:	0.5 ft.
Riser Diameter:	12 in.
Element Flows To:	
Outlet 1	Outlet 2

Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.8936	0.0000	0.0000	0.0000
0.0522	0.8936	0.0140	0.0000	0.0000
0.1044	0.8936	0.0280	0.0000	0.0000
0.1566	0.8936	0.0420	0.0000	0.0000
0.2088	0.8936	0.0560	0.0000	0.0000
0.2610	0.8936	0.0700	0.0000	0.0000
0.3132	0.8936	0.0840	0.0000	0.0000
0.3654	0.8936	0.0979	0.0000	0.0000
0.4176	0.8936	0.1119	0.0000	0.0000
0.4698	0.8936	0.1259	0.0000	0.0000
0.5220	0.8936	0.1399	0.0000	0.0000
0.5742	0.8936	0.1539	0.0000	0.0000
0.6264	0.8936	0.1679	0.0000	0.0000
0.6786	0.8936	0.1819	0.0000	0.0000
0.7308	0.8936	0.1959	0.0000	0.0000
0.7830	0.8936	0.2099	0.0000	0.0000
0.8352	0.8936	0.2239	0.0000	0.0000
0.8874	0.8936	0.2379	0.0000	0.0000
0.9396	0.8936	0.2519	0.0000	0.0000
0.9918	0.8936	0.2659	0.0000	0.0000
1.0440	0.8936	0.2799	0.0000	0.0000
1.0962	0.8936	0.2938	0.0000	0.0000
1.1484	0.8936	0.3078	0.0000	0.0000
1.2005	0.8936	0.3218	0.0000	0.0000
1.2527	0.8936	0.3358	0.0000	0.0000
1.3049	0.8936	0.3498	0.0000	0.0000
1.3571	0.8936	0.3638	0.0000	0.0000
1.4093	0.8936	0.3778	0.0000	0.0000
1.4615	0.8936	0.3918	0.0000	0.0000
1.5137	0.8936	0.4058	0.0000	0.0000
1.5659	0.8936	0.4198	0.0000	0.0000

1.6181	0.8936	0.4338	0.0000	0.0000
1.6703	0.8936	0.4478	0.0000	0.0000
1.7225	0.8936	0.4618	0.0000	0.0000
1.7747	0.8936	0.4811	0.0000	0.0000
1.8269	0.8936	0.5005	0.0000	0.0000
1.8791	0.8936	0.5198	0.0000	0.0000
1.9313	0.8936	0.5392	0.0000	0.0000
1.9835	0.8936	0.5585	0.0000	0.0000
2.0357	0.8936	0.5779	0.0000	0.0000
2.0879	0.8936	0.5973	0.0000	0.0000
2.1401	0.8936	0.6166	0.0000	0.0000
2.1923	0.8936	0.6360	0.0000	0.0000
2.2445	0.8936	0.6553	0.0000	0.0000
2.2967	0.8936	0.6747	0.0000	0.0000
2.3489	0.8936	0.6940	0.0000	0.0000
2.4011	0.8936	0.7134	0.0000	0.0000
2.4533	0.8936	0.7327	0.0000	0.0000
2.5055	0.8936	0.7521	0.0000	0.0000
2.5577	0.8936	0.7715	0.0000	0.0000
2.6099	0.8936	0.7908	0.0000	0.0000
2.6621	0.8936	0.8102	0.0000	0.0000
2.7143	0.8936	0.8295	0.0000	0.0000
2.7665	0.8936	0.8489	0.0000	0.0000
2.8187	0.8936	0.8682	0.0000	0.0000
2.8709	0.8936	0.8876	0.0000	0.0000
2.9231	0.8936	0.9070	0.0000	0.0000
2.9753	0.8936	0.9263	0.0000	0.0000
3.0275	0.8936	0.9457	0.0000	0.0000
3.0797	0.8936	0.9650	0.0000	0.0000
3.1319	0.8936	0.9844	0.0000	0.0000
3.1841	0.8936	1.0037	0.0000	0.0000
3.2363	0.8936	1.0231	0.0000	0.0000
3.2500	0.8936	1.0282	0.0000	0.0000

Biofilter Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	To Amended(cfs)	Infilt(cfs)
3.2500	0.8936	1.0282	0.0000	0.0324	0.0000
3.3022	0.8936	1.0748	0.0000	0.0324	0.0000
3.3544	0.8936	1.1215	0.0000	0.0324	0.0000
3.4066	0.8936	1.1681	0.0000	0.0324	0.0000
3.4588	0.8936	1.2148	0.0000	0.0324	0.0000
3.5110	0.8936	1.2614	0.0000	0.0324	0.0000
3.5632	0.8936	1.3080	0.0000	0.0324	0.0000
3.6154	0.8936	1.3547	0.0000	0.0324	0.0000
3.6676	0.8936	1.4013	0.0000	0.0324	0.0000
3.7198	0.8936	1.4480	0.0000	0.0324	0.0000
3.7720	0.8936	1.4946	0.0000	0.0324	0.0000
3.8242	0.8936	1.5413	0.0000	0.0324	0.0000
3.8764	0.8936	1.5879	0.0000	0.0324	0.0000
3.9286	0.8936	1.6345	0.0000	0.0324	0.0000
3.9808	0.8936	1.6812	0.0000	0.0324	0.0000
4.0330	0.8936	1.7278	0.0000	0.0324	0.0000
4.0852	0.8936	1.7745	0.0000	0.0324	0.0000
4.1374	0.8936	1.8211	0.0000	0.0324	0.0000
4.1896	0.8936	1.8677	0.0000	0.0324	0.0000
4.2418	0.8936	1.9144	0.0000	0.0324	0.0000
4.2940	0.8936	1.9610	0.0000	0.0324	0.0000
4.3462	0.8936	2.0077	0.0000	0.0324	0.0000

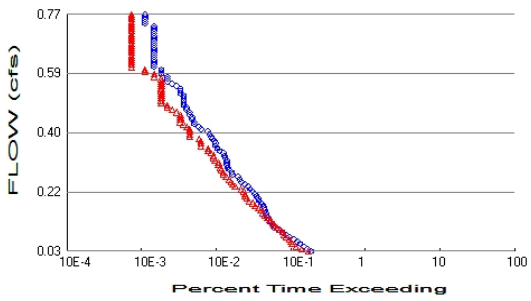
4.3984	0.8936	2.0543	0.0000	0.0324	0.0000
4.4505	0.8936	2.1010	0.0000	0.0324	0.0000
4.5027	0.8936	2.1476	0.0000	0.0324	0.0000
4.5549	0.8936	2.1942	0.0000	0.0324	0.0000
4.6071	0.8936	2.2409	0.0000	0.0324	0.0000
4.6593	0.8936	2.2875	0.0015	0.0324	0.0000
4.7115	0.8936	2.3342	0.0022	0.0324	0.0000
4.7500	0.8936	2.3685	0.0032	0.0324	0.0000

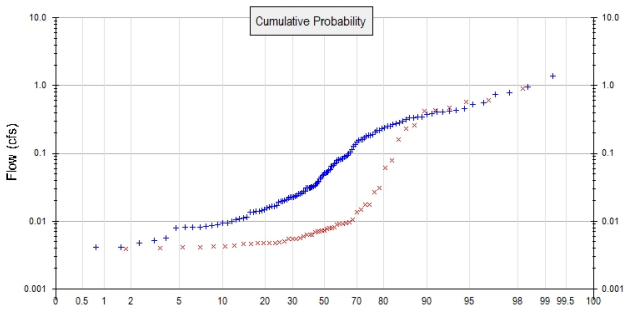
Surface rtial Ret 1

Element Flows To:

Outlet 1	Outlet 2
	Bio Partial Ret 1

Analysis Results
POC 1





\+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #1
Total Pervious Area: 1.79
Total Impervious Area: 0

Mitigated Landuse Totals for POC #1
Total Pervious Area: 0.33
Total Impervious Area: 1.46

Flow Frequency Method: Cunnane

Flow Frequency Return Periods for Predeveloped. POC #1

Return Period	**Flow(cfs)**
2 year	0.338562
5 year	0.491893
10 year	0.769406
25 year	1.17907

Flow Frequency Return Periods for Mitigated. POC #1

Return Period	**Flow(cfs)**
2 year	0.014617
5 year	0.350192
10 year	0.548751
25 year	0.771831

Duration Flows

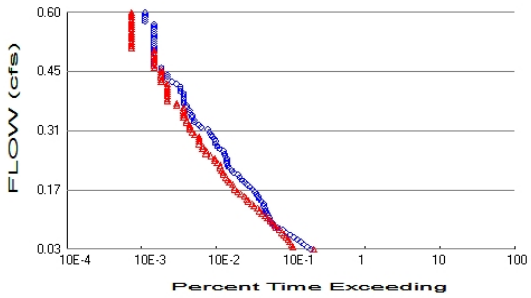
The Facility PASSED

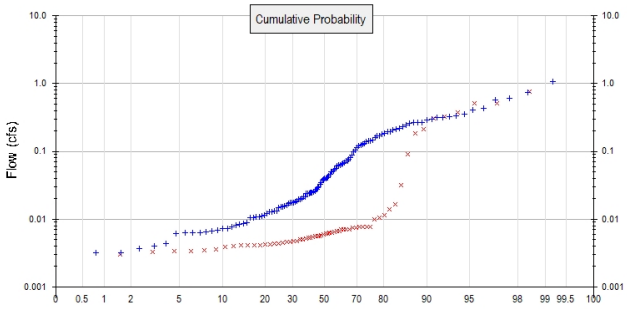
Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.0339	510	469	91	Pass
0.0413	451	380	84	Pass
0.0487	411	321	78	Pass
0.0561	361	285	78	Pass
0.0636	330	271	82	Pass
0.0710	303	260	85	Pass
0.0784	259	235	90	Pass
0.0859	235	222	94	Pass
0.0933	209	212	101	Pass
0.1007	184	194	105	Pass
0.1082	160	176	110	Pass
0.1156	153	164	107	Pass
0.1230	145	154	106	Pass
0.1304	140	143	102	Pass
0.1379	136	133	97	Pass
0.1453	129	121	93	Pass
0.1527	127	116	91	Pass
0.1602	123	108	87	Pass
0.1676	120	100	83	Pass
0.1750	116	90	77	Pass
0.1825	110	85	77	Pass
0.1899	103	75	72	Pass
0.1973	99	70	70	Pass
0.2047	94	67	71	Pass
0.2122	90	66	73	Pass
0.2196	83	64	77	Pass
0.2270	78	59	75	Pass
0.2345	72	49	68	Pass
0.2419	65	45	69	Pass
0.2493	59	43	72	Pass
0.2568	56	41	73	Pass
0.2642	53	37	69	Pass
0.2716	45	34	75	Pass
0.2790	44	34	77	Pass
0.2865	40	32	80	Pass
0.2939	39	31	79	Pass
0.3013	38	29	76	Pass
0.3088	38	29	76	Pass
0.3162	38	26	68	Pass
0.3236	36	25	69	Pass
0.3310	35	25	71	Pass
0.3385	34	23	67	Pass
0.3459	30	21	70	Pass
0.3533	28	21	75	Pass
0.3608	27	17	62	Pass
0.3682	27	17	62	Pass
0.3756	26	17	65	Pass
0.3831	24	16	66	Pass
0.3905	23	12	52	Pass
0.3979	22	12	54	Pass
0.4053	21	12	57	Pass
0.4128	17	12	70	Pass
0.4202	16	11	68	Pass

0.4276	14	10	71	Pass
0.4351	14	9	64	Pass
0.4425	13	9	69	Pass
0.4499	13	9	69	Pass
0.4574	12	9	75	Pass
0.4648	12	8	66	Pass
0.4722	11	7	63	Pass
0.4796	11	6	54	Pass
0.4871	10	6	60	Pass
0.4945	10	5	50	Pass
0.5019	10	5	50	Pass
0.5094	10	5	50	Pass
0.5168	10	5	50	Pass
0.5242	9	5	55	Pass
0.5317	9	5	55	Pass
0.5391	9	5	55	Pass
0.5465	8	5	62	Pass
0.5539	7	5	71	Pass
0.5614	6	5	83	Pass
0.5688	6	5	83	Pass
0.5762	6	4	66	Pass
0.5837	5	4	80	Pass
0.5911	5	3	60	Pass
0.5985	5	3	60	Pass
0.6060	4	2	50	Pass
0.6134	4	2	50	Pass
0.6208	4	2	50	Pass
0.6282	4	2	50	Pass
0.6357	4	2	50	Pass
0.6431	4	2	50	Pass
0.6505	4	2	50	Pass
0.6580	4	2	50	Pass
0.6654	4	2	50	Pass
0.6728	4	2	50	Pass
0.6802	4	2	50	Pass
0.6877	4	2	50	Pass
0.6951	4	2	50	Pass
0.7025	4	2	50	Pass
0.7100	4	2	50	Pass
0.7174	4	2	50	Pass
0.7248	4	2	50	Pass
0.7323	4	2	50	Pass
0.7397	3	2	66	Pass
0.7471	3	2	66	Pass
0.7545	3	2	66	Pass
0.7620	3	2	66	Pass
0.7694	3	2	66	Pass

Water Quality

POC 2





\+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #2
Total Pervious Area: 1.39
Total Impervious Area: 0

Mitigated Landuse Totals for POC #2
Total Pervious Area: 0.34
Total Impervious Area: 1.05

Flow Frequency Method: Cunnane

Flow Frequency Return Periods for Predeveloped. POC #2

Return Period	**Flow(cfs)**
2 year	0.262905
5 year	0.381973
10 year	0.597472
25 year	0.915591

Flow Frequency Return Periods for Mitigated. POC #2

Return Period	**Flow(cfs)**
2 year	0.007763
5 year	0.266186
10 year	0.474116
25 year	0.646797

Duration Flows

The Facility PASSED

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.0263	508	553	108	Pass
0.0321	449	292	65	Pass
0.0378	413	277	67	Pass
0.0436	367	264	71	Pass
0.0494	330	250	75	Pass
0.0551	303	235	77	Pass
0.0609	267	224	83	Pass
0.0667	235	205	87	Pass
0.0724	210	190	90	Pass
0.0782	182	172	94	Pass
0.0840	161	168	104	Pass
0.0898	154	154	100	Pass
0.0955	145	144	99	Pass
0.1013	140	131	93	Pass
0.1071	135	123	91	Pass
0.1128	131	111	84	Pass
0.1186	127	105	82	Pass
0.1244	123	98	79	Pass
0.1301	119	87	73	Pass
0.1359	118	82	69	Pass
0.1417	110	73	66	Pass
0.1475	103	70	67	Pass
0.1532	99	65	65	Pass
0.1590	94	58	61	Pass
0.1648	90	53	58	Pass
0.1705	83	49	59	Pass
0.1763	78	48	61	Pass
0.1821	71	45	63	Pass
0.1878	65	41	63	Pass
0.1936	60	39	65	Pass
0.1994	56	37	66	Pass
0.2051	53	34	64	Pass
0.2109	46	34	73	Pass
0.2167	44	32	72	Pass
0.2225	40	31	77	Pass
0.2282	39	31	79	Pass
0.2340	38	28	73	Pass
0.2398	38	26	68	Pass
0.2455	38	26	68	Pass
0.2513	36	23	63	Pass
0.2571	35	20	57	Pass
0.2628	34	20	58	Pass
0.2686	30	18	60	Pass
0.2744	28	18	64	Pass
0.2801	27	16	59	Pass
0.2859	27	16	59	Pass
0.2917	26	16	61	Pass
0.2975	24	16	66	Pass
0.3032	23	14	60	Pass
0.3090	22	13	59	Pass
0.3148	21	12	57	Pass
0.3205	17	12	70	Pass
0.3263	16	12	75	Pass

0.3321	14	11	78	Pass
0.3378	14	11	78	Pass
0.3436	13	10	76	Pass
0.3494	13	10	76	Pass
0.3552	12	10	83	Pass
0.3609	12	10	83	Pass
0.3667	11	10	90	Pass
0.3725	11	8	72	Pass
0.3782	10	8	80	Pass
0.3840	10	6	60	Pass
0.3898	10	6	60	Pass
0.3955	10	6	60	Pass
0.4013	10	6	60	Pass
0.4071	9	6	66	Pass
0.4128	9	6	66	Pass
0.4186	9	6	66	Pass
0.4244	8	6	75	Pass
0.4302	7	5	71	Pass
0.4359	6	5	83	Pass
0.4417	6	5	83	Pass
0.4475	6	5	83	Pass
0.4532	5	5	100	Pass
0.4590	5	5	100	Pass
0.4648	5	4	80	Pass
0.4705	4	4	100	Pass
0.4763	4	4	100	Pass
0.4821	4	4	100	Pass
0.4879	4	4	100	Pass
0.4936	4	4	100	Pass
0.4994	4	4	100	Pass
0.5052	4	4	100	Pass
0.5109	4	2	50	Pass
0.5167	4	2	50	Pass
0.5225	4	2	50	Pass
0.5282	4	2	50	Pass
0.5340	4	2	50	Pass
0.5398	4	2	50	Pass
0.5455	4	2	50	Pass
0.5513	4	2	50	Pass
0.5571	4	2	50	Pass
0.5629	4	2	50	Pass
0.5686	4	2	50	Pass
0.5744	3	2	66	Pass
0.5802	3	2	66	Pass
0.5859	3	2	66	Pass
0.5917	3	2	66	Pass
0.5975	3	2	66	Pass

Water Quality

Model Default Modifications

Total of 0 changes have been made.

PERLND Changes

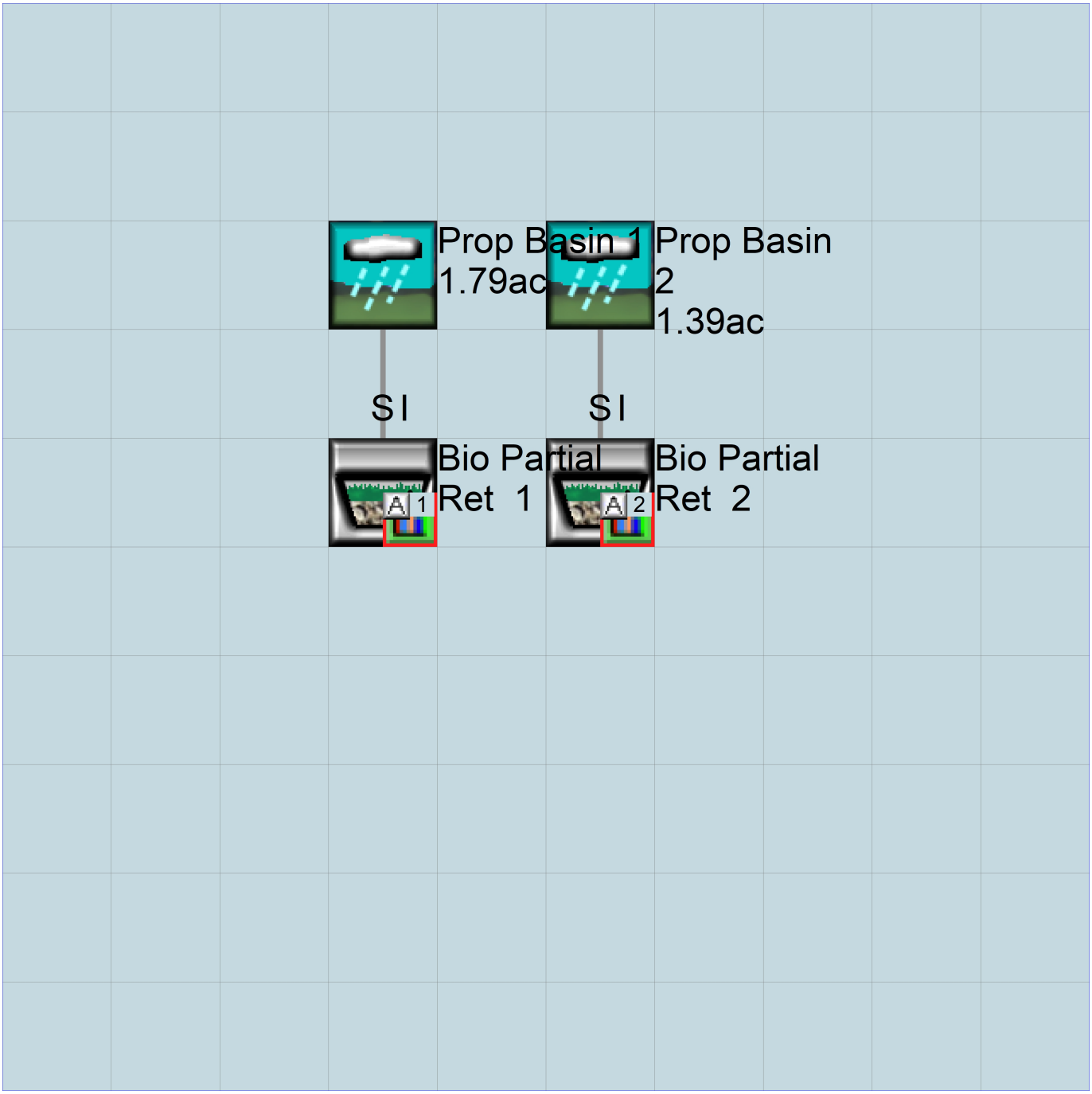
No PERLND changes have been made.

IMPLND Changes

No IMPLND changes have been made.

Appendix
Predeveloped Schematic

Mitigated Schematic



Predeveloped UCI File

```
RUN

GLOBAL
  WWHM4 model simulation
  START       1973 10 01        END    2004 09 30
  RUN INTERP OUTPUT LEVEL    3    0
  RESUME     0 RUN     1                    UNIT SYSTEM     1
END GLOBAL

FILES
<File>  <Un#>   <-----------File Name------------------------------>***
<-ID->                                                              ***
WDM         26   2025_SCC.wdm
MESSU       25   Pre2025_SCC.MES
            27   Pre2025_SCC.L61
            28   Pre2025_SCC.L62
            30   POC2025_SCC1.dat
            31   POC2025_SCC2.dat
END FILES

OPN SEQUENCE
    INGRP               INDELT 00:60
      PERLND      19
      COPY       501
      COPY       502
      DISPLY       1
      DISPLY       2
    END INGRP
END OPN SEQUENCE
DISPLY
  DISPLY-INFO1
    # -  #<----------Title---------->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
    1        Pre Basin 1                MAX                    1    2   30    9
    2        Pre Basin  2               MAX                    1    2   31    9
  END DISPLY-INFO1
END DISPLY
COPY
  TIMESERIES
    # -  #  NPT  NMN ***
    1         1    1
  501         1    1
  502         1    1
  END TIMESERIES
END COPY
GENER
  OPCODE
    #    # OPCD ***
  END OPCODE
  PARM
    #    #         K ***
  END PARM
END GENER
PERLND
  GEN-INFO
    <PLS ><-------Name------->NBLKS   Unit-systems   Printer ***
    # -  #                          User  t-series Engl Metr ***
                                        in  out           ***
   19      C,NatVeg,Flat          1    1    1    1   27    0
  END GEN-INFO
  *** Section PWATER***

  ACTIVITY
    <PLS > ************ Active Sections ******************************
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC ***
   19         0    0    1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
```

```
    <PLS > ***************** Print-flags ***************************** PIVL  PYR
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC  *********
   19         0    0    4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  PWAT-PARM1
    <PLS >  PWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP UZFG  VCS  VUZ  VNN VIFW VIRC  VLE INFC  HWT ***
   19         0    1    1    1    0    0    0    0    1    1    0
  END PWAT-PARM1

  PWAT-PARM2
    <PLS >      PWATER input info: Part 2         ***
    # -  # ***FOREST      LZSN    INFILT      LSUR     SLSUR     KVARY     AGWRC
   19              0       3.8     0.035       100      0.05       2.5     0.915
  END PWAT-PARM2

  PWAT-PARM3
    <PLS >      PWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN    INFEXP    INFILD    DEEPFR    BASETP    AGWETP
   19              0         0         2         2         0      0.05      0.05
  END PWAT-PARM3
  PWAT-PARM4
    <PLS >     PWATER input info: Part 4                              ***
    # -  #     CEPSC      UZSN      NSUR     INTFW       IRC     LZETP ***
   19             0       0.6      0.04         1       0.3         0
  END PWAT-PARM4
  MON-LZETPARM
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.4  0.4  0.4  0.4  0.6  0.6  0.6  0.6  0.6  0.4  0.4  0.4
  END MON-LZETPARM
  MON-INTERCEP
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.1  0.1  0.1  0.1 0.06 0.06 0.06 0.06 0.06  0.1  0.1  0.1
  END MON-INTERCEP

  PWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
               ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
    # -  # ***  CEPS      SURS       UZS      IFWS       LZS      AGWS      GWVS
   19             0         0      0.01         0       0.4      0.01         0
  END PWAT-STATE1

END PERLND

IMPLND
  GEN-INFO
    <PLS ><-------Name------->   Unit-systems   Printer ***
    # -  #                    User  t-series Engl Metr ***
                                    in  out           ***
  END GEN-INFO
  *** Section IWATER***

  ACTIVITY
    <PLS > ************* Active Sections ****************************
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL   ***
  END ACTIVITY

  PRINT-INFO
    <ILS > ******** Print-flags ******** PIVL  PYR
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL    *********
  END PRINT-INFO

  IWAT-PARM1
    <PLS >  IWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP  VRS  VNN RTLI     ***
  END IWAT-PARM1
```

```
  IWAT-PARM2
    <PLS >      IWATER input info: Part 2         ***
    # -  # ***  LSUR     SLSUR      NSUR     RETSC
  END IWAT-PARM2

  IWAT-PARM3
    <PLS >      IWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN
  END IWAT-PARM3

  IWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
    # -  # ***  RETS      SURS
  END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->                 <--Area-->     <-Target->   MBLK    ***
<Name>   #                 <-factor->     <Name>   #   Tbl#    ***
Pre Basin 1***
PERLND  19                       1.79     COPY   501     12
PERLND  19                       1.79     COPY   501     13
Pre Basin  2***
PERLND  19                       1.39     COPY   502     12
PERLND  19                       1.39     COPY   502     13

******Routing******
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
COPY   501 OUTPUT MEAN   1 1   12.1        DISPLY   1     INPUT  TIMSER 1
COPY   502 OUTPUT MEAN   1 1   12.1        DISPLY   2     INPUT  TIMSER 1



<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
END NETWORK

RCHRES
  GEN-INFO
    RCHRES       Name        Nexits   Unit Systems   Printer                ***
    # -  #<------------------><---> User T-series  Engl Metr LKFG           ***
                                      in  out                               ***
  END GEN-INFO
  *** Section RCHRES***

  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags ****************** PIVL  PYR
    # -  # HYDR ADCA CONS HEAT  SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR  *********
  END PRINT-INFO

  HYDR-PARM1
    RCHRES  Flags for each HYDR Section                                 ***
    # -  #  VC A1 A2 A3  ODFVFG for each *** ODGTFG for each     FUNCT  for each
            FG FG FG FG  possible  exit  *** possible  exit      possible  exit
             *  *  *  *    *  *  *  *  *       *  *  *  *  *         ***
  END HYDR-PARM1

  HYDR-PARM2
    # -  #    FTABNO       LEN     DELTH     STCOR        KS      DB50       ***
  <------><--------><--------><--------><--------><--------><-------->      ***
```

```
  END HYDR-PARM2
  HYDR-INIT
    RCHRES  Initial conditions for each HYDR section                        ***
    # -  # ***   VOL     Initial  value  of COLIND     Initial  value  of OUTDGT
          *** ac-ft     for each possible exit        for each possible exit
  <------><-------->     <---><---><---><---><---> *** <---><---><---><---><--->
  END HYDR-INIT
END RCHRES

SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES
END FTABLES

EXT SOURCES
<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   # <Name> # tem strg<-factor->strg <Name>   #   #        <Name> # #  ***
WDM      2 PREC     ENGL    1              PERLND   1 999 EXTNL  PREC
WDM      2 PREC     ENGL    1              IMPLND   1 999 EXTNL  PREC
WDM      1 EVAP     ENGL    1              PERLND   1 999 EXTNL  PETINP
WDM      1 EVAP     ENGL    1              IMPLND   1 999 EXTNL  PETINP

END EXT SOURCES

EXT TARGETS
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name>   #        <Name> # #<-factor->strg <Name>   # <Name>    tem strg strg***
COPY   501 OUTPUT MEAN   1 1     12.1      WDM    501 FLOW     ENGL      REPL
COPY   502 OUTPUT MEAN   1 1     12.1      WDM    502 FLOW     ENGL      REPL
END EXT TARGETS

MASS-LINK
<Volume>   <-Grp> <-Member-><--Mult-->     <Target>       <-Grp> <-Member->***
<Name>            <Name> # #<-factor->     <Name>                <Name> # #***
  MASS-LINK       12
PERLND     PWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   12

  MASS-LINK       13
PERLND     PWATER IFWO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   13


END MASS-LINK

END RUN
```

Mitigated UCI File

```
RUN

GLOBAL
  WWHM4 model simulation
  START       1973 10 01        END    2004 09 30
  RUN INTERP OUTPUT LEVEL    3    0
  RESUME     0 RUN     1                    UNIT SYSTEM     1
END GLOBAL

FILES
<File>  <Un#>   <-----------File Name------------------------------>***
<-ID->                                                              ***
WDM         26   2025_SCC.wdm
MESSU       25   Mit2025_SCC.MES
            27   Mit2025_SCC.L61
            28   Mit2025_SCC.L62
            31   POC2025_SCC2.dat
            30   POC2025_SCC1.dat
END FILES

OPN SEQUENCE
    INGRP               INDELT 00:60
      PERLND      19
      IMPLND       1
      RCHRES       1
      RCHRES       2
      RCHRES       3
      RCHRES       4
      COPY         2
      COPY       502
      COPY         1
      COPY       501
      DISPLY       2
      DISPLY       1
    END INGRP
END OPN SEQUENCE
DISPLY
  DISPLY-INFO1
    # -  #<----------Title---------->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
    2        Surface rtial Ret  2        MAX                   1    2   31    9
    1        Surface rtial Ret  1        MAX                   1    2   30    9
  END DISPLY-INFO1
END DISPLY
COPY
  TIMESERIES
    # -  #  NPT  NMN ***
    1         1    1
    2         1    1
  502         1    1
  501         1    1
  END TIMESERIES
END COPY
GENER
  OPCODE
    #    # OPCD ***
  END OPCODE
  PARM
    #    #         K ***
  END PARM
END GENER
PERLND
  GEN-INFO
    <PLS ><-------Name------->NBLKS   Unit-systems   Printer ***
    # -  #                          User  t-series Engl Metr ***
                                          in  out           ***
   19      C,NatVeg,Flat          1    1    1    1   27    0
  END GEN-INFO
  *** Section PWATER***
```

```
  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC ***
   19         0    0    1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags **************************** PIVL  PYR
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC  *********
   19         0    0    4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  PWAT-PARM1
    <PLS >  PWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP UZFG  VCS  VUZ  VNN VIFW VIRC  VLE INFC  HWT ***
   19         0    1    1    1    0    0    0    0    1    1    0
  END PWAT-PARM1

  PWAT-PARM2
    <PLS >      PWATER input info: Part 2          ***
    # -  # ***FOREST      LZSN    INFILT      LSUR     SLSUR     KVARY     AGWRC
   19              0       3.8     0.035       100      0.05       2.5     0.915
  END PWAT-PARM2

  PWAT-PARM3
    <PLS >      PWATER input info: Part 3          ***
    # -  # ***PETMAX    PETMIN    INFEXP    INFILD    DEEPFR    BASETP    AGWETP
   19              0         0         2         2         0      0.05      0.05
  END PWAT-PARM3
  PWAT-PARM4
    <PLS >     PWATER input info: Part 4                              ***
    # -  #     CEPSC      UZSN      NSUR     INTFW       IRC     LZETP ***
   19              0       0.6      0.04         1       0.3         0
  END PWAT-PARM4
  MON-LZETPARM
    <PLS >      PWATER input info: Part 3          ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.4  0.4  0.4  0.4  0.6  0.6  0.6  0.6  0.6  0.4  0.4  0.4
  END MON-LZETPARM
  MON-INTERCEP
    <PLS >      PWATER input info: Part 3          ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   19       0.1  0.1  0.1  0.1 0.06 0.06 0.06 0.06 0.06  0.1  0.1  0.1
  END MON-INTERCEP

  PWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
             ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
    # -  # ***  CEPS      SURS       UZS      IFWS       LZS      AGWS      GWVS
   19              0         0      0.01         0       0.4      0.01         0
  END PWAT-STATE1

END PERLND

IMPLND
  GEN-INFO
    <PLS ><-------Name------->   Unit-systems   Printer ***
    # -  #                     User  t-series Engl Metr ***
                                  in  out           ***
    1      IMPERVIOUS-FLAT        1    1    1   27    0
  END GEN-INFO
  *** Section IWATER***

  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL   ***
    1         0    0    1    0    0    0
  END ACTIVITY
```

```
  PRINT-INFO
    <ILS > ******** Print-flags ******** PIVL  PYR
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL    *********
    1         0    0    4    0    0    0    1    9
  END PRINT-INFO

  IWAT-PARM1
    <PLS >  IWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP  VRS  VNN RTLI     ***
    1         0    0    0    0    1
  END IWAT-PARM1

  IWAT-PARM2
    <PLS >      IWATER input info: Part 2         ***
    # -  # ***  LSUR     SLSUR      NSUR     RETSC
    1          100      0.05     0.011       0.1
  END IWAT-PARM2

  IWAT-PARM3
    <PLS >      IWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN
    1              0         0
  END IWAT-PARM3

  IWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
    # -  # ***  RETS      SURS
    1              0         0
  END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->                 <--Area-->     <-Target->   MBLK   ***
<Name>   #                 <-factor->     <Name>   #   Tbl#   ***
Prop Basin  2***
PERLND  19                      0.34     RCHRES   1      2
PERLND  19                      0.34     RCHRES   1      3
IMPLND   1                      1.05     RCHRES   1      5
Prop Basin 1***
PERLND  19                      0.33     RCHRES   3      2
PERLND  19                      0.33     RCHRES   3      3
IMPLND   1                      1.46     RCHRES   3      5

******Routing******
PERLND  19                      0.34     COPY     2     12
IMPLND   1                      1.05     COPY     2     15
PERLND  19                      0.34     COPY     2     13
RCHRES   1                         1     RCHRES   2      8
PERLND  19                      0.33     COPY     1     12
IMPLND   1                      1.46     COPY     1     15
PERLND  19                      0.33     COPY     1     13
RCHRES   3                         1     RCHRES   4      8
RCHRES   2                         1     COPY   502     16
RCHRES   1                         1     COPY   502     17
RCHRES   4                         1     COPY   501     16
RCHRES   3                         1     COPY   501     17
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
COPY   502 OUTPUT MEAN   1 1   12.1        DISPLY   2     INPUT  TIMSER 1
COPY   501 OUTPUT MEAN   1 1   12.1        DISPLY   1     INPUT  TIMSER 1



<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
END NETWORK
```

```
RCHRES
  GEN-INFO
    RCHRES       Name        Nexits   Unit Systems   Printer                ***
    # -  #<-----------------><---> User T-series  Engl Metr LKFG            ***
                                       in  out                              ***
    1     Surface rtial Re-029    2    1    1    1   28    0    1
    2     Bio Partial Ret -028    1    1    1    1   28    0    1
    3     Surface rtial Re-040    2    1    1    1   28    0    1
    4     Bio Partial Ret -039    1    1    1    1   28    0    1
  END GEN-INFO
  *** Section RCHRES***

  ACTIVITY
    <PLS > ************ Active Sections ******************************
    # -  # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1         1    0    0    0    0    0    0    0    0    0
    2         1    0    0    0    0    0    0    0    0    0
    3         1    0    0    0    0    0    0    0    0    0
    4         1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags ******************* PIVL  PYR
    # -  # HYDR ADCA CONS HEAT  SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR  *********
    1         4    0    0    0    0    0    0    0    0    0    1    9
    2         4    0    0    0    0    0    0    0    0    0    1    9
    3         4    0    0    0    0    0    0    0    0    0    1    9
    4         4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  HYDR-PARM1
    RCHRES  Flags for each HYDR Section                                  ***
    # -  #  VC A1 A2 A3  ODFVFG for each *** ODGTFG for each     FUNCT  for each
          FG FG FG FG  possible  exit  *** possible  exit      possible  exit
           *  *  *  *   *  *  *  *  *       *  *  *  *  *         ***
    1      0  1  0  0    4  5  0  0  0       0  0  0  0  0        2  2  2  2  2
    2      0  1  0  0    4  0  0  0  0       0  0  0  0  0        2  2  2  2  2
    3      0  1  0  0    4  5  0  0  0       0  0  0  0  0        2  2  2  2  2
    4      0  1  0  0    4  0  0  0  0       0  0  0  0  0        2  2  2  2  2
  END HYDR-PARM1

  HYDR-PARM2
    # -  #    FTABNO       LEN      DELTH     STCOR        KS      DB50       ***
  <------><--------><--------><--------><--------><--------><--------><--------> ***
    1              1      0.01       0.0       0.0       0.0       0.0
    2              2      0.03       0.0       0.0       0.0       0.0
    3              3      0.01       0.0       0.0       0.0       0.0
    4              4      0.04       0.0       0.0       0.0       0.0
  END HYDR-PARM2
  HYDR-INIT
    RCHRES  Initial conditions for each HYDR section                     ***
    # -  # ***   VOL     Initial  value  of COLIND     Initial  value  of OUTDGT
         *** ac-ft     for each possible exit        for each possible exit
  <------><-------->     <---><---><---><---><---> *** <---><---><---><---><--->
    1            0         4.0  5.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
    2            0         4.0  0.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
    3            0         4.0  5.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
    4            0         4.0  0.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
  END HYDR-INIT
END RCHRES

SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES
  FTABLE      2
   71    4
     Depth      Area    Volume  Outflow1 Velocity  Travel Time***
      (ft)   (acres) (acre-ft)   (cfs)   (ft/sec)    (Minutes)***
  0.000000  0.601944  0.000000  0.000000
```

0.046703	0.601944	0.008434	0.000000
0.093407	0.601944	0.016868	0.000000
0.140110	0.601944	0.025301	0.000000
0.186813	0.601944	0.033735	0.000000
0.233516	0.601944	0.042169	0.000000
0.280220	0.601944	0.050603	0.000000
0.326923	0.601944	0.059037	0.000000
0.373626	0.601944	0.067471	0.000000
0.420330	0.601944	0.075904	0.000000
0.467033	0.601944	0.084338	0.000000
0.513736	0.601944	0.092772	0.000000
0.560440	0.601944	0.101206	0.000000
0.607143	0.601944	0.109640	0.000000
0.653846	0.601944	0.118074	0.000000
0.700549	0.601944	0.126507	0.000000
0.747253	0.601944	0.134941	0.000000
0.793956	0.601944	0.143375	0.000000
0.840659	0.601944	0.151809	0.000000
0.887363	0.601944	0.160243	0.000000
0.934066	0.601944	0.168677	0.000000
0.980769	0.601944	0.177110	0.000000
1.027473	0.601944	0.185544	0.000000
1.074176	0.601944	0.193978	0.000000
1.120879	0.601944	0.202412	0.000000
1.167582	0.601944	0.210846	0.000000
1.214286	0.601944	0.219280	0.000937
1.260989	0.601944	0.227713	0.001406
1.307692	0.601944	0.236147	0.002206
1.354396	0.601944	0.244581	0.002606
1.401099	0.601944	0.253015	0.003210
1.447802	0.601944	0.261449	0.003512
1.494505	0.601944	0.269883	0.003995
1.541209	0.601944	0.278316	0.004237
1.587912	0.601944	0.286750	0.004646
1.634615	0.601944	0.295184	0.004851
1.681319	0.601944	0.303618	0.005212
1.728022	0.601944	0.312052	0.005393
1.774725	0.601944	0.323718	0.005719
1.821429	0.601944	0.335385	0.005883
1.868132	0.601944	0.347052	0.006184
1.914835	0.601944	0.358719	0.006334
1.961538	0.601944	0.370386	0.006615
2.008242	0.601944	0.382052	0.006755
2.054945	0.601944	0.393719	0.007019
2.101648	0.601944	0.405386	0.007151
2.148352	0.601944	0.417053	0.007401
2.195055	0.601944	0.428720	0.007525
2.241758	0.601944	0.440386	0.007763
2.288462	0.601944	0.452053	0.007763
2.335165	0.601944	0.463720	0.008060
2.381868	0.601944	0.475387	0.008524
2.428571	0.601944	0.487054	0.009051
2.475275	0.601944	0.498720	0.009593
2.521978	0.601944	0.510387	0.010128
2.568681	0.601944	0.522054	0.010646
2.615385	0.601944	0.533721	0.011145
2.662088	0.601944	0.545388	0.011625
2.708791	0.601944	0.557054	0.012088
2.755495	0.601944	0.568721	0.012534
2.802198	0.601944	0.580388	0.012965
2.848901	0.601944	0.592055	0.013382
2.895604	0.601944	0.603722	0.013786
2.942308	0.601944	0.615388	0.014180
2.989011	0.601944	0.627055	0.014562
3.035714	0.601944	0.638722	0.014936
3.082418	0.601944	0.650389	0.015301
3.129121	0.601944	0.662056	0.015658
3.175824	0.601944	0.673722	0.016009
3.222527	0.601944	0.685389	0.016358
3.250000	0.601944	0.694435	0.026411

```
END FTABLE  2
FTABLE      1
 23    5
   Depth      Area    Volume  Outflow1  Outflow2  Velocity  Travel Time***
    (ft)   (acres) (acre-ft)   (cfs)      (cfs)   (ft/sec)    (Minutes)***
0.000000  0.601944  0.000000  0.000000  0.000000
0.046703  0.601944  0.028113  0.000000  0.026411
0.093407  0.601944  0.056226  0.000000  0.026411
0.140110  0.601944  0.084338  0.000000  0.026411
0.186813  0.601944  0.112451  0.000000  0.026411
0.233516  0.601944  0.140564  0.000000  0.026411
0.280220  0.601944  0.168677  0.000000  0.026411
0.326923  0.601944  0.196789  0.000000  0.026411
0.373626  0.601944  0.224902  0.000000  0.026411
0.420330  0.601944  0.253015  0.000000  0.026411
0.467033  0.601944  0.281128  0.000000  0.026411
0.513736  0.601944  0.309240  0.017087  0.026411
0.560440  0.601944  0.337353  0.157374  0.026411
0.607143  0.601944  0.365466  0.369426  0.026411
0.653846  0.601944  0.393579  0.627270  0.026411
0.700549  0.601944  0.421691  0.911089  0.026411
0.747253  0.601944  0.449804  1.200769  0.026411
0.793956  0.601944  0.477917  1.476083  0.026411
0.840659  0.601944  0.506030  1.718754  0.026411
0.887363  0.601944  0.534143  1.915531  0.026411
0.934066  0.601944  0.562255  2.061968  0.026411
0.980769  0.601944  0.590368  2.166777  0.026411
1.000000  0.601944  0.601944  2.287491  0.026411
END FTABLE  1
FTABLE      4
 64    4
   Depth      Area    Volume  Outflow1 Velocity  Travel Time***
    (ft)   (acres) (acre-ft)   (cfs)   (ft/sec)    (Minutes)***
0.000000  0.893566  0.000000  0.000000
0.052198  0.893566  0.013993  0.000000
0.104396  0.893566  0.027985  0.000000
0.156593  0.893566  0.041978  0.000000
0.208791  0.893566  0.055971  0.000000
0.260989  0.893566  0.069963  0.000000
0.313187  0.893566  0.083956  0.000000
0.365385  0.893566  0.097949  0.000000
0.417582  0.893566  0.111941  0.000000
0.469780  0.893566  0.125934  0.000000
0.521978  0.893566  0.139927  0.000000
0.574176  0.893566  0.153919  0.000000
0.626374  0.893566  0.167912  0.000000
0.678571  0.893566  0.181905  0.000000
0.730769  0.893566  0.195897  0.000000
0.782967  0.893566  0.209890  0.000000
0.835165  0.893566  0.223882  0.000000
0.887363  0.893566  0.237875  0.000000
0.939560  0.893566  0.251868  0.000000
0.991758  0.893566  0.265860  0.000000
1.043956  0.893566  0.279853  0.000000
1.096154  0.893566  0.293846  0.000000
1.148352  0.893566  0.307838  0.000000
1.200549  0.893566  0.321831  0.000000
1.252747  0.893566  0.335824  0.000000
1.304945  0.893566  0.349816  0.000000
1.357143  0.893566  0.363809  0.000000
1.409341  0.893566  0.377802  0.001476
1.461538  0.893566  0.391794  0.002214
1.513736  0.893566  0.405787  0.003228
1.565934  0.893566  0.419780  0.003735
1.618132  0.893566  0.433772  0.004479
1.670330  0.893566  0.447765  0.004851
1.722527  0.893566  0.461758  0.005448
1.774725  0.893566  0.481114  0.005746
1.826923  0.893566  0.500471  0.006257
1.879121  0.893566  0.519827  0.006512
```

```
  1.931319  0.893566  0.539184  0.006966
  1.983516  0.893566  0.558540  0.007193
  2.035714  0.893566  0.577897  0.007606
  2.087912  0.893566  0.597253  0.007812
  2.140110  0.893566  0.616610  0.008194
  2.192308  0.893566  0.635966  0.008385
  2.244505  0.893566  0.655323  0.008593
  2.296703  0.893566  0.674679  0.009080
  2.348901  0.893566  0.694036  0.009784
  2.401099  0.893566  0.713392  0.010559
  2.453297  0.893566  0.732749  0.011340
  2.505495  0.893566  0.752105  0.012100
  2.557692  0.893566  0.771462  0.012829
  2.609890  0.893566  0.790818  0.013525
  2.662088  0.893566  0.810175  0.014190
  2.714286  0.893566  0.829531  0.014827
  2.766484  0.893566  0.848888  0.015438
  2.818681  0.893566  0.868244  0.016027
  2.870879  0.893566  0.887601  0.016594
  2.923077  0.893566  0.906957  0.017143
  2.975275  0.893566  0.926314  0.017675
  3.027473  0.893566  0.945670  0.018192
  3.079670  0.893566  0.965027  0.018695
  3.131868  0.893566  0.984383  0.019187
  3.184066  0.893566  1.003740  0.019669
  3.236264  0.893566  1.023096  0.020150
  3.250000  0.893566  1.030869  0.032411
  END FTABLE  4
  FTABLE      3
   30    5
     Depth      Area    Volume  Outflow1  Outflow2  Velocity  Travel Time***
      (ft)   (acres) (acre-ft)    (cfs)     (cfs)   (ft/sec)    (Minutes)***
  0.000000  0.893566  0.000000  0.000000  0.000000
  0.052198  0.893566  0.046642  0.000000  0.032411
  0.104396  0.893566  0.093284  0.000000  0.032411
  0.156593  0.893566  0.139927  0.000000  0.032411
  0.208791  0.893566  0.186569  0.000000  0.032411
  0.260989  0.893566  0.233211  0.000000  0.032411
  0.313187  0.893566  0.279853  0.000000  0.032411
  0.365385  0.893566  0.326495  0.000000  0.032411
  0.417582  0.893566  0.373137  0.000000  0.032411
  0.469780  0.893566  0.419780  0.000000  0.032411
  0.521978  0.893566  0.466422  0.034569  0.032411
  0.574176  0.893566  0.513064  0.213745  0.032411
  0.626374  0.893566  0.559706  0.471194  0.032411
  0.678571  0.893566  0.606348  0.775552  0.032411
  0.730769  0.893566  0.652991  1.099144  0.032411
  0.782967  0.893566  0.699633  1.413620  0.032411
  0.835165  0.893566  0.746275  1.692395  0.032411
  0.887363  0.893566  0.792917  1.915531  0.032411
  0.939560  0.893566  0.839559  2.076126  0.032411
  0.991758  0.893566  0.886202  2.187838  0.032411
  1.043956  0.893566  0.932844  2.322958  0.032411
  1.096154  0.893566  0.979486  2.431861  0.032411
  1.148352  0.893566  1.026128  2.536091  0.032411
  1.200549  0.893566  1.072770  2.636204  0.032411
  1.252747  0.893566  1.119412  2.732651  0.032411
  1.304945  0.893566  1.166055  2.825808  0.032411
  1.357143  0.893566  1.212697  2.915991  0.032411
  1.409341  0.893566  1.259339  3.003467  0.032411
  1.461538  0.893566  1.305981  3.088466  0.032411
  1.500000  0.893566  1.340349  3.171188  0.032411
  END FTABLE  3
END FTABLES

EXT SOURCES
<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   # <Name> # tem strg<-factor->strg <Name>   #   #        <Name> # #  ***
WDM      2 PREC     ENGL    1              PERLND   1 999 EXTNL  PREC
WDM      2 PREC     ENGL    1              IMPLND   1 999 EXTNL  PREC
```

```
WDM      1 EVAP     ENGL    1              PERLND   1 999 EXTNL  PETINP
WDM      1 EVAP     ENGL    1              IMPLND   1 999 EXTNL  PETINP
WDM      2 PREC     ENGL    1              RCHRES   1     EXTNL  PREC
WDM      2 PREC     ENGL    1              RCHRES   3     EXTNL  PREC
WDM      1 EVAP     ENGL    0.5            RCHRES   1     EXTNL  POTEV
WDM      1 EVAP     ENGL    0.7            RCHRES   2     EXTNL  POTEV
WDM      1 EVAP     ENGL    0.5            RCHRES   3     EXTNL  POTEV
WDM      1 EVAP     ENGL    0.7            RCHRES   4     EXTNL  POTEV

END EXT SOURCES

EXT TARGETS
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name>   #        <Name> # #<-factor->strg <Name>   # <Name>    tem strg strg***
RCHRES   2 HYDR   RO     1 1        1      WDM   1004 FLOW     ENGL       REPL
RCHRES   2 HYDR   STAGE  1 1        1      WDM   1005 STAG     ENGL       REPL
RCHRES   1 HYDR   STAGE  1 1        1      WDM   1006 STAG     ENGL       REPL
RCHRES   1 HYDR   O      1 1        1      WDM   1007 FLOW     ENGL       REPL
COPY     2 OUTPUT MEAN   1 1     12.1      WDM    702 FLOW     ENGL       REPL
COPY   502 OUTPUT MEAN   1 1     12.1      WDM    802 FLOW     ENGL       REPL
RCHRES   4 HYDR   RO     1 1        1      WDM   1008 FLOW     ENGL       REPL
RCHRES   4 HYDR   STAGE  1 1        1      WDM   1009 STAG     ENGL       REPL
RCHRES   3 HYDR   STAGE  1 1        1      WDM   1010 STAG     ENGL       REPL
RCHRES   3 HYDR   O      1 1        1      WDM   1011 FLOW     ENGL       REPL
COPY     1 OUTPUT MEAN   1 1     12.1      WDM    701 FLOW     ENGL       REPL
COPY   501 OUTPUT MEAN   1 1     12.1      WDM    801 FLOW     ENGL       REPL
END EXT TARGETS

MASS-LINK
<Volume>   <-Grp> <-Member-><--Mult-->     <Target>       <-Grp> <-Member->***
<Name>             <Name> # #<-factor->     <Name>                <Name> # #***
  MASS-LINK        2
PERLND     PWATER SURO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    2

  MASS-LINK        3
PERLND     PWATER IFWO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    3

  MASS-LINK        5
IMPLND     IWATER SURO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    5

  MASS-LINK        8
RCHRES     OFLOW  OVOL   2                 RCHRES         INFLOW IVOL
  END MASS-LINK    8

  MASS-LINK       12
PERLND     PWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   12

  MASS-LINK       13
PERLND     PWATER IFWO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   13

  MASS-LINK       15
IMPLND     IWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   15

  MASS-LINK       16
RCHRES     ROFLOW                          COPY           INPUT  MEAN
  END MASS-LINK   16

  MASS-LINK       17
RCHRES     OFLOW  OVOL   1                 COPY           INPUT  MEAN
  END MASS-LINK   17


END MASS-LINK
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```
END RUN
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ERROR/WARNING ID:   238   1

The continuity error reported below is greater than 1 part in 1000 and is
therefore considered high.

Did you specify any "special actions"?  If so, they could account for it.

Relevant data are:
DATE/TIME: 1976/ 7/31 24: 0

RCHRES :    1

RELERR       STORS        STOR       MATIN      MATDIF
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Where:

RELERR is the relative error (ERROR/REFVAL).
ERROR  is (STOR-STORS) - MATDIF.
REFVAL is the reference value (STORS+MATIN).
STOR   is the storage of material in the processing unit (land-segment or
reach/reservior) at the end of the present interval.
STORS  is the storage of material in the pu at the start of the present
printout reporting period.
MATIN  is the total inflow of material to the pu during the present printout
reporting period.
MATDIF is the net inflow (inflow-outflow) of material to the pu during the
present printout reporting period.
```

```
ERROR/WARNING ID:   238   1

The continuity error reported below is greater than 1 part in 1000 and is
therefore considered high.

Did you specify any "special actions"?  If so, they could account for it.

Relevant data are:
DATE/TIME: 1976/ 7/31 24: 0

RCHRES :    3

RELERR       STORS        STOR       MATIN      MATDIF
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Where:

RELERR is the relative error (ERROR/REFVAL).
ERROR  is (STOR-STORS) - MATDIF.
REFVAL is the reference value (STORS+MATIN).
STOR   is the storage of material in the processing unit (land-segment or
reach/reservior) at the end of the present interval.
STORS  is the storage of material in the pu at the start of the present
printout reporting period.
MATIN  is the total inflow of material to the pu during the present printout
reporting period.
MATDIF is the net inflow (inflow-outflow) of material to the pu during the
present printout reporting period.
```

Disclaimer

Legal Notice

This program and accompanying documentation are provided 'as-is' without warranty of any kind. The entire risk regarding the performance and results of this program is assumed by End User. Clear Creek Solutions Inc. and the governmental licensee or sublicensees disclaim all warranties, either expressed or implied, including but not limited to implied warranties of program and accompanying documentation. In no event shall Clear Creek Solutions Inc. be liable for any damages whatsoever (including without limitation to damages for loss of business profits, loss of business information, business interruption, and the like) arising out of the use of, or inability to use this program even if Clear Creek Solutions Inc. or their authorized representatives have been advised of the possibility of such damages.

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ATTACHMENT 3
Structural BMP Maintenance Information

This is the cover sheet for Attachment 3.

Indicate which Items are Included behind this cover sheet:

Attachment Sequence	Contents	Checklist
Attachment 3a	Structural BMP Maintenance Thresholds and Actions (Required)	☒ Included See Structural BMP Maintenance Information Checklist on the back of this Attachment cover sheet.
Attachment 3b	Draft Maintenance Agreement (when applicable)	☒ Included ☐ Not Applicable

E.12 BF-1 Biofiltration

Location: 43rd Street and Logan Avenue, San Diego, California

MS4 Permit Category
Biofiltration

Manual Category
Biofiltration

Applicable Performance Standard
Pollutant Control
Flow Control

Primary Benefits
Treatment
Volume Reduction (Incidental)
Peak Flow Attenuation (Optional)

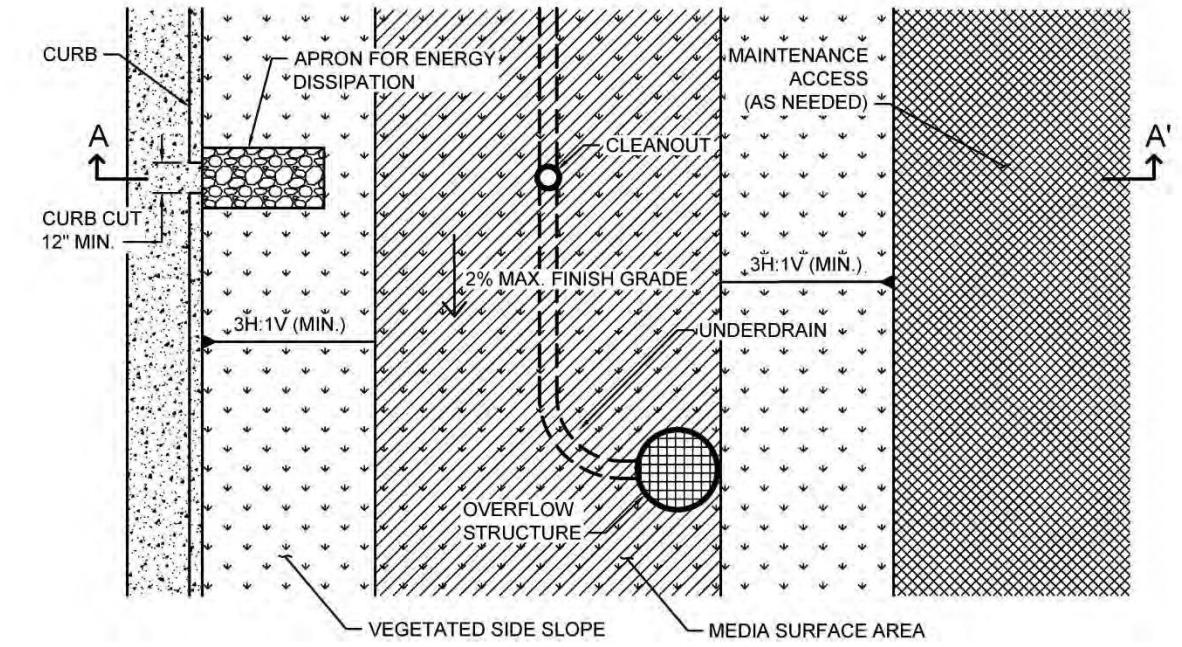
Description

Biofiltration (Bioretention with underdrain) facilities are vegetated surface water systems that filter water through vegetation, and soil or engineered media prior to discharge via underdrain or overflow to the downstream conveyance system. Bioretention with underdrain facilities are commonly incorporated into the site within parking lot landscaping, along roadsides, and in open spaces. Because these types of facilities have limited or no infiltration, they are typically designed to provide enough hydraulic head to move flows through the underdrain connection to the storm drain system. Treatment is achieved through filtration, sedimentation, sorption, biochemical processes and plant uptake.

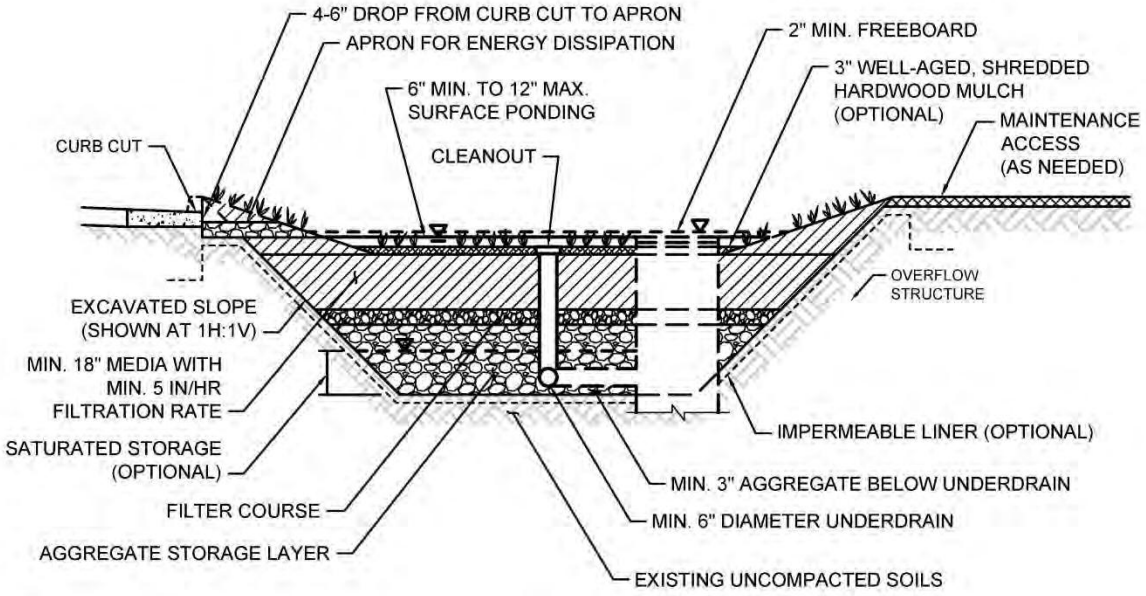
Typical bioretention with underdrain components include:

- Inflow distribution mechanisms (e.g, perimeter flow spreader or filter strips)
- Energy dissipation mechanism for concentrated inflows (e.g., splash blocks or riprap)
- Shallow surface ponding for captured flows
- Side slope and basin bottom vegetation selected based on expected climate and ponding depth
- Non-floating mulch layer (Optional)
- Media layer (planting mix or engineered media) capable of supporting vegetation growth
- Filter course layer consisting of aggregate to prevent the migration of fines into uncompacted native soils or the aggregate storage layer
- Aggregate storage layer with underdrain(s)

- Impermeable liner or uncompacted native soils at the bottom of the facility
- Overflow structure



PLAN
NOT TO SCALE



SECTION A-A'
NOT TO SCALE

Typical plan and Section view of a Biofiltration BMP

Design Adaptations for Project Goals

Biofiltration Treatment BMP for storm water pollutant control. The system is lined or un-lined to provide incidental infiltration, and an underdrain is provided at the bottom to carry away filtered runoff. This configuration is considered to provide biofiltration treatment via flow through the media layer. Storage provided above the underdrain within surface ponding, media, and aggregate storage is considered included in the biofiltration treatment volume. Saturated storage within the aggregate storage layer can be added to this design by raising the underdrain above the bottom of the aggregate storage layer or via an internal weir structure designed to maintain a specific water level elevation.

Integrated storm water flow control and pollutant control configuration. The system can be designed to provide flow rate and duration control by primarily providing increased surface ponding and/or having a deeper aggregate storage layer above the underdrain. This will allow for significant detention storage, which can be controlled via inclusion of an outlet structure at the downstream end of the underdrain.

Design Criteria and Considerations

Bioretention with underdrain must meet the following design criteria. Deviations from the below criteria may be approved at the discretion of the City Engineer if it is determined to be appropriate:

	Siting and Design	*Intent/Rationale*
☐	Placement observes geotechnical recommendations regarding potential hazards (e.g., slope stability, landslides, liquefaction zones) and setbacks (e.g., slopes, foundations, utilities).	Must not negatively impact existing site geotechnical concerns.
☐	An impermeable liner or other hydraulic restriction layer is included if site constraints indicate that infiltration or lateral flows should not be allowed.	Lining prevents storm water from impacting groundwater and/or sensitive environmental or geotechnical features. Incidental infiltration, when allowable, can aid in pollutant removal and groundwater recharge.

Siting and Design		*Intent/Rationale*
☐	Contributing tributary area shall be ≤ 5 acres (≤ 1 acre preferred).	Bigger BMPs may require additional design features for proper performance. Contributing tributary area greater than 5 acres may be allowed at the discretion of the City Engineer if the following conditions are met: 1) incorporate design features (e.g. flow spreaders) to minimizing short circuiting of flows in the BMP and 2) incorporate additional design features requested by the City Engineer for proper performance of the regional BMP.
☐	Finish grade of the facility is ≤ 2%.	Flatter surfaces reduce erosion and channelization within the facility.
Surface Ponding		
☐	Surface ponding is limited to a 24-hour drawdown time.	Surface ponding limited to 24 hour for plant health.
☐	Surface ponding depth is ≥ 6 and ≤ 12 inches.	Surface ponding capacity lowers subsurface storage requirements. Deep surface ponding raises safety concerns. Surface ponding depth greater than 12 inches (for additional pollutant control or surface outlet structures or flow-control orifices) may be allowed at the discretion of the City Engineer if the following conditions are met: 1) surface ponding depth drawdown time is less than 24 hours; and 2) safety issues and fencing requirements are considered (typically ponding greater than 18" will require a fence and/or flatter side slopes) and 3) potential for elevated clogging risk is considered.
☐	A minimum of 2 inches of freeboard is provided.	Freeboard provides room for head over overflow structures and minimizes risk of uncontrolled surface discharge.

Siting and Design	*Intent/Rationale*
☐ Side slopes are stabilized with vegetation and are = 3H:1V or shallower.	Gentler side slopes are safer, less prone to erosion, able to establish vegetation more quickly and easier to maintain.
Vegetation	
☐ Plantings are suitable for the climate and expected ponding depth. A plant list to aid in selection can be found in Appendix E.20.	Plants suited to the climate and ponding depth are more likely to survive.
☐ An irrigation system with a connection to water supply should be provided as needed.	Seasonal irrigation might be needed to keep plants healthy.
Mulch (Mandatory)	
☐ A minimum of 3 inches of well-aged, shredded hardwood mulch that has been stockpiled or stored for at least 12 months is provided.	Mulch will suppress weeds and maintain moisture for plant growth. Aging mulch kills pathogens and weed seeds and allows the beneficial microbes to multiply.
Media Layer	
☐ Media maintains a minimum filtration rate of 5 in/hr over lifetime of facility. An initial filtration rate of 8 to 12 in/hr is recommended to allow for clogging over time; the initial filtration rate should not exceed 12 inches per hour.	A filtration rate of at least 5 inches per hour allows soil to drain between events. The initial rate should be higher than long term target rate to account for clogging over time. However an excessively high initial rate can have a negative impact on treatment performance, therefore an upper limit is needed.

Siting and Design		*Intent/Rationale*
☐	Media is a minimum 18 inches deep, meeting either of these two media specifications: City of San Diego Low Impact Development Design Manual (page B-18) (July 2011, unless superseded by more recent edition) **or** County of San Diego Low Impact Development Handbook: Appendix G -Bioretention Soil Specification (June 2014, unless superseded by more recent edition). Alternatively, for proprietary designs and custom media mixes not meeting the media specifications contained in the City or County LID Manual, the media meets the pollutant treatment performance criteria in Section F.1.	A deep media layer provides additional filtration and supports plants with deeper roots. Standard specifications shall be followed. For non-standard or proprietary designs, compliance with F.1 ensures that adequate treatment performance will be provided.
☐	Media surface area is 3% of contributing area times adjusted runoff factor or greater.	Greater surface area to tributary area ratios: a) maximizes volume retention as required by the MS4 Permit and b) decrease loading rates per square foot and therefore increase longevity. Adjusted runoff factor is to account for site design BMPs implemented upstream of the BMP (such as rain barrels, impervious area dispersion, etc.). Refer to Appendix B.2 guidance. Use Worksheet B.5-1 Line 26 to estimate the minimum surface area required per this criteria.
☐	Where receiving waters are impaired or have a TMDL for nutrients, the system is designed with nutrient sensitive media design (see fact sheet BF-2).	Potential for pollutant export is partly a function of media composition; media design must minimize potential for export of nutrients, particularly where receiving waters are impaired for nutrients.
Filter Course Layer		
☐	A filter course is used to prevent migration of fines through layers of the facility. Filter fabric is not used.	Migration of media can cause clogging of the aggregate storage layer void spaces or subgrade. Filter fabric is more likely to clog.

Siting and Design		*Intent/Rationale*
☐	Filter course is washed and free of fines.	Washing aggregate will help eliminate fines that could clog the facility and impede infiltration.
☐	Filter course calculations assessing suitability for particle migration prevention have been completed.	Gradation relationship between layers can evaluate factors (e.g., bridging, permeability, and uniformity) to determine if particle sizing is appropriate or if an intermediate layer is needed.
Aggregate Storage Layer		
☐	Class 2 Permeable per Caltrans specification 68-1.025 is recommended for the storage layer. Washed, open-graded crushed rock may be used, however a 4-6 inch washed pea gravel filter course layer at the top of the crushed rock is required.	Washing aggregate will help eliminate fines that could clog the aggregate storage layer void spaces or subgrade.
☐	The depth of aggregate provided (12-inch typical) and storage layer configuration is adequate for providing conveyance for underdrain flows to the outlet structure.	Proper storage layer configuration and underdrain placement will minimize facility drawdown time.
Inflow, Underdrain, and Outflow Structures		
☐	Inflow, underdrains and outflow structures are accessible for inspection and maintenance.	Maintenance will prevent clogging and ensure proper operation of the flow control structures.
☐	Inflow velocities are limited to 3 ft/s or less or use energy dissipation methods. (e.g., riprap, level spreader) for concentrated inflows.	High inflow velocities can cause erosion, scour and/or channeling.
☐	Curb cut inlets are at least 12 inches wide, have a 4-6 inch reveal (drop) and an apron and energy dissipation as needed.	Inlets must not restrict flow and apron prevents blockage from vegetation as it grows in. Energy dissipation prevents erosion.
☐	Underdrain outlet elevation should be a minimum of 3 inches above the bottom elevation of the aggregate storage layer.	A minimal separation from subgrade or the liner lessens the risk of fines entering the underdrain and can improve hydraulic performance by allowing perforations to remain unblocked.
☐	Minimum underdrain diameter is 6 inches.	Smaller diameter underdrains are prone to clogging.

Siting and Design		*Intent/Rationale*
☐	Underdrains are made of slotted, PVC pipe conforming to ASTM D 3034 or equivalent or corrugated, HDPE pipe conforming to AASHTO 252M or equivalent.	Slotted underdrains provide greater intake capacity, clog resistant drainage, and reduced entrance velocity into the pipe, thereby reducing the chances of solids migration.
☐	An underdrain cleanout with a minimum 6-inch diameter and lockable cap is placed every 250 to 300 feet as required based on underdrain length.	Properly spaced cleanouts will facilitate underdrain maintenance.
☐	Overflow is safely conveyed to a downstream storm drain system or discharge point Size overflow structure to pass 100-year peak flow for on-line infiltration basins and water quality peak flow for off-line basins.	Planning for overflow lessens the risk of property damage due to flooding.

Conceptual Design and Sizing Approach for Storm Water Pollutant Control Only

To design bioretention with underdrain for storm water pollutant control only (no flow control required), the following steps should be taken:

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.
2. Calculate the DCV per Appendix B based on expected site design runoff for tributary areas.
3. Use the sizing worksheet presented in Appendix B.5 to size biofiltration BMPs.

Conceptual Design and Sizing Approach when Storm Water Flow Control is Applicable

Control of flow rates and/or durations will typically require significant surface ponding and/or aggregate storage volumes, and therefore the following steps should be taken prior to determination of storm water pollutant control design. Pre-development and allowable post-project flow rates and durations should be determined as discussed in Chapter 6 of the manual.

1. Verify that siting and design criteria have been met, including placement requirements, contributing tributary area, maximum side and finish grade slopes, and the recommended media surface area tributary ratio.

2. Iteratively determine the facility footprint area, surface ponding and/or aggregate storage layer depth required to provide detention storage to reduce flow rates and durations to allowable limits. Flow rates and durations can be controlled from detention storage by altering outlet structure orifice size(s) and/or water control levels. Multi-level orifices can be used within an outlet structure to control the full range of flows.
3. If bioretention with underdrain cannot fully provide the flow rate and duration control required by this manual, an upstream or downstream structure with significant storage volume such as an underground vault can be used to provide remaining controls.
4. After bioretention with underdrain has been designed to meet flow control requirements, calculations must be completed to verify if storm water pollutant control requirements to treat the DCV have been met.

E.13 Nutrient Sensitive Media Design

Some studies of bioretention with underdrains have observed export of nutrients, particularly inorganic nitrogen (nitrate and nitrite) and dissolved phosphorus. This has been observed to be a short-lived phenomenon in some studies or a long term issue in some studies. The composition of the soil media, including the chemistry of individual elements is believed to be an important factor in the potential for nutrient export. Organic amendments, often compost, have been identified as the most likely source of nutrient export. The quality and stability of organic amendments can vary widely.

The biofiltration media specifications contained in the County of San Diego Low Impact Development Handbook: Appendix G -Bioretention Soil Specification (June 2014, unless superseded by more recent edition) and the City of San Diego Low Impact Development Design Manual (page B-18) (July 2011, unless superseded by more recent edition) were developed with consideration of the potential for nutrient export. These specifications include criteria for individual component characteristics and quality in order to control the overall quality of the blended mixes. As of the publication of this manual, the June 2014 County of San Diego specifications provide more detail regarding mix design and quality control.

The City and County specifications noted above were developed for general purposes to meet permeability and treatment goals. In cases where the BMP discharges to receiving waters with nutrient impairments or nutrient TMDLs, the biofiltration media should be designed with the specific goal of minimizing the potential for export of nutrients from the media. Therefore, in addition to adhering to the City or County media specifications, the following guidelines should be followed:

1. Select plant palette to minimize plant nutrient needs

A landscape architect or agronomist should be consulted to select a plant palette that minimizes nutrient needs. Utilizing plants with low nutrient needs results in less need to enrich the biofiltration soil mix. If nutrient quantity is then tailored to plants with lower nutrient needs, these plants will generally have less competition from weeds, which typically need higher nutrient content. The following practices are recommended to minimize nutrient needs of the plant palette:

- **Utilize native, drought-tolerant plants and grasses where possible.** Native plants generally have a broader tolerance for nutrient content, and can be longer lived in leaner/lower nutrient soils.

- **Start plants from smaller starts or seed.** Younger plants are generally more tolerant of lower nutrient levels and tend to help develop soil structure as they grow. Given the lower cost of smaller plants, the project should be able to accept a plant mortality rate that is somewhat higher than starting from larger plants and providing high organic content.

2. Minimize excess nutrients in media mix

Once the low-nutrient plant palette is established (item 1), the landscape architect and/or agronomist should be consulted to assist in the design of a biofiltration media to balance the interests of plant establishment, water retention capacity (irrigation demand), and the potential for nutrient export. The following guidelines should be followed:

- **The mix should not exceed the nutrient needs of plants.** In conventional landscape design, the nutrient needs of plants are often exceeded intentionally in order to provide a factor of safety for plant survival. This practice must be avoided in biofiltration media as excess nutrients will increase the chance of export. The mix designer should keep in mind that nutrients can be added later (through mulching, tilling of amendments into the surface), but it is not possible to remove nutrients, once added.

- **The actual nutrient content and organic content of the selected organic amendment source should be determined when specifying mix proportions.** Nutrient content (i.e., C:N ratio; plant extractable nutrients) and organic content (i.e, % organic material) are relatively inexpensive to measure via standard agronomic methods and can provide important information about mix design. If mix design relies on approximate assumption about nutrient/organic content and this is not confirmed with testing (or the results of prior representative testing), it is possible that the mix could contain much more nutrient than intended.

- **Nutrients are better retained in soils with higher cation exchange capacity.** Cation exchange capacity can be increased through selection of organic material with naturally high cation exchange capacity, such as peat or coconut coir pith, and/or selection of inorganic material with high cation exchange capacity such as some sands or engineered minerals (e.g., low P-index sands, zeolites, rhyolites, etc). Including higher cation exchange capacity materials would tend to reduce the net export of nutrients. Natural silty materials also provide cation exchange capacity; however potential impacts to permeability need to be considered.

- **Focus on soil structure as well as nutrient content.** Soil structure is loosely defined as the ability of the soil to conduct and store water and nutrients as well as the degree of aeration of the soil. Soil structure can be more important than nutrient content in plant survival and biologic health of the system. If a good soil structure can be created with very low amounts of organic amendment, plants survivability should still be provided. While soil structure generally develops with time, biofiltration media can be designed to promote earlier development of soil structure. Soil structure is enhanced by the use of amendments with high humus content (as found in well-aged organic material). In addition, soil structure can be enhanced through the use of organic material with a distribution of particle sizes (i.e., a more heterogeneous mix).

- **Consider alternatives to compost.** Compost, by nature, is a material that is continually evolving and decaying. It can be challenging to determine whether tests previously done on a given compost stock are still representative. It can also be challenging to determine how the properties of the compost will change once placed in the media bed. More stable materials such as aged coco coir pith, peat, biochar, shredded bark, and/or other amendments should be considered.

With these considerations, it is anticipated that less than 10 percent organic amendment by volume could be used, while still balancing plant survivability and water retention. If compost is used, designers should strongly consider utilizing less than 10 percent by volume.

3. Design with partial retention and/or internal water storage

An internal water storage zone, as described in Fact Sheet PR-1 is believed to improve retention of nutrients. For lined systems, an internal water storage zone worked by providing a zone that fluctuates between aerobic and anaerobic conditions, resulting in nitrification/denitrification. In soils that will allow infiltration, a partial retention design (PR-1) allows significant volume reduction and can also promote nitrification/denitrification.

Acknowledgment: This fact sheet has been adapted from the Orange County Technical Guidance Document (May 2011). It was originally developed based on input from: Deborah Deets, City of Los Angeles Bureau of Sanitation, Drew Ready, Center for Watershed Health, Rick Fisher, ASLA, City of Los Angeles Bureau of Engineering, Dr. Garn Wallace, Wallace Laboratories, Glen Dake, GDML, and Jason Schmidt, Tree People. The guidance provided herein does not reflect the individual opinions of any individual listed above and should not be cited or otherwise attributed to those listed.

E.14 BF-3 Proprietary Biofiltration Systems

The purpose of this fact sheet is to help explain the potential role of proprietary BMPs in meeting biofiltration requirements, when full retention of the DCV is not feasible. The fact sheet does not describe design criteria like the other fact sheets in this appendix because this information varies by BMP product model.

Criteria for Use of a Proprietary BMP as a Biofiltration BMP

A proprietary BMP may be acceptable as a "biofiltration BMP" under the following conditions:

(1) The BMP meets the minimum design criteria listed in Appendix F, including the pollutant treatment performance standard in Appendix F.1;

(2) The BMP is designed and maintained in a manner consistent with its performance certifications (See explanation in Appendix F.2); and

(3) The BMP is acceptable at the discretion of the City Engineer. The City Engineer has no obligation to accept any proprietary biofiltration BMP.

Guidance for Sizing a Proprietary BMP as a Biofiltration BMP

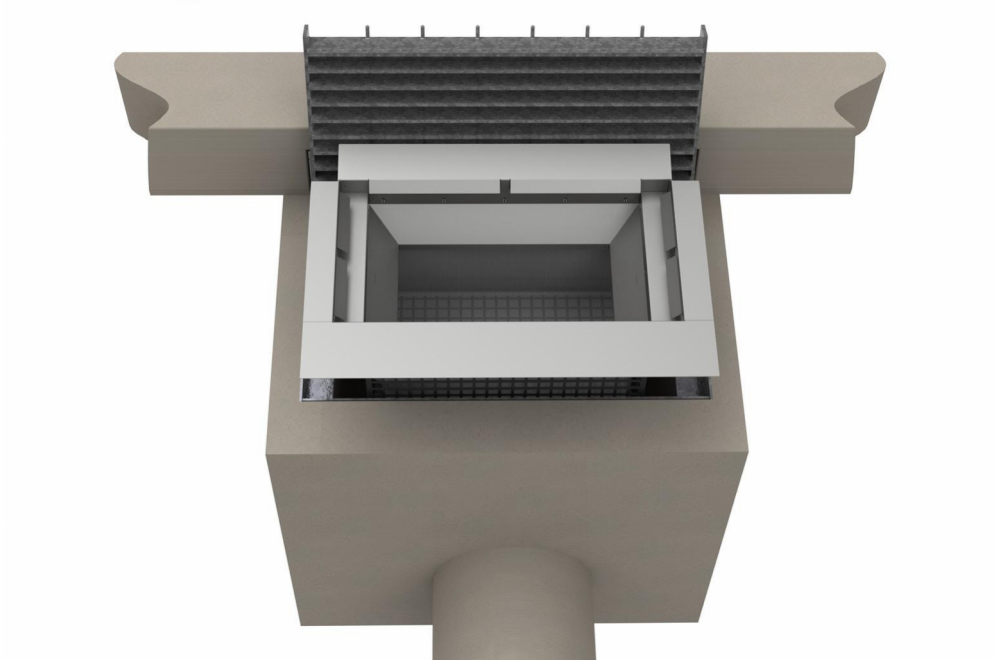
Proprietary biofiltration BMPs must meet the same sizing guidance as non-proprietary BMPs. Sizing is typically based on capturing and treating 1.50 times the DCV not reliably retained. Guidance for sizing biofiltration BMPs to comply with requirements of this manual is provided in Appendix F.2.

Oldcastle Precast®

FLOGARD +PLUS®

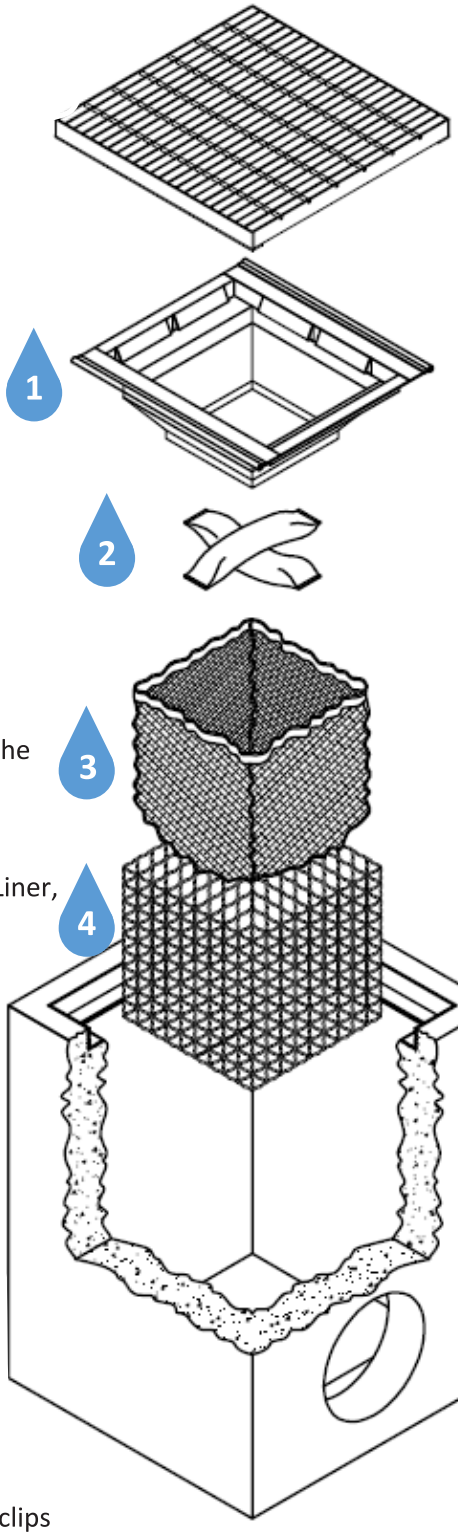
Replacement & Repair

Instruction Manual



Stormwater

FloGard Plus Replacement and Repair



Parts of the FloGard Plus Inlet Filter-

1. FloGard Stainless Steel Support Frame
2. Fossil Rock Absorbent Pouches
3. Liner
4. GeoGrid Support Basket & Cable

* Grate and Basin NOT INCLUDED

Disassembly:

1. Clear FloGard of any existing debris by hand or vacuum.
2. Unclip and remove the Fossil Rock pouches from the inside Liner.
3. Lift the FloGard from the catch basin.
4. Using a slotted screw driver, carefully pry open the metal tabs holding the GeoGrid and Cable in place. Separate the GeoGrid and Liner from the FloGard frame.
5. Unclip the Liner from the inside of the GeoGrid. If you are reusing the Liner, rinse thoroughly with water and inspect for tears. (If torn, mend with stainless steel wire or replace the Liner).
6. Rinse and inspect the GeoGrid Basket and the reinforcing cable. (If torn, mend with stainless steel wire or replace the GeoGrid).
7. Rinse and inspect the Stainless Steel FloGard frame.

Reassembly:

1. Fully expand the GeoGrid Basket and orient to the FloGard frame. Hook cable and GeoGrid to the FloGard frame metal tabs and close the tabs using slotted screwdriver. Move around the FloGard until all tabs are closed and GeoGrid is secured to the Frame.
2. Expand and orient the Liner, locating the clips at each corner and side. Push the Liner through the center of the FloGard frame and secure the clips to the GeoGrid Basket close to the top support cable. Push the Liner to expand inside of the basket.
3. Clip new Fossil Rock Rubberizer pouches to the inside of the Liner.
4. Lower FloGard back into the basin, replace grate.

FLOGARD +PLUS®

OUR MARKETS

BUILDING STRUCTURES

COMMUNICATIONS

WATER

ENERGY

TRANSPORTATION

Attachment 3b

RECORDING REQUESTED BY:

City of Santee, CA

AFTER RECORDING MAIL TO:

City Clerk
City of Santee
10601 Magnolia Avenue
Santee, CA 92071-1266

ABOVE SPACE FOR RECORDER'S USE

AGREEMENT TO PERFORM STORM WATER FACILITIES MAINTENANCE

NO RECORDATION FEE REQUIRED; THIS DOCUMENT IS EXEMPT FROM RECORDING FEES PURSUANT TO CALIFORNIA GOVERNMENT CODE SECTIONS 27383

DOCUMENTARY TRANSFER TAX DUE $ 0

Assessor's Parcel No._____ Project No._____

This AGREEMENT for the maintenance and repair of certain Storm Water Management Facilities is entered into between _____ (hereinafter referred to as "Owner") and the City of Santee (hereinafter referred to as "City") for the benefit of the City, the successors in interest to the City, and the public generally.

RECITALS

A. Owner is the owner of certain real property located in the City of Santee, California, more particularly described in Exhibit "A" hereto (hereinafter referred to as the "Property"), and has proposed that the Property be developed as _____(insert brief description of type of project, e.g., "a 100 unit residential subdivision")_____ in accordance with applications for Tentative Map No. ___

_____, Development Review No. _____, Conditional Use Permit No. _____, Grading Permit No. _____ which are on file with the City. This Agreement is required as a condition of approval for such development as set forth in Resolution Nos. _____ _____.

B. In accordance with the City of Santee's Storm Water Management and Discharge Control Ordinance, (Santee Municipal Code, Chapter 9.06), the City of Santee Subdivision Ordinance, the City of Santee Zoning Ordinance, the City of Santee Grading Ordinance and/or other ordinances or regulations of the City which regulate land development and urban runoff, Owner has prepared and submitted to the City, a site specific Storm Water Quality Management Plan (hereinafter the SWQMP), prepared by _____ and dated _____ as it currently exists or may hereafter be amended and which is on file with the City's Department of Development Services. The SWQMP proposes that storm water runoff from the Property be treated by the use of various storm water management facilities which are identified in the SWQMP as "Best Management Practices" or "BMP's":

The precise location and extent of the BMP's are described and shown in the SWQMP. The SWQMP specifies the frequency, manner, and standards by which the BMP's must be repaired and maintained in order to retain their effectiveness, as set forth in the Operation and Maintenance Section included in the SWMP.

C. The information contained in the SWQMP and the Owner's representation that the BMP's will be maintained pursuant to the SWQMP have been relied upon by City in approving Owner's development applications. It is the purpose of this Agreement to assure that the BMP's are maintained in perpetuity, by creating obligations which are enforceable against the Owner and the Owner's successors in interest in the Property. It is intended that these obligations be enforceable notwithstanding other provisions related to BMP maintenance which are provided by law.

AGREEMENT

NOW, THEREFORE, for consideration of City's approval of the above development applications and the mutual covenants set forth herein, IT IS HEREBY AGREED AS FOLLOWS:

1. **Maintenance of Storm Water Management Facilities.** Owner agrees, for itself and its successors in interest, to all or any portion of the Property, to comply in all respects with the requirements of the Storm Water Management and Discharge Control Ordinance and the SWQMP with regard to the maintenance

of all BMP's as designated in the SWQMP, and in particular agrees to perform, at its sole cost, expense and liability, the following "Maintenance Activities": all inspections, cleaning, repairs, servicing, maintenance and other actions specified in the SWQMP, with respect to all of the BMP's listed at Recital "B" above, at the times and in the manner specified in the SWQMP as it currently exists or may be amended or modified as provided herein. Owner shall initiate, perform and complete all Maintenance Activities at the required time, without request or demand from City or any other agency. Owner further agrees that "Maintenance Activities" shall include replacement or modification of the BMP's in the event that the BMP fails to provide the necessary water quality treatment, it is found that the BMP was not installed correctly, or in the event that the BMP is not functioning as intended. Replacement shall be with an identical type, size and model of BMP, except that:

(a) The City Engineer may authorize substitution of an alternative BMP if he or she determines that it will function as good or better than the failed BMP. The City requires that proposed modifications be submitted for review and approval prior to making any changes in the field, and that the Storm Water Quality Management Plan be revised or amended and resubmitted for approval; and

(b) Pursuant to Section 9.06.200 of the Storm Water Management and Discharge Control Ordinance, any discharge that would result in or contribute to a violation of the City's NPDES Permit and any amendment, revision or re-issuance thereof, either separately considered or when combined with other discharges, is prohibited. Liability for any such discharge shall be the responsibility of the owner(s) causing or responsible for the discharge. Owner agrees that if the BMP, in the judgment of the Director of Development Services, is inappropriate or inadequate to the circumstances and has or may result in a violation of water quality standards, the BMP must be modified or replaced with an upgraded BMP to prevent any actual or potential violation.

2. **Annual Inspection and Certification by Owner**

Owner agrees to provide documentation of BMP maintenance as required for the City to ensure that all storm water BMPs are properly maintained and are functioning as intended, in compliance with the site specific Storm Water Quality Management Plan. Owner shall provide annual certification that BMPs have been properly maintained for the time period of S*eptember 1 to August 31, each year. This documentation is due to the City* prior to September 15th of each year. Structural BMPs for which annual certification is required includes, but is not limited to: drainage inserts; detention basins; hydrodynamic separators; swales; filters;

bioretention facilities; and Low Impact Development Integrated Management Practices (LID IMPs).

3. **Notices.** Owner further agrees that it shall, prior to transferring ownership of any land on which any of the above BMP's are located, and also prior to transferring ownership of any such BMP, provide clear written notice of the above maintenance obligations associated with that BMP to the transferee. The Storm Water Quality Management Plan and all associated records must also be provided to all subsequent owners upon transfer of property title.

4. **City's Right to Perform Maintenance.** It is agreed that City shall have the right, but not the obligation, to elect to perform any or all of the Maintenance Activities if, in the City's sole judgment, Owner has failed to perform the same. It is recognized and understood that the City makes no representation that it intends to or will perform any of the Maintenance Activities, and any election by the City to perform any of the Maintenance Activities, shall in no way relieve Owner of its continuing maintenance obligations under this agreement. If the City elects to perform any of the Maintenance Activities, it is understood that the City shall be deemed to be acting as the agent of the Owner and said work shall be without warranty or representation by City as to safety or effectiveness, shall be deemed to be accepted by Owner "as is", and shall be covered by Owner's indemnity provisions below.

If the City performs any of the Maintenance Activities, after City has served written notice to the Owner to perform the same, and the Owner has failed to do so within a reasonable time stated in the City's written notice, then Owner shall pay all of the City's costs incurred in performing the Maintenance Activities within sixty days of receipt of an invoice for those costs.

5. **Right of Entry and Inspection by City.** Owner hereby grants to City a perpetual right of entry over, under and across Owner's Property, for purposes of accessing the BMP's and performing inspection of the BMP's or any of the Maintenance Activities related to maintenance of the BMP's. City shall have the right, at any time and without prior notice to Owner, to enter upon any part of said area as may be necessary or convenient for such purposes. Owner shall at all times maintain the Property so as to make the City's access clear and unobstructed. City is required to perform periodic inspection of Structural BMPs. Owner agrees to pay reasonable fees levied by the City on Owners of BMPs for the costs of managing the BMP inspection and maintenance tracking program.

6. **Administration of Agreement for City.** City hereby designates its Department of Development Services with responsibility and authority to administer this Agreement on behalf of City. Any notice or communication related to the

implementation of this Agreement desired or required to be delivered to City shall be addressed to:

Director of Development Services
City of Santee
10601 Magnolia Avenue
Santee, CA 92071

The City Engineer is also granted authority to enter into appropriate amendments to this Agreement on behalf of City, provided that the amendment is consistent with the purposes of this Agreement as set forth above.

7. **Defense and Indemnity.** City shall not be liable for, and Owner and its successors in interest shall defend and indemnify City and the employees and agents of City, against any and all claims, demands, liability, judgments, awards, fines, mechanic's liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as "CLAIMS"), related to this Agreement and arising either directly or indirectly from any act, error, omission or negligence of Owner, Owner's successors, or their contractors, licensees, agents, servants or employees, including, without limitation, claims caused by the concurrent negligent act, error or omission, whether active or passive of City. Owner shall have no obligation, however, to defend or indemnify City from a claim if it is determined by a court of competent jurisdiction that such claim was caused by the sole negligence or willful misconduct of City. Nothing in this Agreement, in the City's approval of the subdivision or other applications or plans and specifications, or inspection of the work, is intended to acknowledge responsibility for any such matter, and City shall have absolutely no responsibility or liability therefore unless otherwise provided by applicable law.

8. **Common Interest Developments.** If the Property is developed as a "Common Interest Development" as defined in Civil Code section 4100 which will include membership in or ownership of an "Association" as defined in Civil Code section 4080, then the following provisions of this Paragraph 7 shall apply during such time as the Property is encumbered by a "Declaration" as defined in Civil Code section 4135, and the Common Area, as "Common Area" is defined in Civil Code section 4095, of the Property is managed and controlled by the Association:

(a) The Association, through its Board of Directors, shall assume full responsibility to perform the MAINTENANCE ACTIVITIES pursuant to this Agreement, and shall undertake all actions and efforts necessary to accomplish the MAINTENANCE ACTIVITIES, including but not limited to, levying regular or special assessments against each member of the

Association sufficient to provide funding for the MAINTENANCE ACTIVITIES, conducting a vote of the membership related to such assessments if required by law. In the event insufficient votes have been obtained to authorize an assessment, the Association shall seek authority from a court of competent jurisdiction for a reduced percentage of affirmative votes necessary to authorize the assessment, re-conducting the vote of the membership in order to obtain the votes necessary to authorize an assessment, and the Association shall take all action authorized by the Declaration or California law to collect delinquent assessments, including but not limited to, the recording and foreclosure of assessment liens.

(b) No provision of the Declaration, nor any other governing document of the Association or grant of authority to its members, shall grant or recognize a right of any member or other person to alter, improve, maintain or repair any of the Property in any manner which would impair the functioning of the BMP's to manage drainage or storm water runoff as described in the SWQMP. In the event of any conflict between the terms of this Agreement and the Declaration or other Association governing documents, the provisions of this Agreement shall prevail.

9. **Agreement Binds Successors and Runs With the Property.** It is understood and agreed that the terms, covenants and conditions herein contained shall constitute covenants running with the land and shall be binding upon the heirs, executors, administrators, successors and assigns of Owner and City, shall be deemed to be for the benefit of all persons owning any interest in the Property (including the interest of City or its successors in the easement granted herein). It is the intent of the parties hereto that this Agreement shall be recorded and shall be binding upon all persons purchasing or otherwise acquiring all or any lot, unit or other portion of the Property, who shall be deemed to have consented to and become bound by all the provisions hereof.

10. **Owner's Continuing Responsibilities Where Work Commenced or Permit Obtained.** Notwithstanding any other provision of this Agreement, no transfer or conveyance of the Property or any portion thereof shall in any way relieve Owner of or otherwise affect Owner's responsibilities for installation or maintenance of BMP's which may have arisen under the ordinances or regulations of City referred to in Recital B above, or other federal, state or local laws, on account of Owner having obtained a permit which creates such obligations or having commenced grading, construction or other land disturbance work.

11. **Amendment and Release.** The terms of this Agreement may be modified only by a written amendment approved and signed by the Director of Development Services and by the Owner or Owner's successor(s) in interest. This

Agreement may be terminated and Owner and the Property released from the covenants set forth herein, by a Release which City may execute if it determines that another mechanism will assure the ongoing maintenance of the BMP's or that it is no longer necessary to assure such maintenance.

12. **Agreement is Intended to Supplement Not Supercede.** This Agreement is intended to supplement and not supercede the requirements of the Chapter 9.06 of the Santee Municipal Code – Storm Water Management and Discharge Control. The requirements listed herein are in addition to the requirements set forth in the Code including Civil Actions and Enforcement Powers established under the Code.

13. **Governing Law and Severability.** This Agreement shall be governed by the laws of the State of California. Venue in any action related to this Agreement shall be in the Superior Court of the State of California, County of San Diego, East County Division. In the event that any of the provisions of this Agreement are held to be unenforceable or invalid by any court of competent jurisdiction, the validity, and enforceability of the remaining provisions shall not be affected thereby.

IN WITNESS WHEREOF, the parties have executed this Agreement on the _____ day of _____, 201__.

CITY OF SANTEE:

By: _____
Melanie Kush
Director of Development Services

OWNERS: _____

By:_____ By:_____
(sign here) (sign here)

_____ _____
(print name here) (print name here)

_____ _____
(title of signatory) (title of signatory)

(All OWNERS must sign)

(Proper notary acknowledgment of execution by OWNER must be attached.)

(President or vice-president **and** secretary or assistant secretary must sign for corporations. If only one officer signs, the corporation must attach a resolution certified by the secretary or assistant secretary under corporate seal empowering that officer to bind the corporation.)

CITY OF SANTEE
CERTIFICATE OF ACCEPTANCE
FOR
AGREEMENT TO PERFORM STORM WATER FACILITIES MAINTENANCE

This AGREEMENT by and between the City of Santee, a municipal corporation, and _____ is accepted for recording by the undersigned officers on behalf of the City of Santee pursuant to authority granted by Resolution No. 148-89 of the Santee City Council adopted on August 9, 1989.

Date:_____ By:_____
Melanie Kush
Director of Development Services

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }
County of San Diego }

On _____
(date), before me, Patsy Bell, Santee City Clerk (name and title of the officer), personally appeared _____

(Name(s) of Signer(s)), who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

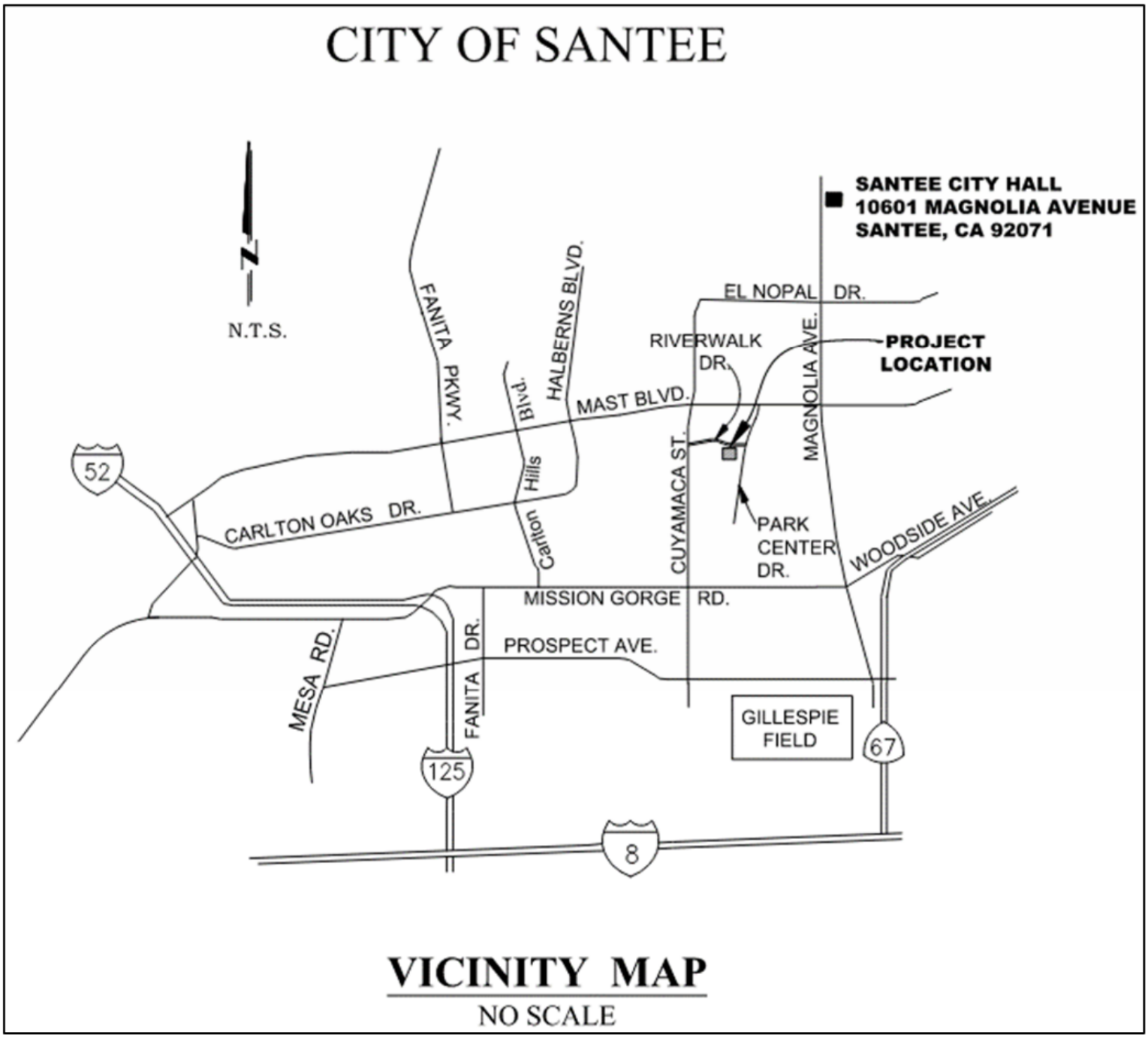
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

_____ [Seal]

Patsy Bell, City Clerk

EXHIBIT 'A'


CITY OF SANTEE
N
N.T.S.
SANTEE CITY HALL
10601 MAGNOLIA AVENUE
SANTEE, CA 92071
PROJECT LOCATION
EL NOPAL DR.
RIVERWALK DR.
MAGNOLIA AVE.
FANITA PKWY.
HALBERNS BLVD.
Blvd.
MAST BLVD.
52
CARLTON OAKS DR.
Hills
Carlton
CUYAMACA ST.
PARK CENTER DR.
WOODSIDE AVE.
MISSION GORGE RD.
MESA RD.
DR.
PROSPECT AVE.
FANITA
GILLESPIE FIELD
125
67
8
VICINITY MAP
NO SCALE

ATTACHMENT 4
Copy of Plan Sheets Showing Permanent Storm Water BMPs

This is the cover sheet for Attachment 4.

Use this checklist to ensure the required information has been included on the plans:

The plans must identify:

☒ Structural BMP(s) with ID numbers matching Form I-6 Summary of PDP Structural BMPs

☒ The grading and drainage design shown on the plans must be consistent with the delineation of DMAs shown on the DMA exhibit

☒ Details and specifications for construction of structural BMP(s)

☒ Signage indicating the location and boundary of structural BMP(s) as required by the [City Engineer]

☒ How to access the structural BMP(s) to inspect and perform maintenance

☒ Features that are provided to facilitate inspection (e.g., observation ports, cleanouts, silt posts, or other features that allow the inspector to view necessary components of the structural BMP and compare to maintenance thresholds)

☒ Manufacturer and part number for proprietary parts of structural BMP(s) when applicable

☒ Maintenance thresholds specific to the structural BMP(s), with a location-specific frame of reference (e.g., level of accumulated materials that triggers removal of the materials, to be identified based on viewing marks on silt posts or measured with a survey rod with respect to a fixed benchmark within the BMP)

☒ Recommended equipment to perform maintenance

☐ When applicable, necessary special training or certification requirements for inspection and maintenance personnel such as confined space entry or hazardous waste management

☒ Include landscaping plan sheets showing vegetation requirements for vegetated structural BMP(s)

☒ All BMPs must be fully dimensioned on the plans

☐ When proprietary BMPs are used, site-specific cross section with outflow, inflow, and model number shall be provided. Photocopies of general brochures are not acceptable.

I

SANTEE COMMUNITY CENTER (CIP 2018-31)

CITY OF SANTEE

GENERAL NOTES

1. AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE DEPARTMENT OF DEVELOPMENT SERVICES PRIOR TO THE START OF ANY CONSTRUCTION WITHIN THE LIMITS OF THE PUBLIC RIGHT-OF-WAY INCLUDING BUT NOT LIMITED TO UTILITY CONNECTIONS OR GRADING.
2. ACCEPTANCE OF THESE IMPROVEMENTS AS SHOWN DOES NOT CONSTITUTE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
3. ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, TESTED AND CONNECTED PRIOR TO CONSTRUCTION OF BERMS, CURBS, CROSS-GUTTERS, SIDEWALKS, RETAINING WALLS OR FINAL PAVING.
4. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORD DATA AND FIELD SURVEYS. TO THE BEST OF OUR KNOWLEDGE, EXISTING FACILITIES ARE SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITIES SHOWN HEREON AND TO MAKE A REASONABLE AND DILIGENT SEARCH TO DETERMINE ANY OTHER WHICH ARE NOT OF RECORD OR NOT SHOWN ON THESE PLANS AND TO PROTECT THE SAME. ANY FACILITIES SO LOCATED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND INCLUDED ON THE AS-BUILT DRAWINGS FOR THIS PROJECT.
5. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING EXPLORATORY EXCAVATIONS AND LOCATING EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO ALLOW FOR REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF CHANGES IN LINE OR GRADE DUE TO THE ACTUAL LOCATION OF THE EXISTING FACILITIES.
6. THE CONTRACTOR SHALL NOTIFY THE SAN DIEGO GAS AND ELECTRIC COMPANY PRIOR TO STARTING WORK NEAR S.D.G & E. FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.

   NOTICE: FOR LOCATION OF ELECTRICAL CABLES AND GAS PIPING AND APPURTENANCES CONTACT THE SAN DIEGO GAS AND ELECTRIC COMPANY. TELEPHONE: 811.
7. THE CONTRACTOR SHALL NOTIFY THE SBC PACIFIC BELL TELEPHONE COMPANY PRIOR TO STARTING WORK NEAR PACIFIC BELL FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.

   NOTICE: FOR LOCATION OF CABLES AND APPURTENANCES CONTACT AT&T.
8. THE CONTRACTOR SHALL NOTIFY PADRE DAM MUNICIPAL WATER DISTRICT 48 HRS. PRIOR TO STARTING WORK NEAR PADRE DAM FACILITIES AND SHALL COORDINATE HIS WORK WITH DISTRICT REPRESENTATIVES.

   NOTICE: FOR LOCATION OF WATER AND SEWER FACILITIES AND APPURTENANCES CONTACT PADRE DAM. TELEPHONE: 811.
9. THE CONTRACTOR SHALL NOTIFY COX CABLE TV PRIOR TO STARTING WORK NEAR COX CABLE FACILITIES AND SHALL COORDINATE HIS WORK WITH COMPANY REPRESENTATIVES.

   NOTICE: FOR LOCATION OF CABLES AND APPURTENANCES CONTACT COX CABLE. TELEPHONE: 811.
10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS, AND COORDINATE RELOCATION'S, IF NEEDED.
11. POWER SOURCES AND RUNS SERVING STREET LIGHTS SHALL BE SHOWN ON THE "AS-BUILT" IMPROVEMENT DRAWINGS. ALL SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT-OF-WAY, OR WITHIN EASEMENTS DEDICATED TO THE CITY OF SANTEE.
12. CITY OF SANTEE - INSPECTION REQUIREMENTS:
    A. CONTRACTOR SHALL INFORM THE CITY PROJECT ENGINEER 48 HRS. IN ADVANCE OF COMMENCING WORK. PHONE (619) 258-4100 EXT 168.
    B. THE CONTRACTOR SHALL GIVE A MINIMUM OF 24 HRS. NOTICE ON REQUESTS FOR INSPECTION. CONTRACTOR SHALL SCHEDULE ALL INSPECTIONS THROUGH SANTEEPORTAL.ORG.
    C. ANY WORK PERFORMED WITHOUT THE BENEFIT OF INSPECTION IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
13. THE CONTRACTOR SHALL RELOCATE STREET SIGNS WHEN CONDITIONS SO DICTATE. CONTRACTOR SHALL PROTECT AND ASSUME RESPONSIBILITY FOR ALL OTHER TRAFFIC CONTROL DEVICES. CONTRACTOR SHALL REPLACE TRAFFIC STRIPING, STREET MARKINGS, AND CURB MARKINGS REMOVED OR DAMAGED BY HIS WORK.
14. SIDEWALK JOINT LOCATIONS SHALL BE INSTALLED IN ACCORDANCE WITH REGIONAL STANDARD DRAWING NO. G-9. CURB OR CURB AND GUTTER JOINT LOCATIONS SHALL INCLUDE EXPANSION JOINTS AT CURB RETURNS, ADJACENT TO WALLS AND STRUCTURES AND AT 45 FOOT INTERVALS. WEAKENED PLANE JOINTS SHALL BE PLACED EVERY 15' AND GROOVED JOINTS PLACED EVERY 5'. ALL CONCRETE JOINTS SHALL CONFORM TO REGIONAL STANDARD DRAWING NO. G-10. SIDEWALKS SHALL BE REMOVED TO THE NEAREST JOINT. REFER TO PROJECT SPECIFICATIONS SECTION 32 13 13 FOR FURTHER INFORMATION.
15. SIDEWALKS AND BIKEPATHS ARE DESIGNED TO HAVE CLEAR UNOBSTRUCTED ACCESS. THESE FACILITIES SHALL BE KEPT CLEAR OF STREET LIGHTS, FIRE HYDRANTS, METER BOXES, TRANSFORMERS, ELECTRICAL PULL BOXES, BLOWOFFS, AIR VENTS OR OTHER SIMILAR OBSTRUCTIONS AT ALL TIMES AND SHALL MAINTAIN 4' MINIMUM CLEARANCE.
16. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ADEQUACY OF DESIGN AND CONSTRUCTION IN ACCORDANCE WITH THE SPECIFIED GENERAL STANDARDS OF CONSTRUCTION LISTED HEREON, AND TO PROTECT THE WORK AT ALL TIMES DURING THE COURSE OF CONSTRUCTION. FAILED OR DAMAGED WORK SUCH AS CRACKED SIDEWALKS, CURB AND GUTTER, CROSS GUTTERS, DRIVEWAY APRONS AND SO FORTH, SHALL BE REPLACED TO THE NEAREST JOINT OR SCORE LINE IN EACH DIRECTION PRIOR TO PLACEMENT OF THE FINAL PAVEMENT COURSE.
17. THE CONTRACTOR SHALL ENFORCE SAFETY MEASURES AND REGULATIONS INCLUDING THE DESIGN, CONSTRUCTION AND MAINTENANCE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL, DISPOSAL, AND COORDINATION OF ALL PRIVATE FACILITIES, FENCES, WALLS, DEBRIS, LANDSCAPING AND IRRIGATION WITHIN THE RIGHT OF WAY WHICH REQUIRES REMOVAL FOR CONSTRUCTION PURPOSES. EACH INDIVIDUAL OWNER EFFECTED SHALL BE NOTIFIED 5 DAYS IN ADVANCE PRIOR TO DEMOLITION OR REMOVAL OF PRIVATE PROPERTY WITHIN THE RIGHT OF WAY.
19. NO WORK OUTSIDE THE RIGHT OF WAY SHALL BE CONDUCTED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE CITY.
20. SOME UTILITIES MAY BE RELOCATED BY THE UTILITY COMPANIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THAT ALL UTILITIES ARE RELOCATED PRIOR TO START OF WORK BY CONTACTING THE CITY.
21. CONTRACTOR SHALL BE PROPERLY LICENSED BY THE TIME THE CONTRACT IS AWARDED, PURSUANT TO THE PROVISIONS OF PUBLIC CONTRACT CODE 20103.5.

DIGALERT

811

Call 2 Full Working Days In Advance

STORMWATER POLLUTION PREVENTION NOTES:

1. APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED AT ALL TIMES.
2. THE TOPS OF ALL SLOPES SHALL HAVE A DIKE OR TRENCH TO PREVENT WATER FROM FLOWING OVER THE CRESTS OF SLOPES.
3. CLEAN GRAVEL ONLY WILL BE USED IN GRAVEL BAGS.
4. CATCH BASINS, DESILTING BASINS, GRAVEL BAGS, CHECK DAMS AND STORM DRAIN SYSTEMS SHALL BE INSTALLED TO THE SATISFACTION OF THE CITY ENGINEER. THESE FACILITIES SHALL BE CLEANED ON A REGULAR BASIS, AND KEPT FREE OF SOIL ACCUMULATION.
5. GRAVEL BAG CHECK DAMS SHALL BE PLACED IN UNPAVED AREAS WITH GRADIENTS IN EXCESS OF 2%, IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE DEPARTMENT OF DEVELOPMENT SERVICES, AND AT OR NEAR EVERY POINT WHERE CONCENTRATED FLOWS LEAVE THE DEVELOPMENT.
6. GRAVEL BAGS SHALL BE PLACED ON THE UPSTREAM SIDE OF ALL DRAINAGE INLETS TO MINIMIZE SILT BUILDUP IN THE INLETS AND PIPES.
7. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY ERODED SLOPES.
8. ROADWAYS AND ENTRANCES TO AND FROM THE SITE SHALL BE SWEPT ON A REGULAR BASIS TO KEEP THEM FREE OF SOIL ACCUMULATION.
9. CONTRACTOR SHALL HAVE WATER TRUCKS AND EQUIPMENT ON-SITE TO MINIMIZE AIRBORNE DUST CREATED FROM GRADING AND HAULING OPERATIONS OR EXCESSIVE WIND CONDITIONS. WATERING SHALL BE PERFORMED ON A CONTINUOUS BASIS ANY TIME THESE CONDITIONS ARE PRESENT AND AT ALL OTHER TIMES AS DIRECTED BY THE CITY ENGINEER. ADDITIONAL DUST CONTROL MEASURES SHALL BE IMPLEMENTED AS NEEDED.
10. STOCKPILES SHALL BE COVERED AT THE END OF EACH WORKING DAY AND PRIOR TO PREDICTED RAIN EVENTS. ASPHALT SHALL BE STORED ON A LAYER OF PLASTIC SHEETING, OR EQUIVALENT.
11. ALL PORTABLE TOILETS SHALL HAVE A SECONDARY CONTAINMENT AND NOT BE LOCATED NEAR A STORM DRAIN (I.E. CATCH BASIN OR STREET).
12. INACTIVE SLOPES SHALL BE PROTECTED AND STABILIZED WITHIN 10 CALENDAR DAYS OF LAST BEING WORKED, OR ON THE DIRECTION OF THE CITY. ACTIVE SLOPES SHALL BE STABILIZED DURING RAIN.
13. EROSION CONTROL ON SLOPES SHALL BE MITIGATED BY INSTALLING LANDSCAPING AS PER APPROVED LANDSCAPE PLANS AS REQUIRED BY THE DEVELOPMENT REVIEW CONDITIONS..
14. VEHICLE MAINTENANCE, REPAIR AND STORAGE BMPS WILL BE IMPLEMENTED INCLUDING: USE OF DRIP PANS OR EQUIVALENT UNDER VEHICLE STORED OVERNIGHT; DAILY INSPECTION FOR LEAKS AND SPILLS; PROMPT REMOVAL OF SPILLS; AVAILABILITY OF OIL-ABSORBENT SPILL REMOVAL MATERIALS ON SITE.
15. HEAVY EQUIPMENT WILL NOT BE STORED ON THE PUBLIC RIGHT-OF-WAY.
16. TRASH SHALL BE PLACED IN DUMPSTERS. OFFCUTS FROM FRAMING WILL BE STORED APPROPRIATLY AND NOT ALLOWED TO ACCUMULATE IN STOCKPILES AROUND THE SITE.
17. TRASH DUMPSTERS WILL HAVE LIDS. THE LIDS WILL REMAIN CLOSED AND THE DUMPSTERS WILL NOT BE OVERFILLED. ADDITIONAL TRASH PICK UPS SHALL BE MADE AS NECESSARY.
18. LIQUID MATERIALS WILL BE STORED IN CLOSED CONTAINERS IN SECONDARY CONTAINMENT AND UNDER COVER. SOLID MATERIALS WILL BE STORED ON PALLETS AND BE COVERED DURING RAIN.
19. A MATERIALS WASHOUT WILL BE AVAILABLE ONSITE WHENEVER LIQUID MATERIALS ARE USED. THE WASHOUT WILL FULLY CONTAIN THOSE MATERIALS AND THE SURROUNDING AREA SHALL BE KEPT FREE OF SPILLS.
20. DISCHARGE OF POTABLE WATER (SUCH AS FROM POWERWASHING OR FILLING WATER TRUCKS) WILL BE PREVENTED.
21. 125 PERCENT OF THE MATERIALS REQUIRED TO MAINTAIN STORM WATER BMPS SHALL BE PRESENT ON THE SITE AT ALL TIMES.
22. STORMWATER CONTROL MEASURES SHOWN HEREON ARE BEST MANAGEMENT PRACTICES FOR THIS SITE BASED ON THE ANTICIPATED PROGRESS OF THE WORK. ADDITIONAL MEASURES MAY BE REQUIRED AT ANY TIME AT THE DISCRETION OF THE CITY ENGINEER AS THE WORK PROGRESSES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ADEQUATE PROTECTION IS IN PLACE AT ALL TIMES TO PREVENT ANY DISCHARGE OF POLLUTANTS, INCLUDING SEDIMENT, FROM THE EXPOSED SITE AREAS. BMPS WILL BE MAINTAINED UNTIL REMOVAL.
23. SILT FENCING SHALL BE INSTALLED AROUND THE PERIMETER OF ALL GRADING WORK AND THE PERIMETER OF THE IMPROVEMENT AREA.

ENGINEER OF WORK'S DESIGN CERTIFICATION

I, SARAH CURRAN, HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I, UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SANTEE IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME AS THE ENGINEER OF WORK OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

I FURTHER UNDERSTAND THAT UPON APPROVAL OF THESE PLANS BY THE CITY ENGINEER, THE PLANS BECOME THE PROPERTY OF THE CITY OF SANTEE IN ACCORDANCE WITH THE CITY PUBLIC WORKS STANDARDS. AS SUCH, I HEREBY RELINQUISH RIGHT OF OWNERSHIP TO THE CITY TO USE THESE PLANS AS THEY MAY DEEM NECESSARY

SIGNED: _____ DATE: 04/04/2025

R.C.E. # C69620, MY REGISTRATION EXPIRES ON 06/30/26.

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN No. C69620 CIVIL STATE OF CALIFORNIA

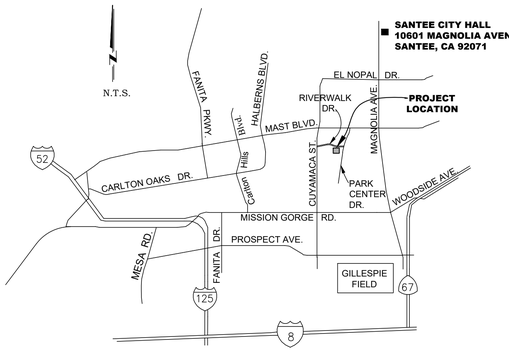
NONRESIDENTIAL FLOOD STATEMENT

I, SARAH CURRAN, A REGISTERED CIVIL ENGINEER HEREBY CERTIFY THAT:

1. THE PAD ELEVATIONS SHOWN ON THIS AS-BUILT GRADING PLAN HAVE BEEN VERIFIED BY ME AND THAT SAID ELEVATIONS ARE AT A MINIMUM OF ONE FOOT ABOVE THE BASE FLOOD ELEVATION AS ESTABLISHED BY THE BASE FLOOD DISCHARGE RATES SET FORTH IN THE FLOOD DAMAGE PREVENTION ORDINANCE - CHAPTER 11.36 OF THE SANTEE MUNICIPAL CODE, OR
2. THE STRUCTURES ON THIS PROPERTY HAVE BEEN FLOOD PROOFED TO OR ABOVE THE BASE FLOOD ELEVATION AS ESTABLISHED BY THE BASE FLOOD DISCHARGE RATES SET FORTH IN THE FLOOD DAMAGE PREVENTION ORDINANCE - CHAPTER 15.52 OF THE SANTEE MUNICIPAL CODE.

SIGNED: _____ DATE: 04/04/2025

R.C.E. # C69620, MY REGISTRATION EXPIRES ON 06/30/26.



VICINITY MAP

NO SCALE

STANDARD SPECIFICATIONS:

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION ("GREENBOOK") 2021 EDITION.
2. CITY OF SANTEE DEVELOPMENT SERVICES STANDARDS, LATEST EDITION.
3. CALIFORNIA DEPARTMENT OF TRANSPORTATION, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" 2014 REVISION 6 EDITION.
4. STANDARD SPECIFICATIONS OF THE PADRE DAM MUNICIPAL WATER DISTRICT, WATER AGENCY STANDARDS, W.A.S.

STANDARD DRAWINGS:

1. CITY OF SANTEE STANDARD DRAWINGS.
2. SAN DIEGO REGIONAL STANDARD DRAWINGS (R.S.D.) AS RECOMMENDED BY THE REGIONAL STANDARDS COMMITTEE, MAINTAINED AND PUBLISHED BY THE SAN DIEGO COUNTY DEPARTMENT OF PUBLIC WORKS, 2018 EDITION.
3. STANDARD DRAWINGS OF THE PADRE DAM MUNICIPAL WATER DISTRICT, WATER AGENCY STANDARDS, W.A.S.
4. STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION 2021 EDITION.

LEGAL DESCRIPTION:

SITE ADDRESS: 10129 RIVERWALK DRIVE
SANTEE, CA 92071

APN: 381-051-14-00

ALL THOSE PORTIONS OF BLOCKS 2 AND 3 OF THE SUBDIVISION OF LOTS "H" AND "O", PER MAP NO. 817, RECORDED APRIL 2, 1896.

SHEET INDEX:

SHEET NO.	DESCRIPTION
C1.0	TITLE SHEET AND GENERAL NOTES
C1.1	EXISTING CONDITIONS PLAN
C1.2	DEMOLITION PLAN
C1.3	GRADING AND PAVING PLAN
C1.4	PARKING LOT GRADING AND PAVING PLAN
C1.5	HORIZONTAL CONTROL PLAN
C1.6	PARKING LOT HORIZONTAL CONTROL PLAN
C1.7	HORIZONTAL CONTROL PLAN TABLES
C1.8	TRAFFIC SIGNAGE AND STRIPING PLAN
C1.9	CIVIL UTILITY PLAN
C1.10	CIVIL DETAILS
C1.11	CIVIL DETAILS
C1.12	EROSION CONTROL PLAN

BENCHMARK:

THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10, WITH PUNCH ONLY. LOCATED ON A 5.00' OFFSET SOUTH ALONG THE CENTERLINE OF COTTONWOOD AVENUE FROM THE CENTERLINE INTERSECTION OF PALM GLEN DRIVE AND COTTONWOOD AVENUE AS DERIVED FROM MAP NO. 7349.

ELEVATION: 355.96 FEET FROM SAID RECORD OF SURVEY 20986. FOR THE PURPOSE OF THIS SURVEY IT IS 356.05 FEET.

DATUM: NAVD88

CITY RESUBMITTAL
03/05/2025

ABBREVIATIONS:

AC	ASPHALT CONCRETE
C&G	CURB AND GUTTER
CB	CATCH BASIN
CBM	CONSTRUCTION BENCH MARK
EX	EXISTING
FG	FINISH GRADE
FL	FLOW LINE
LT	LEFT
MH	MANHOLE
OHE	OVER HEAD ELECTRIC
PCC	PORTLAND CEMENT CONCRETE
PP	POWER POLE
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
RT	RIGHT
ROW	RIGHT OF WAY
RW	RECYCLED WATER
SDRSD	SAN DIEGO COUNTY REGIONAL STANDARD DRAWINGS
SDMH	STORM DRAIN MANHOLE
SL	STREET LIGHT
TC	TOP OF CURB
TF	TOP OF FOOTING
X-ING	CROSSING

LEGEND

ITEM (RSD)	SYMBOL
RIGHT-OF-WAY	ROW
EXIST TELEPHONE	T
EXIST CABLE TV	CATV
EXIST ELECTRIC	E
EXIST SANITARY SEWER	MH SS
EXIST WATER	W
EXIST GAS	G
EXIST RECYCLED WATER	RW
EXIST CHAIN LINK FENCE	X X X
EXIST SIDEWALK	#6
EXIST CATCH BASIN	CB
EXIST POWER POLE	PP
EXIST CURB AND GUTTER	
EXIST STORM DRAIN	SD SD
EXIST SEWER SERVICE	S
EXIST WATER SERVICE	W
EXIST BLOWOFF	B
EXIST RECYCLED WATER SERVICE	
CURB AND GUTTER (G-2)	
LODGE POLE FENCE (2 RAIL)	
CHAIN LINK FENCE (M-6)	X X X
REMOVABLE BOLLARD	
DG SURFACE	
6" CONCRETE MOW CURB	
CONSTRUCTION NOTE	1

* ALL DIMENSIONS IN FEET UNLESS OTHERWISE SHOWN

SEWER & WATER AGENCY

APPROVED BY: PADRE DAM Municipal Water District

DIRECTOR OF ENGINEERING & PLANNING — DATE

RCE NO. — EXP

PDMWD PROJECT/FILE NAME — PDMWD JOB NO. — SERVICE AREA

VALID FOR ONE YEAR FROM THE DATE OF SIGNATURE.
SIGNATURE OF THESE PLANS IS NOT A COMMITMENT TO SERVE. ACTUAL FIELD CONDITIONS MAY REQUIRE CHANGES TO THE WATER, SEWER, AND/OR RECYCLED WATER PLANS. THE DEVELOPER AND/OR ITS ENGINEER OF WORK SHALL BE RESPONSIBLE FOR MAKING ANY NECESSARY CHANGES AT NO ADDITIONAL COST TO THE DISTRICT.

CITY OF SANTEE

FIRE DEPARTMENT
DEPUTY FIRE CHIEF — DATE

COMMUNITY SERVICES DEPARTMENT
PUBLIC SERVICES MANAGER — DATE

ENGINEERING DIVISION
CITY ENGINEER — DATE
RCE NO: 60112 EXPIRES: 06/30/2026

PLANNING DIVISION
PROJECT PLANNER — DATE

TRAFFIC SECTION
PRINCIPAL TRAFFIC ENGINEER — DATE

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
TITLE SHEET AND GENERAL NOTES

CITY W.O. NO.: CIP 2018-31

DRAWING NO.: C1.0

SHEET X OF X

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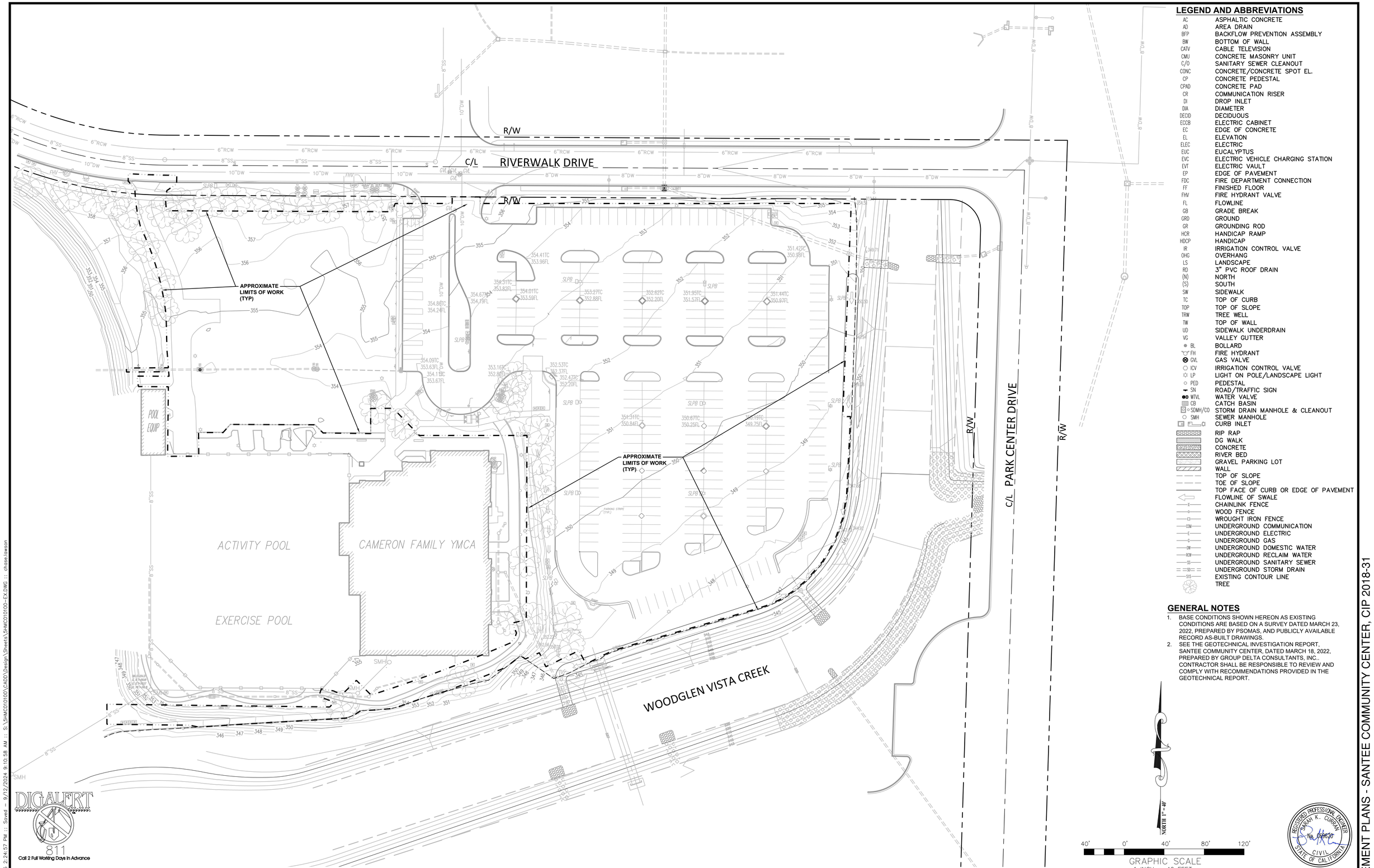
IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31



LEGEND AND ABBREVIATIONS

AC	ASPHALTIC CONCRETE
AD	AREA DRAIN
BFP	BACKFLOW PREVENTION ASSEMBLY
BW	BOTTOM OF WALL
CATV	CABLE TELEVISION
CMU	CONCRETE MASONRY UNIT
C/O	SANITARY SEWER CLEANOUT
CONC	CONCRETE/CONCRETE SPOT EL.
CP	CONCRETE PEDESTAL
CPAD	CONCRETE PAD
CR	COMMUNICATION RISER
DI	DROP INLET
DIA	DIAMETER
DECID	DECIDUOUS
ECCB	ELECTRIC CABINET
EC	EDGE OF CONCRETE
EL	ELEVATION
ELEC	ELECTRIC
EUC	EUCALYPTUS
EVC	ELECTRIC VEHICLE CHARGING STATION
EVT	ELECTRIC VAULT
EP	EDGE OF PAVEMENT
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISHED FLOOR
FHV	FIRE HYDRANT VALVE
FL	FLOWLINE
GB	GRADE BREAK
GRD	GROUND
GR	GROUNDING ROD
HCR	HANDICAP RAMP
HDCP	HANDICAP
IR	IRRIGATION CONTROL VALVE
OHG	OVERHANG
LS	LANDSCAPE
RD	3" PVC ROOF DRAIN
(N)	NORTH
(S)	SOUTH
SW	SIDEWALK
TC	TOP OF CURB
TOP	TOP OF SLOPE
TRW	TREE WELL
TW	TOP OF WALL
UD	SIDEWALK UNDERDRAIN
VG	VALLEY GUTTER
BL	BOLLARD
FH	FIRE HYDRANT
GVL	GAS VALVE
ICV	IRRIGATION CONTROL VALVE
LP	LIGHT ON POLE/LANDSCAPE LIGHT
PED	PEDESTAL
SN	ROAD/TRAFFIC SIGN
WTVL	WATER VALVE
CB	CATCH BASIN
SDMH/CO	STORM DRAIN MANHOLE & CLEANOUT
SMH	SEWER MANHOLE
CI	CURB INLET
	RIP RAP
	DG WALK
	CONCRETE
	RIVER BED
	GRAVEL PARKING LOT
	WALL
	TOP OF SLOPE
	TOE OF SLOPE
	TOP FACE OF CURB OR EDGE OF PAVEMENT
	FLOWLINE OF SWALE
X	CHAINLINK FENCE
O	WOOD FENCE
	WROUGHT IRON FENCE
COM	UNDERGROUND COMMUNICATION
E	UNDERGROUND ELECTRIC
G	UNDERGROUND GAS
DW	UNDERGROUND DOMESTIC WATER
RCW	UNDERGROUND RECLAIM WATER
SS	UNDERGROUND SANITARY SEWER
SD	UNDERGROUND STORM DRAIN
355	EXISTING CONTOUR LINE
	TREE

GENERAL NOTES

1. BASE CONDITIONS SHOWN HEREON AS EXISTING CONDITIONS ARE BASED ON A SURVEY DATED MARCH 23, 2022, PREPARED BY PSOMAS, AND PUBLICLY AVAILABLE RECORD AS-BUILT DRAWINGS.
2. SEE THE GEOTECHNICAL INVESTIGATION REPORT, SANTEE COMMUNITY CENTER, DATED MARCH 18, 2022, PREPARED BY GROUP DELTA CONSULTANTS, INC.. CONTRACTOR SHALL BE RESPONSIBLE TO REVIEW AND COMPLY WITH RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT.

NORTH 1" = 40'

40' 0' 40' 80' 120'

GRAPHIC SCALE
1 INCH = 40 FEET

DIGALERT 811
Call 2 Full Working Days In Advance

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
No. C69620
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY. ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET. DATUM: NAVD88

SCALE	
HORIZ:	AS SHOW
VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____
PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:

SANTEE COMMUNITY CENTER
EXISTING CONDITIONS PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.1

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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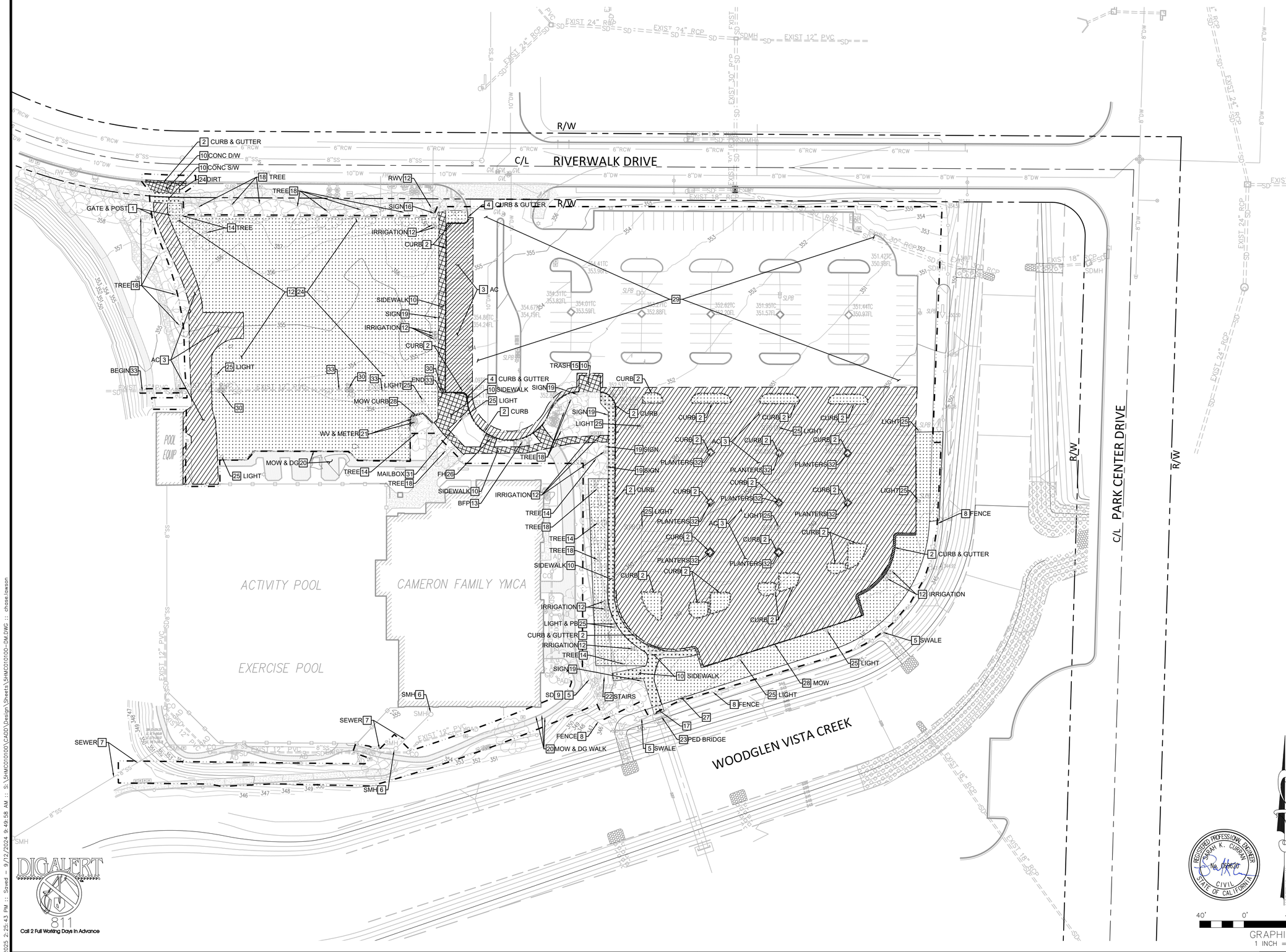

LEGEND

- REMOVE EXIST ASPHALT PAVEMENT AND AGGREGATE BASE
- REMOVE EXIST CONCRETE PAVEMENT AND PERIMETER CURB/GUTTER/SIDEWALK (WHERE OCCURS)
- REMOVE EXIST LANDSCAPING AND IRRIGATION
- REMOVE EXIST CONCRETE MOW CURB

- SAWCUT LINE
- REMOVE EXIST FENCE/GATE
- EXISTING NATURAL SWALE
- APPROXIMATE LIMITS OF WORK

DEMOLITION NOTES

1. REMOVE AND DISPOSE GATE AND GATE POSTS.
2. REMOVE AND DISPOSE CONCRETE CURB OR CURB & GUTTER.
3. REMOVE AND DISPOSE AC PAVEMENT AND BASE, FULL DEPTH, WHEEL STOPS, AND ADA PARKING SIGNAGE.
4. PROTECT CURB & GUTTER IN PLACE.
5. PROTECT DRAINAGE STRUCTURE IN PLACE.
6. PROTECT SEWER MANHOLE IN PLACE.
7. PROTECT SEWER LINE IN PLACE.
8. PROTECT FENCE IN PLACE.
9. PROTECT STORM DRAIN PIPE IN PLACE.
10. REMOVE CONCRETE PAVEMENT & SIDEWALK.
11. NOT USED.
12. REFER TO LANDSCAPE SHEETS L2.10 AND L2.11 FOR IRRIGATION DEMOLITION AND DISPOSE.
13. PROTECT IN PLACE BACK FLOW PREVENTER AND FIRE PIPE CONNECTION.
14. REMOVE AND DISPOSE TREE AND TRUNKS.
15. REMOVE AND DISPOSE OF TRASH ENCLOSURE AND FOOTINGS.
16. PROTECT SIGN.
17. PROTECT REMOVABLE BOLLARD IN PLACE.
18. PROTECT TREE.
19. REMOVE & DISPOSE SIGN.
20. PROTECT MOW CURB AND DG WALK.
21. EXISTING YMCA WATER METERS (2) TO BE REMOVED BY PADRE DAM MUNICIPAL WATER DISTRICT AFTER RELOCATION INSTALL (SEE UTILITIES PLAN). BACKFLOW PREVENTERS (2) TO BE REMOVED BY CONTRACTOR AFTER RELOCATION INSTALL (SEE UTILITIES PLAN).
22. REMOVE AND DISPOSE WOOD STAIRS.
23. PROTECT IN PLACE PEDESTRIAN BRIDGE.
24. REMOVE GRASS FIELD AND AGGREGATE BASE.
25. REMOVE LIGHT STANDARD POLE FOOTING AND PULL BOX.
26. PROTECT FIRE HYDRANT IN PLACE.
27. PROTECT UNDERGROUND ELECTRICAL PULL BOX.
28. REMOVE AND DISPOSE MOW CURB.
29. PROTECT EXIST CURBS, STRIPES, ASPHALT CONCRETE, PLANTERS, IRRIGATION, LANDSCAPING, ELECTRICAL AND LIGHTING IN PLACE.
30. REMOVE AND DISPOSE EXISTING CATCH BASIN.
31. PROTECT IN PLACE EXISTING MAIL BOX.
32. REMOVE AND DISPOSE EXISTING TREES AND ROOT BARRIERS IN ISLAND PLANTERS.
33. REMOVE AND DISPOSE PVC STORM DRAIN.

GENERAL DEMOLITION NOTES

1. PRIOR TO ANY DEMOLITION OR EXCAVATION FOR THIS CONTRACT CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS ONLY AND MAY NOT REFLECT ALL EXISTING UTILITIES.
2. LOCATION OF ALL EXISTING UTILITIES SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF WORK. ACCURATE VERIFICATION AS TO SIZE, LOCATION AND DEPTH OF EXISTING UNDERGROUND SERVICES SHALL BE THE CONTRACTORS RESPONSIBILITY.
3. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
4. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED UTILITY AGENCIES PRIOR TO STARTING HIS WORK WITH UTILITY REPRESENTATIVES. FOR LOCATION OF UNDERGROUND UTILITIES AND APPURTENANCES, CONTACT "UNDERGROUND SERVICE ALERT": AT 811
5. EXIST ABANDONED UNDERGROUND UTILITIES TO BE REMOVED AND DISPOSED.
6. WITHIN DEMOLITION AREA, REMOVE ALL TREES, ROOTS,SHRUBS, STRUCTURES, FENCING, STRUCTURAL FOUNDATIONS, PAVED PATHS AND STAIRS, CONCRETE PAVEMENT, ASPHALT PAVEMENT, CURBS, GUTTERS, GROUND COVER, AND ANY EXISTING IMPROVEMENTS NOT SPECIFICALLY NOTED TO REMAIN. REMOVE ALL MISCELLANEOUS TRASH FROM SITE.
7. UNLESS OTHERWISE NOTED, ALL EXISTING UNDERGROUND UTILITIES AND ASSOCIATED STRUCTURES SHALL BE PROTECTED IN PLACE.
8. REFERENCE MECHANICAL, ELECTRICAL AND TELECOMMUNICATION PLANS FOR DEMOLITION AND INSTALLATION OF M, E, & T UTILITIES AND STRUCTURES.
9. REFERENCE LANDSCAPE PLANS FOR TREE PROTECTION AND REMOVALS.
10. REFERENCE LANDSCAPE PLANS FOR DEMOLITION AND INSTALLATION OF IRRIGATION LINES.
11. SHOULD ANY EXISTING UTILITY NOT SHOWN HEREON BE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER PRIOR TO DEMOLITION OF SUCH UTILITY.
12. CONTRACTOR SHALL USE A 3RD PARTY UNDERGROUND LOCATION SERVICE TO DETERMINE THE LOCATION OF ALL ELECTRICAL, WATER, SEWER, AND IRRIGATION LINES.

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN No. C69620 CIVIL STATE OF CALIFORNIA

NORTH 1" = 40'

40' 0' 40' 80' 120'

GRAPHIC SCALE
1 INCH = 40 FEET

DIGALERT 811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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DATUM: NAVD88

SCALE
HORIZ: AS SHOW
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DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
DEMOLITION PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.2**
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

SEE TRAFFIC SIGNAGE AND STRIPING PLANS FOR IMPROVEMENTS WITHIN ADJACENT PARKING LOT

MATCHLINE SEE SHEET C1.4

CAMERON FAMILY YMCA

COMMUNITY CENTER
FF 350.50
PAD 350.08

PROPOSED LIGHT POLE (TYP)

SPILLWAY CONNECTION TO EXISTING SITE DISCHARGE POINT (346.0) FG

WOODGLEN VISTA CREEK

LEGEND

- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- CATCH BASIN
- CLEANOUT
- X% SLOPE ARROW
- 500 NEW CONTOUR
- x 505.50 NEW SPOT ELEVATION
- 500 EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE RIDGE LINE
- GB GRADE BREAK
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- LIMITS OF WORK
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

GRADING NOTES

1. CONSTRUCT CONCRETE CURB PER SDRSD G-01 6" CURB FACE UNLESS NOTED OTHERWISE.
2. CONSTRUCT CONCRETE CURB AND GUTTER PER SDRSD G-02 6" CURB FACE,TYPE H.
3. CONSTRUCT TYPE A CURB RAMP PER SDRSD G-27.
4. CONSTRUCT CROSS GUTTER PER SDRSD G-12 WIDTH PER PLANS.
5. CONSTRUCT CONCRETE SIDEWALK PER DETAIL 4 SHEET C1.10.
6. CONSTRUCT CONCRETE VEHICULAR PAVEMENT PER DETAIL 3 SHEET C1.10.
7. CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL 2 SHEET C1.10.
8. CONSTRUCT FENCE PER LANDSCAPE PLAN.
9. CONSTRUCT CURB CUT WITH RIP RAP APRON PER DETAIL 2 SHEET C1.11.
10. NOT USED
11. CONSTRUCT CURBSIDE GRATED CATCH BASIN PER SPPWC STD 303-4 (SINGLE GRATE, V=2.77, t=8") WITH CASE F LOCAL DEPRESSION AT CATCH BASIN PER SPPWC STD 313-4.
12. CONSTRUCT TRASH ENCLOSURE PER ARCHITECT PLAN.
13. CONSTRUCT SEAT WALL PER LANDSCAPE PLAN.
14. CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 SHEET C1.11.
15. EXISTING PEDESTRIAN BRIDGE TO REMAIN.
16. CONSTRUCT CONCRETE DRIVEWAY (ALLEY TYPE) PER SDRSD G-14E.
17. CONSTRUCT 8" CURB WITH SIDEWALK UNDERDRAIN PER SDRSD D-27.
18. CONSTRUCT 12" CURB CUT PER DETAIL 2 ON SHEET 1 SHEET C1.11.
19. CONSTRUCT TYPE A 6" ROLLED CURB ALONG CONCRETE PAVEMENT ACCESS PER SDRSD G-4A WITH 5'-LONG CURB TRANSITION ON EACH END PER SDRSD G-04B.
20. INSTALL DEMOUNTABLE POST PER SDRSD M-16.
21. CONSTRUCT TYPE D-3 CURB RAMP PER SRDSD G-31.
22. CONSTRUCT TYPE D-2 CURB PAMP PER SDRSD G-31.
23. CONSTRUCT COBBLE ENERGY DISSIPATION PER DETAIL 4 ON SHEET C1.11.
24. CONSTRUCT SIDEWALK UNDERDRAIN PER DETAIL 5 ON SHEET C1.11.
25. ELECTRICAL EQUIPMENT, SEE MEP PLANS FOR EQUIPMENT AND PAD CONSTRUCTION DETAILS.

SPECIAL GEOTECHNICAL NOTES

1. GROUND IMPROVEMENT SPECIALTY CONTRACTOR SHALL SUBMIT PLANS AND DESIGN CALCULATIONS PRIOR TO CONSTRUCTION FOR APPROVAL. THE PLANS SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER OR RECORD FOR CONCURRENCE THAT THEY MEET THE DESIGN INTENT NOTED IN THE PROJECT GEOTECHNICAL REPORT. THE GROUND IMPROVEMENT DESIGN PACKAGE SHALL INCLUDE QUALITY CONTROL PROCEDURES TO CONFIRM THE DESIGN BEARING CAPACITY AND LIQUEFACTION POTENTIAL MEET THE DESIGN INTENT. THE QUALITY CONTROL PROCEDURES SHALL INCLUDE AN INDICATOR MODULUS TEST (MT) PROGRAM AND A GROUND IMPROVEMENT TEST SECTION TO INDICATE PRE- AND POST- IMPROVEMENT BORINGS AND/OR CPTS ALONG WITH LIQUEFACTION ANALYSIS TO INDICATE THAT THE POST-GROUND IMPROVEMENT MEETS THE DESIGN INTENT.
2. ALL GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS CONTAINED IN THE PROJECT SPECIFIC GEOTECHNICAL REPORT, PROJECT NUMBER IR786, BY GROUP DELTA, DATED JUNE 15, 2022.

GENERAL GRADING NOTES

1. CONTRACTOR SHALL PROTECT IN PLACE OR ADJUST WHERE NECESSARY ALL EXISTING UTILITY LINES, WHETHER SHOWN OR NOT SHOWN ON THESE PLANS, THAT LAY WITHIN THE LIMITS OF THE NEW CONSTRUCTION, AND ARE NOT SPECIFICALLY MARKED TO BE REMOVED OR ABANDONED.
2. FINAL MANHOLE, VALVE BOXES AND VAULTS RIM ELEVATIONS SHALL BE ADJUSTED TO MEET FINAL GRADES.
3. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES THAT ARE IN CONFLICT WITH THE PROJECT PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER OF RECORD OF ANY FOUND CONFLICTS. CONTRACTOR SHALL USE A 3RD PARTY UNDERGROUND UTILITY SERVICE TO DETERMINE THE LOCATION OF ALL ELECTRICAL, WATER, SEWER, AND IRRIGATION LINES.
4. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. JOIN ELEVATIONS SHOW APPROXIMATE. NEW CONCRETE JOINS SHALL MATCH EXISTING ELEVATIONS.
6. BUILDING PAD PREPARATION REFERENCE SHEET S0.01 FOR SOIL (GROUND) IMPROVEMENTS AND SHEET S3.02 FOR ADDITIONAL REQUIRED EXCAVATION AND CERTIFIED FILL BENEATH BUILDING.

NORTH 1"= 20'

GRAPHIC SCALE
20' 0' 20' 40' 60'
1 INCH = 20 FEET

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
No. C69620
CIVIL
STATE OF CALIFORNIA

DIGALERT 811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20886, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY. ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET. DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

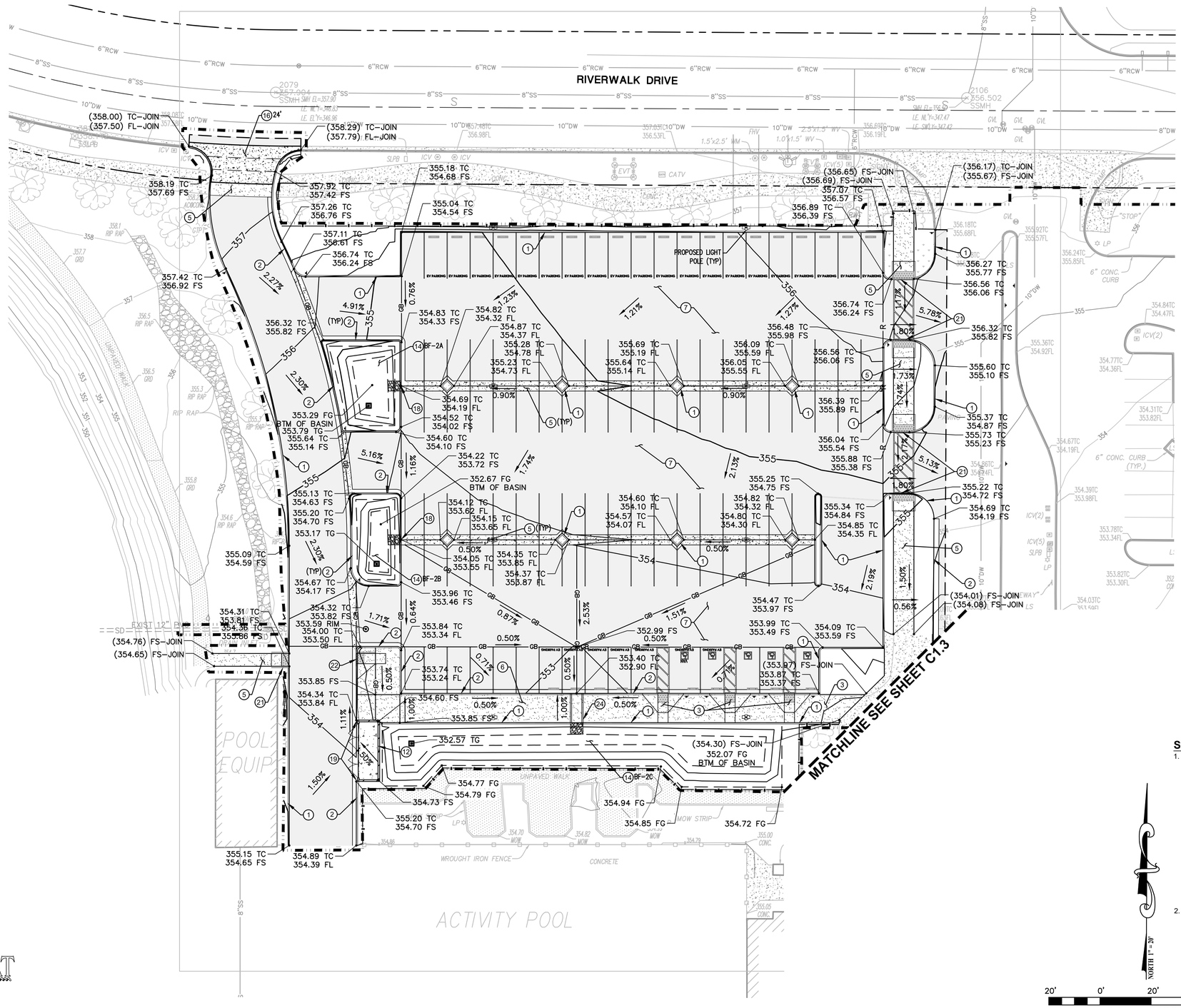
IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
GRADING AND PAVING PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.3
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted – 3/4/2025 2:27:00 PM :: Saved – 2/24/2025 4:54:02 PM :: S:\SHMC01010\CADD\Design\Sheets\SHMC010100-GP.DWG :: chase.lawson



LEGEND

- CURB RAMP
- CONCRETE CROSS GUTTER/RIBBON GUTTER
- CATCH BASIN
- CLEANOUT
- X% — SLOPE ARROW
- 500 — NEW CONTOUR
- x 505.50 — NEW SPOT ELEVATION
- 500 — EXISTING CONTOUR (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 000.00 — EXISTING ELEVATION (PER FIELD SURVEY, ACCURACY OF ± 0.1')
- 500.0 — EXISTING SPOT ELEVATION (PER AERIAL SURVEY, ACCURACY OF ± 0.5')
- 740 — NEW CONTOUR LINE
- DAYLIGHT LINE
- SAWCUT LINE
- RIDGE — RIDGE LINE
- GB — GRADE BREAK
- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- LIMITS OF WORK
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

GRADING NOTES

1. CONSTRUCT CONCRETE CURB PER SDRSD G-01 6" CURB FACE UNLESS NOTED OTHERWISE.
2. CONSTRUCT CONCRETE CURB AND GUTTER PER SDRSD G-02 6" CURB FACE,TYPE H.
3. CONSTRUCT TYPE A CURB RAMP PER SDRSD G-27.
4. CONSTRUCT CROSS GUTTER PER SDRSD G-12 WIDTH PER PLANS.
5. CONSTRUCT CONCRETE SIDEWALK PER DETAIL 4 SHEET C1.10.
6. CONSTRUCT CONCRETE VEHICULAR PAVEMENT PER DETAIL 3 SHEET C1.10.
7. CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL 2 SHEET C1.10.
8. CONSTRUCT FENCE PER LANDSCAPE PLAN.
9. CONSTRUCT CURB CUT WITH RIP RAP APRON PER DETAIL 2 SHEET C1.11.
10. NOT USED
11. CONSTRUCT CURBSIDE GRATED CATCH BASIN PER SPPWC STD 303-4 (SINGLE GRATE, V=2.77', t=8") WITH CASE F LOCAL DEPRESSION AT CATCH BASIN PER SPPWC STD 313-4.
12. CONSTRUCT TRASH ENCLOSURE PER ARCHITECT PLAN.
13. CONSTRUCT SEAT WALL PER LANDSCAPE PLAN.
14. CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 SHEET C1.11.
15. EXISTING PEDESTRIAN BRIDGE TO REMAIN.
16. CONSTRUCT CONCRETE DRIVEWAY (ALLEY TYPE) PER SDRSD G-14E.
17. CONSTRUCT 8" CURB WITH SIDEWALK UNDERDRAIN PER SDRSD D-27.
18. CONSTRUCT 12" CURB CUT PER DETAIL 2 ON SHEET 1 SHEET C1.11.
19. CONSTRUCT TYPE A 6" ROLLED CURB ALONG CONCRETE PAVEMENT ACCESS PER SDRSD G-4A WITH 5'-LONG CURB TRANSITION ON EACH END PER SDRSD G-04B.
20. INSTALL DEMOUNTABLE POST PER SDRSD M-16.
21. CONSTRUCT TYPE D-3 CURB RAMP PER SDRSD G-31.
22. CONSTRUCT TYPE D-2 CURB PAMP PER SDRSD G-31.
23. CONSTRUCT COBBLE ENERGY DISSIPATION PER DETAIL 4 ON SHEET C1.11.
24. CONSTRUCT SIDEWALK UNDERDRAIN PER DETAIL 5 ON SHEET C1.11.
25. ELECTRICAL EQUIPMENT, SEE MEP PLANS FOR EQUIPMENT AND PAD CONSTRUCTION DETAILS.

SPECIAL GEOTECHNICAL NOTES

1. GROUND IMPROVEMENT SPECIALTY CONTRACTOR SHALL SUBMIT PLANS AND DESIGN CALCULATIONS PRIOR TO CONSTRUCTION FOR APPROVAL. THE PLANS SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER OR RECORD FOR CONCURRENCE THAT THEY MEET THE DESIGN INTENT NOTED IN THE PROJECT GEOTECHNICAL REPORT. THE GROUND IMPROVEMENT DESIGN PACKAGE SHALL INCLUDE QUALITY CONTROL PROCEDURES TO CONFIRM THE DESIGN BEARING CAPACITY AND LIQUEFACTION POTENTIAL MEET THE DESIGN INTENT. THE QUALITY CONTROL PROCEDURES SHALL INCLUDE AN INDICATOR MODULUS TEST (MT) PROGRAM AND A GROUND IMPROVEMENT TEST SECTION TO INDICATE PRE- AND POST- IMPROVEMENT BORINGS AND/OR CPTS ALONG WITH LIQUEFACTION ANALYSIS TO INDICATE THAT THE POST-GROUND IMPROVEMENT MEETS THE DESIGN INTENT.
2. ALL GRADING WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND RECOMMENDATIONS CONTAINED IN THE PROJECT SPECIFIC GEOTECHNICAL REPORT, PROJECT NUMBER IR786, BY GROUP DELTA, DATED JUNE 15, 2022.

GENERAL GRADING NOTES

1. CONTRACTOR SHALL PROTECT IN PLACE OR ADJUST WHERE NECESSARY ALL EXISTING UTILITY LINES, WHETHER SHOWN OR NOT SHOWN ON THESE PLANS, THAT LAY WITHIN THE LIMITS OF THE NEW CONSTRUCTION, AND ARE NOT SPECIFICALLY MARKED TO BE REMOVED OR ABANDONED.
2. FINAL MANHOLE, VALVE BOXES AND VAULTS RIM ELEVATIONS SHALL BE ADJUSTED TO MEET FINAL GRADES.
3. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES THAT ARE IN CONFLICT WITH THE PROJECT PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE ENGINEER OF RECORD OF ANY FOUND CONFLICTS. CONTRACTOR SHALL USE A 3RD PARTY UNDERGROUND UTILITY SERVICE TO DETERMINE THE LOCATION OF ALL ELECTRICAL, WATER, SEWER, AND IRRIGATION LINES.
4. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. JOIN ELEVATIONS SHOW APPROXIMATE. NEW CONCRETE JOINS SHALL MATCH EXISTING ELEVATIONS.
6. BUILDING PAD PREPARATION REFERENCE SHEET S0.01 FOR SOIL (GROUND) IMPROVEMENTS AND SHEET S3.02 FOR ADDITIONAL REQUIRED EXCAVATION AND CERTIFIED FILL BENEATH BUILDING.

NORTH 1"=20'

20' 0' 20' 40' 60'

GRAPHIC SCALE
1 INCH = 20 FEET

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
No. C69620
CIVIL
STATE OF CALIFORNIA

DIGALERT 811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
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SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED
BY PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
PARKING LOT GRADING AND PAVING PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.4**

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted – 3/4/2025 2:28:14 PM :: Saved – 2/24/2025 5:00:20 PM :: S:\SHMC01010\CADD\Design\Sheets\SHMC010100–GP PARKING LOT.DWG :: dhase.lawson

LEGEND

- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- SAWCUT LINE
- PROPERTY LINE
- LIMITS OF WORK
- LANDSCAPE PER LANDSCAPE PLANS
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

MATCHLINE SEE SHEET C1.6

CAMERON FAMILY YMCA

COMMUNITY CENTER

WOODGLEN VISTA CREEK

GRAPHIC SCALE
1 INCH = 20 FEET

NORTH 1" = 20'

811
Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
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DATE COMPLETED					

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DATUM: NAVD88

SCALE
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DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED
BY
PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
HORIZONTAL CONTROL PLAN

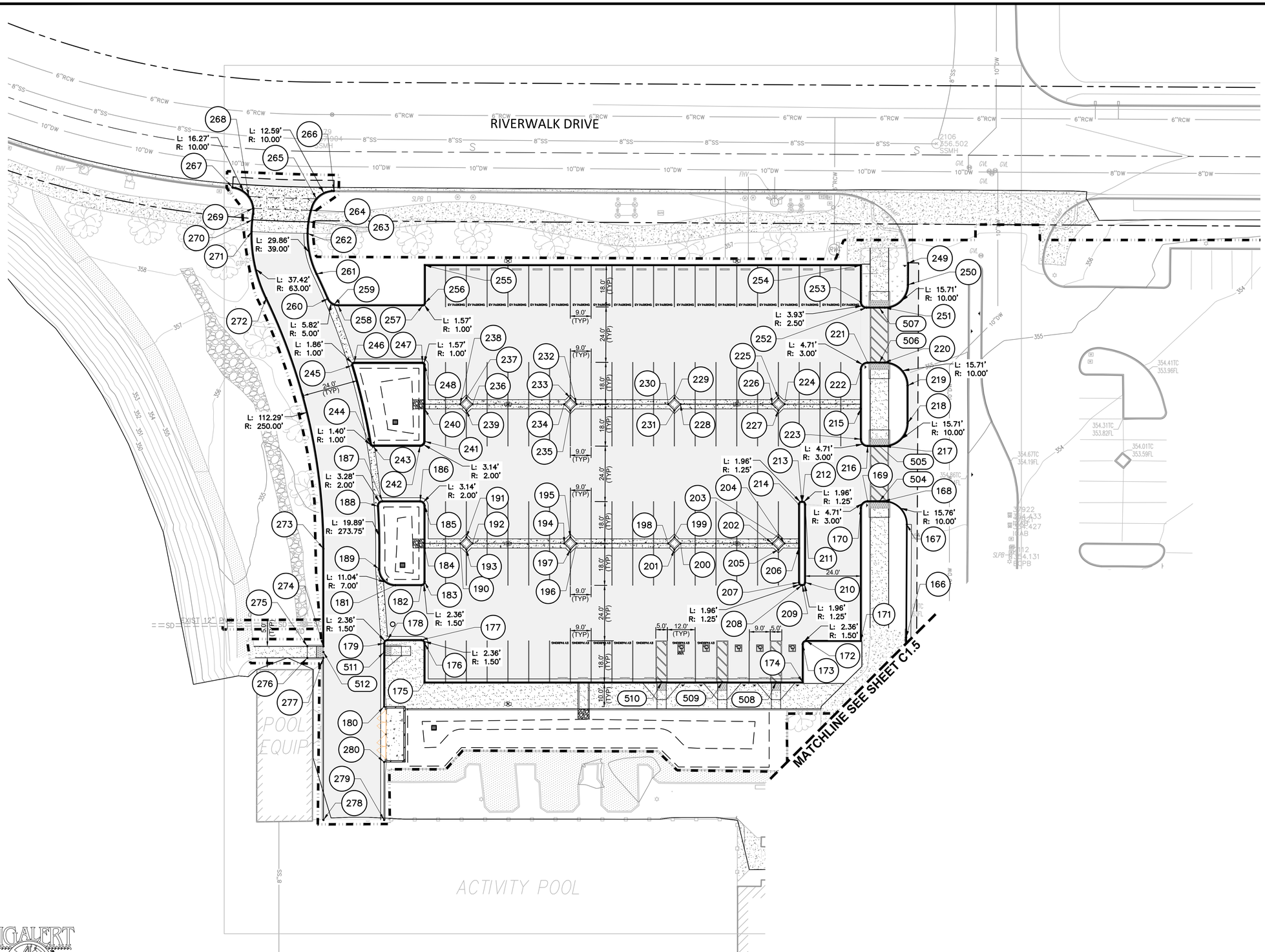
CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.5

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted: 3/4/2025 2:29:27 PM :: Saved: 2/14/2025 3:35:44 PM :: S:\SHMC010100\CADD\Design\Sheets\SHMC010100-HC.DWG :: chase.lawson



LEGEND

- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- SAWCUT LINE
- PROPERTY LINE
- LIMITS OF WORK
- LANDSCAPE PER LANDSCAPE PLANS
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK

DIGALERT 811 Call 2 Full Working Days In Advance

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
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DATE COMPLETED					

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SCALE	
HORIZ:	AS SHOW
VERT:	AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
PARKING LOT HORIZONTAL CONTROL PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.6**

SHEET X OF X

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN CIVIL STATE OF CALIFORNIA

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

Plotted = 3/4/2025 2:30:32 PM :: Saved = 1/18/2024 1:52:13 PM :: S:\SHMC010100\CADD\Design\Sheets\SHMC010100-HC PARKING LOT.DWG :: chase.lawson

SHEET C1.5 POINT TABLES

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
100	1890106.64	6338566.13
101	1890115.91	6338563.64
102	1890119.79	6338556.91
103	1890104.27	6338499.03
104	1890104.27	6338396.38
105	1890139.27	6338361.38
106	1890142.10	6338361.38
107	1890142.11	6338343.40
108	1890214.23	6338343.38
109	1890214.23	6338360.05
110	1890215.42	6338361.30
111	1890222.58	6338358.11
112	1890224.57	6338352.54
113	1890224.71	6338302.82
114	1890206.06	6338275.08
115	1890113.68	6338592.74
116	1890123.67	6338590.06
117	1890128.53	6338592.74
118	1890131.03	6338600.78
119	1890131.04	6338606.08

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
120	1890134.86	6338606.11
121	1890158.86	6338606.26
122	1890223.00	6338607.02
123	1890160.23	6338562.08
124	1890157.84	6338562.08
125	1890148.18	6338554.67
126	1890142.20	6338532.38
127	1890147.03	6338526.08
128	1890151.23	6338526.08
129	1890151.23	6338542.08
130	1890160.23	6338544.08
131	1890142.11	6338501.08
132	1890137.83	6338501.08
133	1890132.83	6338496.09
134	1890132.78	6338469.98
135	1890137.78	6338464.97
136	1890142.11	6338464.97
137	1890142.10	6338439.97
138	1890137.72	6338439.97
139	1890132.72	6338434.98

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
140	1890132.70	6338419.03
141	1890140.84	6338400.52
142	1890142.10	6338401.08
143	1890215.03	6338562.01
144	1890214.23	6338561.62
145	1890214.23	6338526.08
146	1890219.88	6338526.08
147	1890224.88	6338531.08
148	1890224.88	6338542.14
149	1890214.23	6338501.08
150	1890219.79	6338501.08
151	1890224.79	6338496.08
152	1890224.79	6338469.97
153	1890219.79	6338464.97
154	1890214.23	6338464.97
155	1890214.23	6338439.97
156	1890219.70	6338439.97
157	1890224.70	6338434.97
158	1890224.70	6338419.88
159	1890216.27	6338401.17

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
160	1890215.07	6338400.10
161	1890214.23	6338400.48
162	1890194.25	6338268.38
163	1890187.39	6338260.36
164	1890182.95	6338227.77
165	1890208.94	6338201.95
281	1890145.34	6338544.08

CENTER OF CURB RAMP COORDINATES		
POINT #	NORTHING	EASTING
500	1890153.35	6338343.40
501	1890176.60	6338343.40
502	1890199.73	6338343.39
503	1890224.54	6338334.13

BLDG/WALL COORDINATES		
POINT #	NORTHING	EASTING
400	1890128.11	6338354.89
401	1890121.11	6338354.89
402	1890115.77	6338354.89
403	1890105.77	6338354.89
404	1890092.52	6338337.40
405	1890092.52	6338349.40
406	1890092.52	6338356.15
407	1890092.52	6338372.15
408	1890092.52	6338379.06
409	1890092.52	6338391.06
410	1890087.48	6338415.14
411	1890092.25	6338432.93
412	1890086.35	6338441.41
413	1890088.92	6338451.02
414	1890089.44	6338452.95
415	1890092.54	6338464.54
416	1890093.06	6338466.47
417	1890094.10	6338470.34
418	1890094.61	6338472.27
419	1890095.94	6338477.21

BLDG/WALL COORDINATES		
POINT #	NORTHING	EASTING
427	1890099.52	6338523.80
435	1890024.66	6338351.48
440	1890009.98	6338337.56
441	1890003.98	6338337.56
442	1890001.73	6338339.81
443	1890001.73	6338353.81
444	1890001.73	6338359.81
445	1890001.73	6338374.03
446	1890001.73	6338380.03
447	1890001.73	6338392.15
448	1890003.98	6338394.40
449	1890009.98	6338394.40
450	1890030.64	6338424.69
451	1890020.98	6338427.28
452	1890011.58	6338429.80
453	1890001.93	6338432.38
454	1890000.88	6338429.56
455	1889998.16	6338419.39
456	1889987.58	6338422.23
457	1889992.26	6338439.70

BLDG/WALL COORDINATES		
POINT #	NORTHING	EASTING
458	1889977.15	6338443.75
459	1890052.40	6338536.43
460	1890070.73	6338604.91
463	1890095.50	6338524.88
464	1889973.43	6338326.48
465	1889965.43	6338326.48
466	1889965.43	6338314.40
467	1890006.93	6338314.40
468	1890019.43	6338317.40
469	1890045.43	6338320.40
470	1890045.43	6338322.90
471	1890097.27	6338322.90
472	1890097.27	6338315.41
473	1890126.18	6338315.41
474	1890126.18	6338322.90
475	1890167.03	6338322.90
476	1890175.03	6338322.90
477	1890224.02	6338322.90

SHEET C1.6 POINT TABLES

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
166	1890220.21	6338200.78
167	1890269.07	6338201.04
168	1890279.12	6338191.04
169	1890279.12	6338184.10
170	1890276.12	6338181.10
171	1890218.71	6338181.10
172	1890218.71	6338157.45
173	1890217.21	6338155.95
174	1890200.72	6338155.95
175	1890200.71	6337992.49
176	1890217.57	6337992.49
177	1890219.07	6337990.99
178	1890219.07	6337976.41
179	1890217.57	6337974.91
180	1890190.22	6337974.91
181	1890242.71	6337979.74
182	1890242.71	6337990.99
183	1890244.21	6337992.49
184	1890258.84	6337992.49
185	1890277.12	6337992.49
186	1890279.12	6337990.49
187	1890279.12	6337974.17

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
188	1890276.99	6337972.18
189	1890249.75	6337972.74
190	1890260.84	6338007.84
191	1890263.48	6338010.49
192	1890260.84	6338013.13
193	1890258.19	6338010.49
194	1890260.84	6338052.84
195	1890263.48	6338055.49
196	1890260.84	6338058.13
197	1890258.19	6338055.49
198	1890260.84	6338097.84
199	1890263.48	6338100.49
200	1890260.84	6338103.13
201	1890258.19	6338100.49
202	1890260.84	6338142.84
203	1890263.48	6338145.49
204	1890260.84	6338148.13
205	1890258.19	6338145.49
206	1890258.84	6338154.36
207	1890243.96	6338154.36
208	1890242.71	6338155.61
209	1890242.71	6338155.84

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
210	1890243.96	6338157.09
211	1890277.71	6338157.09
212	1890278.96	6338155.84
213	1890278.96	6338155.61
214	1890277.71	6338154.36
215	1890319.09	6338181.10
216	1890302.96	6338184.10
217	1890302.96	6338191.44
218	1890312.96	6338201.44
219	1890329.15	6338201.44
220	1890339.15	6338191.44
221	1890339.15	6338184.10
222	1890336.15	6338181.10
223	1890305.96	6338181.10
224	1890321.09	6338148.13
225	1890323.73	6338145.49
226	1890321.09	6338142.84
227	1890318.44	6338145.49
228	1890321.09	6338103.13
229	1890323.73	6338100.49
230	1890321.09	6338097.84
231	1890318.44	6338100.49

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
232	1890321.09	6338058.13
233	1890323.73	6338055.49
234	1890321.09	6338052.84
235	1890318.44	6338055.49
236	1890321.09	6338013.13
237	1890323.73	6338010.49
238	1890321.09	6338007.84
239	1890318.44	6338010.49
240	1890319.09	6337992.49
241	1890305.02	6337992.49
242	1890303.02	6337990.49
243	1890303.02	6337969.99
244	1890303.86	6337969.01
245	1890337.86	6337961.05
246	1890339.15	6337962.00
247	1890339.15	6337991.49
248	1890338.15	6337992.49
249	1890382.27	6338201.65
250	1890372.81	6338201.60
251	1890362.86	6338191.55
252	1890362.87	6338183.60
253	1890365.37	6338181.10

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
254	1890381.21	6338181.10
255	1890381.21	6337992.61
256	1890364.84	6337992.61
257	1890363.84	6337991.61
258	1890363.84	6337955.04
259	1890364.19	6337953.21
260	1890366.86	6337950.45
261	1890377.49	6337945.61
262	1890395.04	6337941.74
263	1890400.05	6337942.15
264	1890405.04	6337943.21
265	1890410.02	6337945.64
266	1890413.45	6337953.22
267	1890414.93	6337909.28
268	1890411.05	6337916.34
269	1890405.92	6337918.35
270	1890400.93	6337917.97
271	1890395.82	6337917.65
272	1890367.08	6337923.88
273	1890258.53	6337948.68
274	1890216.32	6337948.68
275	1890216.32	6337941.68

CURB/EP COORDINATES		
POINT #	NORTHING	EASTING
276	1890211.33	6337941.68
277	1890211.33	6337948.68
278	1890141.15	6337948.68
279	1890141.13	6337974.91
280	1890166.22	6337974.91

CENTER OF CURB RAMP COORDINATES		
POINT #	NORTHING	EASTING
504	1890279.12	6338189.19
505	1890302.96	6338189.19
506	1890339.15	6338189.19
507	1890362.87	6338189.19
508	1890200.72	6338144.45
509	1890200.72	6338121.20
510	1890200.71	6338094.95
511	1890213.83	6337974.91
512	1890213.82	6337948.68

DIGALERT
811
Call 2 Full Working Days In Advance

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE
HORIZ: AS SHOW
VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED
BY PROJECT ENGINEER

CITY OF SANTEE | DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
HORIZONTAL CONTROL PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.7**
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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LEGEND

- CONCRETE CURB
- CONCRETE CURB AND GUTTER
- 25 FT FIRE ACCESS
- PROPERTY LINE
- LIMITS OF WORK
- LANDSCAPE PER LANDSCAPE PLANS
- CONCRETE VEHICULAR PAVEMENT
- AC PAVEMENT
- CONCRETE SIDEWALK
- SAWCUT LINE
- PAINTED STRIPE PER CONSTRUCTION NOTE
- SIGN PER CONSTRUCTION NOTE
- PEDESTRIAN CROSSWALK

STRIPING NOTES

1. PAINT TYPE 1 PAVEMENT ARROW PER CALTRANS STD PLAN A24A.
2. PAINT 12" WHITE STOP LINE PER 2018 CALTRANS STD PLAN A24E.
3. PAINT 10' WIDE YELLOW CROSS WALK CENTER ON RAMPS PER 2018 CALTRANS STD PLAN A24F.
4. PAINT 4" WHITE STRIPE.
5. INSTALL STOP SIGN & POST.
6. PAINT 8' TALL "STOP" PAVEMENT MARKING PER CALTRANS STD PLAN A24E.
7. INSTALL TOW AWAY SIGN, REFER TO DETAIL 5/A10.01
8. INSTALL FIRE LANE NO PARKING SIGN, REFER TO DETAIL 15/A10.01
9. INSTALL "ONE WAY" SIGN & POST. CALIFORNIA MUTCD R6-1.
10. PAINT TYPE 4 PAVEMENT ARROW PER CALTRANS STD PLAN A24A.
11. PAINT TYPE 7 PAVEMENT ARROW PER CALTRANS STD PLAN A24A.
12. PAINT 12" WHITE "NO PARKING" PER CALTRANS STD PLAN A24E
13. PAINT TOP AND FACE OF CURB RED FOR NO PARKING.

SIGNING AND STRIPING NOTES

1. ALL STRIPING, MARKINGS AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC UNLESS OTHERWISE NOTED.
2. REFER TO ARCHITECTURAL SHEET A1.22 FOR ACCESSIBLE PARKING STRIPING, SIGNAGE, TRUNCATED DOMES, AND WHEEL STOPS

(1) = PAINT TOP & FACE OF CURB RED FOR NO PARKING.
(2) = PAINT TOP & FACE OF CURB BLUE AT ADA STALLS.

3. SIGNS TO BE INSTALLED ON BREAK-AWAY SIGN POSTS PER SDRSD M-45.

NORTH 1" = 20'

40' 0' 40' 80' 120'
GRAPHIC SCALE
1 INCH = 40 FEET

DIGALERT 811 Call 2 Full Working Days In Advance

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CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

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PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES

IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
TRAFFIC SIGNAGE AND STRIPING PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.8

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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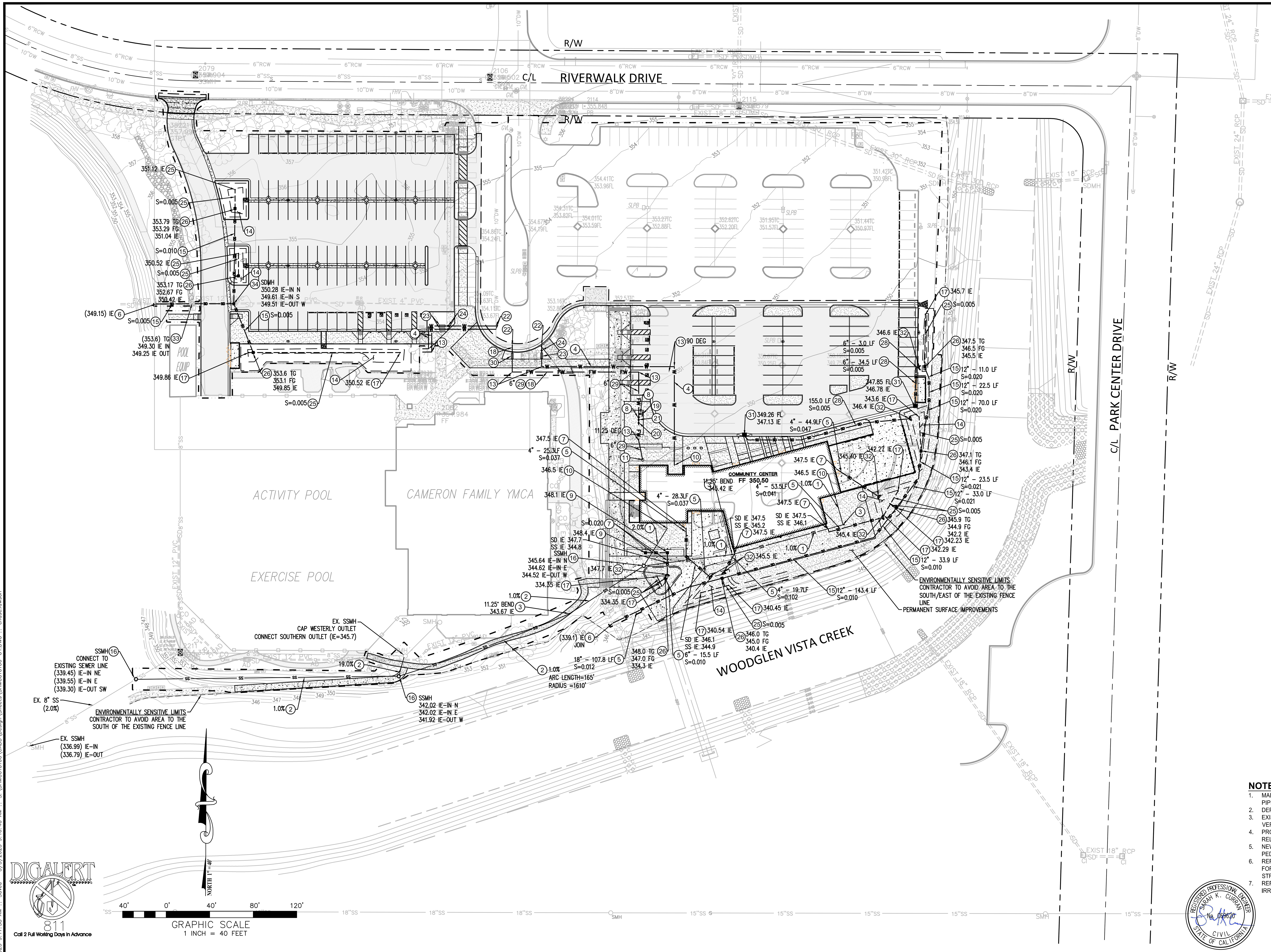

LEGEND

- SIDEWALK UNDERDRAIN
- FIRE WATER SERVICE & BACKFLOW
- DOMESTIC WATER SERVICE, BACKFLOW, & METER
- SEWER LINE
- SEWER MANHOLE
- STORM DRAIN
- UNDERDRAIN PIPE
- CATCH BASIN
- FIRE HYDRANT
- CHAIN LINK FENCE/GATE
- LIMITS OF WORK
- PROPERTY LINE

CONSTRUCTION NOTES

1. CONSTRUCT 4" PVC (SDR 35) SEWER LINE, SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER WAS SP-02.
2. CONSTRUCT 6" PVC (SDR 35) SEWER LINE, SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER WAS SP-02.
3. CONSTRUCT SANITARY SEWER CLEANOUT PER WAS SC-01, TYPE A WITH SCREW CAP
4. CONSTRUCT 2.5" COPPER WATER LINE, PIPE BEDDING AND TRENCH PER WAS WP-02
5. CONSTRUCT HDPE STORM DRAIN LINE, SIZE, LENGTH, AND SLOPE PER PLAN. PIPE BEDDING AND TRENCH PER DETAIL SDRSD D-60
6. CONNECT TO EXISTING UTILITY. CONTRACTOR TO FIELD VERIFY LOCATION, DEPTH, SIZE AND CONDITION PRIOR TO CONSTRUCTION
7. CONSTRUCT 4" PVC STORM DRAIN LINE, LENGTH AND SLOPE PER PLAN. STUB OUT FOR CONNECTION TO BULD DRAIN PER DETAIL SEE STRUCTURAL/PLUMBING PLANS. PIPE BEDDING AND TRENCH PER DETAIL SDRSD D-60.
8. CONSTRUCT GATE VALVE PER WAS WV-02
9. CONSTRUCT 24"X24" CATCH BASIN, PER DETAIL 5 SHEET C1.10. INCLUDE FLOGARD CATCH BASIN INSERT FILTER BY OLD CASTLE (MODEL NO. FGP-24F8) FOR TRASH CAPTURE OR EQUAL. SEE DETAIL 6, SHEET C1.11. INCLUDE STORM DRAIN SIGNAGE PER CASQA SD-13. SEE EXAMPLE DETAIL 7, SHEET C1.11
10. REFER TO PLUMBING SITE PLAN FOR CONNECTION, LOCATION AND ELEVATION
11. REFER TO FIRE PLANS FOR CONNECTION, LOCATION AND ELEVATION
12. INSTALL AND FURNISH (AS NOTED)
13. CONSTRUCT THRUST BLOCK, CLASS 350 RATED WORKING PRESSURE, PER AWWA C110 WITH RESTRAINED JOINTS (U.N.O). SIZE PER ADJOINING PIPE, ANGLE PER PLAN. SEE DETAIL 3, SHEET C1.11
14. CONSTRUCT BIOFILTRATION BASIN PER DETAIL 1 SHEET C1.11
15. CONSTRUCT 12" PVC STORM DRAIN. PIPE BEDDING AND TRENCH PER DETAIL SDRSD D-60.
16. CONSTRUCT SANITARY SEWER MANHOLE PER WAS SM-01
17. CONSTRUCT STORM DRAIN CLEANOUT PER WAS SC-01, TYPE A WITH SCREW CAP
18. CONSTRUCT 6" FIRE WATER SERVICE PER WAS WF-05
19. CONSTRUCT NEW FIRE HYDRANT PER WAS WF-02
20. INSTALL FIRE DEPARTMENT CONNECTION SEE DETAIL 7 ON SHEET C1.10
21. CONSTRUCT POST INDICATOR VALVE SEE DETAIL 7 ON SHEET C1.10
22. CONNECTION TO PADRE DAM MAIN TO BE PERFORMED BY THE DISTRICT AT THE OWNERS EXPENSE.
23. CONSTRUCT 2-INCH DOMESTIC WATER BACKFLOW PREVENTOR ASSEMBLY PER WAS WR-01, WITH STAINLESS STEEL PROTECTION CAGE AND FOUNDATION
24. PDMWD TO INSTALL INSTALL 2" DOMESTIC WATER SERVICE PER WAS WS-02
25. CONSTRUCT UNDERDRAIN AS REQUIRED BY BIO RETENTION BASIN DETAIL 1 SHEET C1.11
26. CONSTRUCT BROOKS 24"X24" CATCH BASIN WITH GALVANIZED STEEL GRATE, OR APPROVED EQUAL. INSTALL $\frac{3}{4}$" ORIFICE AT AN ELEVATION 3" ABOVE THE BASIN FINISH FLOOR. INCLUDE FLOGARD CATCH BASIN INSERT FILTER BY OLD CASTLE (MODEL NO. FGP-24F8) FOR TRASH CAPTURE OR EQUAL. SEE DETAIL 6, SHEET C1.11
27. CONSTRUCT 6" PVC STORM DRAIN LINE
28. CONSTRUCT 8" PVC STORM DRAIN LINE
29. CONSTRUCT C900 PVC FIRE WATER LINE. PIPE BEDDING AND TRENCH PER WAS WP-02
30. CONSTRUCT 6-INCH REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY PER WAS WR-02, PRIMED AND PAINTED RED WITH $\frac{5}{16}$" STAINLESS STEEL CHAIN FOR LOCKING HANDLES
31. CONSTRUCT CURBSIDE GRATING CATCH BASIN, SEE GRADING PLAN. INCLUDE FLOGARD CATCH BASIN INSERT FILTER BY OLD CASTLE (MODEL NO. FGP-24F8) FOR TRASH CAPTURE OR EQUAL. SEE DETAIL 6, SHEET C1.11. INCLUDE STORM DRAIN SIGNAGE PER CASQA SD-13. SEE EXAMPLE DETAIL 7, SHEET C1.11
32. HEADWALL PER DETAIL 6 SHEET C1.10.
33. DEEPEN STRUCTURE TO CONFORM INVERT PER PLAN
34. CONSTRUCT STORM DRAIN MANHOLE PER SPPWC STD PLAN 321-2. SEE DETAIL 8, SHEET C1.10

NOTES

1. MAINTAIN 10' CLEARANCE BETWEEN DOMESTIC AND SANITARY SEWER PIPES OUTSIDE DIAMETERS.
2. DEPTH OF COVER BASED ON FINISHED SURFACE.
3. EXISTING UTILITY LOCATIONS, SIZES, AND DEPTHS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
4. PROVIDE PEDESTRIAN AND TRAFFIC RATED RIMS AND COVERS FOR RELOCATED OR ADJUSTED UTILITY STRUCTURES
5. NEW UTILITY STRUCTURES AND MANHOLES SHALL HOUSE TRAFFIC AND PEDESTRIAN RATED COVERS.
6. REFERENCE MECHANICAL, ELECTRICAL AND TELECOMMUNICATION PLANS FOR DEMOLITION AND INSTALLATION OF M, E, & T UTILITIES AND STRUCTURE.
7. REFERENCE LANDSCAPE PLANS FOR DEMOLITION AND INSTALLATION OF IRRIGATION LINES.

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN No. C69620 CIVIL STATE OF CALIFORNIA

CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES AS DESCRIBED IN GENERAL NOTE 4 ON SHEET C1.0. CONTRACTOR TO USE 3RD PARTY PRIVATE UNDERGROUND UTILITY LOCATION SERVICE.

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

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DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF SARAH CURRAN, DATE 04/04/2025
RCE NO. C69620, EXPIRES 06/30/2026

REVIEWED ____
BY ____ PROJECT ENGINEER

CITY OF SANTEE	DEPARTMENT OF DEVELOPMENT SERVICES	CITY W.O. NO.	DRAWING NO.
IMPROVEMENT PLANS FOR:	SANTEE COMMUNITY CENTER **CIVIL UTILITY PLAN**	CIP 2018-31	**C1.9** SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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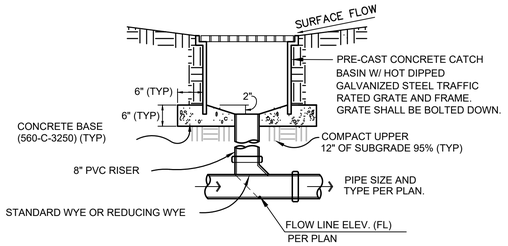
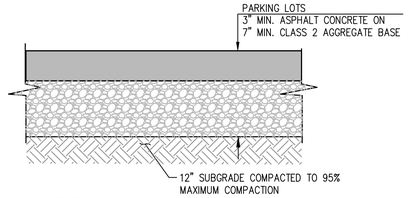


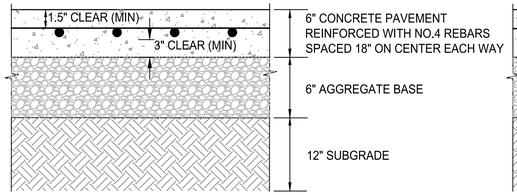
CATCH BASIN DETAIL 5 C1.10
N.T.S.



NOTE:

1. AC STRUCTURAL SECTIONS ARE FOR ESTIMATING PURPOSES ONLY AND SHALL BE BASED ON SUBGRADE TESTS BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF BASE MATERIAL.
2. OVER EXCAVATE AND RECOMPACT 1-FT BELOW PAVEMENT SECTION PER GEOTECHNICAL REPORT.

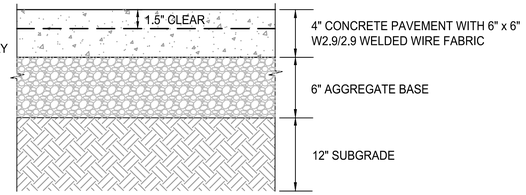
ASPHALT PAVEMENT DETAIL 2 C1.10
N.T.S.



NOTE:

1. OVER EXCAVATE AND RECOMPACT 1-FT BELOW PAVEMENT SECTION PER GEOTECHNICAL REPORT.

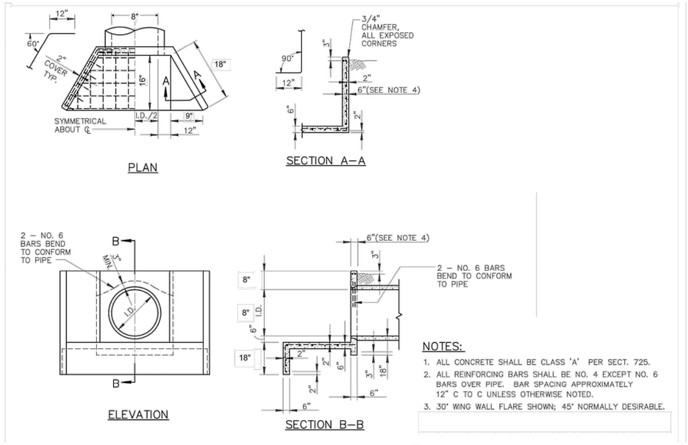
CONCRETE VEHICULAR PAVEMENT DETAIL 3 C1.10
N.T.S.



NOTE:

1. OVER EXCAVATE AND RECOMPACT 1-FT BELOW PAVEMENT SECTION PER GEOTECHNICAL REPORT.

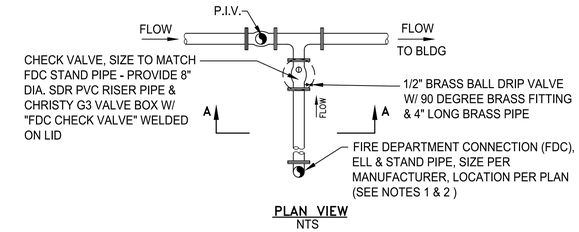
CONCRETE WALK DETAIL 4 C1.10
N.T.S.



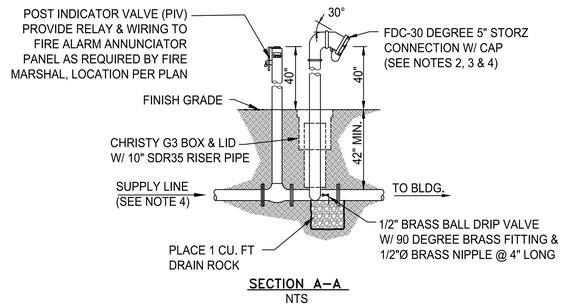
NOTES:

1. ALL CONCRETE SHALL BE CLASS 'A' PER SECT. 725.
2. ALL REINFORCING BARS SHALL BE NO. 4 EXCEPT NO. 6 BARS OVER PIPE. BAR SPACING APPROXIMATELY 12" C TO C UNLESS OTHERWISE NOTED.
3. 30° WING WALL FLARE SHOWN; 45° NORMALLY DESIRABLE.

8" HEADWALL 6 C1.10
N.T.S.



PLAN VIEW
NTS



SECTION A–A
NTS

NOTES:

1. FIRE MARSHAL SHALL SPECIFY LOCATION OF FIRE DEPARTMENT CONNECTION (FDC). CLEARANCE AROUND FDC SHALL BE 3 FEET RIGHT, LEFT, REAR, AND 20 FEET IN FRONT.
2. A METAL SIGN WITH RAISED LETTERS AT LEAST 1 INCH IN SIZE SHALL BE MOUNTED ON ALL FIRE DEPARTMENT CONNECTIONS SERVICING AUTO SPRINKLERS, STANDPIPES OR FIRE PUMPS. SUCH SIGNS SHALL READ "AUTO SPRINKLER", "STANDPIPE", OR "TEST CONNECTION" AS APPLICABLE. WHERE THE FDC DOES NOT SERVE THE ENTIRE BUILDING A SIGN SHALL BE PROVIDED INDICATING THE PORTIONS OF THE BUILDING TO BE SERVED.
3. FIRE PROTECTION FACILITIES ARE OWNED AND MAINTAINED BY THE CUSTOMER.
4. ASSEMBLIES AND PIPING ON FIRE LINES SHALL BE FM/UL AND CONFORM TO THE APPLICABLE NFPA. THRUST BLOCKING AND/OR MECHANICAL RESTRAINTS SHALL BE PROVIDED AS NECESSARY.
5. STANDPIPE MATERIALS AND DEVICES MUST BE OF SUFFICIENT STRENGTH TO WITHSTAND A MINIMUM OF 200 PSI.
6. ALL FERROUS MATERIAL PRODUCTS THAT WILL INTERACT WITH THE SOIL WHEN INSTALLED SHALL BE PROPERLY COATED FOR CORROSION PROTECTION PER GEOTECH REPORT.

FIRE DEPARTMENT CONNECTION AND POST INDICATOR VALVE DETAIL 7 C1.10
N.T.S.

REGISTERED PROFESSIONAL ENGINEER
SARAH K. CURRAN
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
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INSPECTOR					
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SKC	GPY	EH

PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

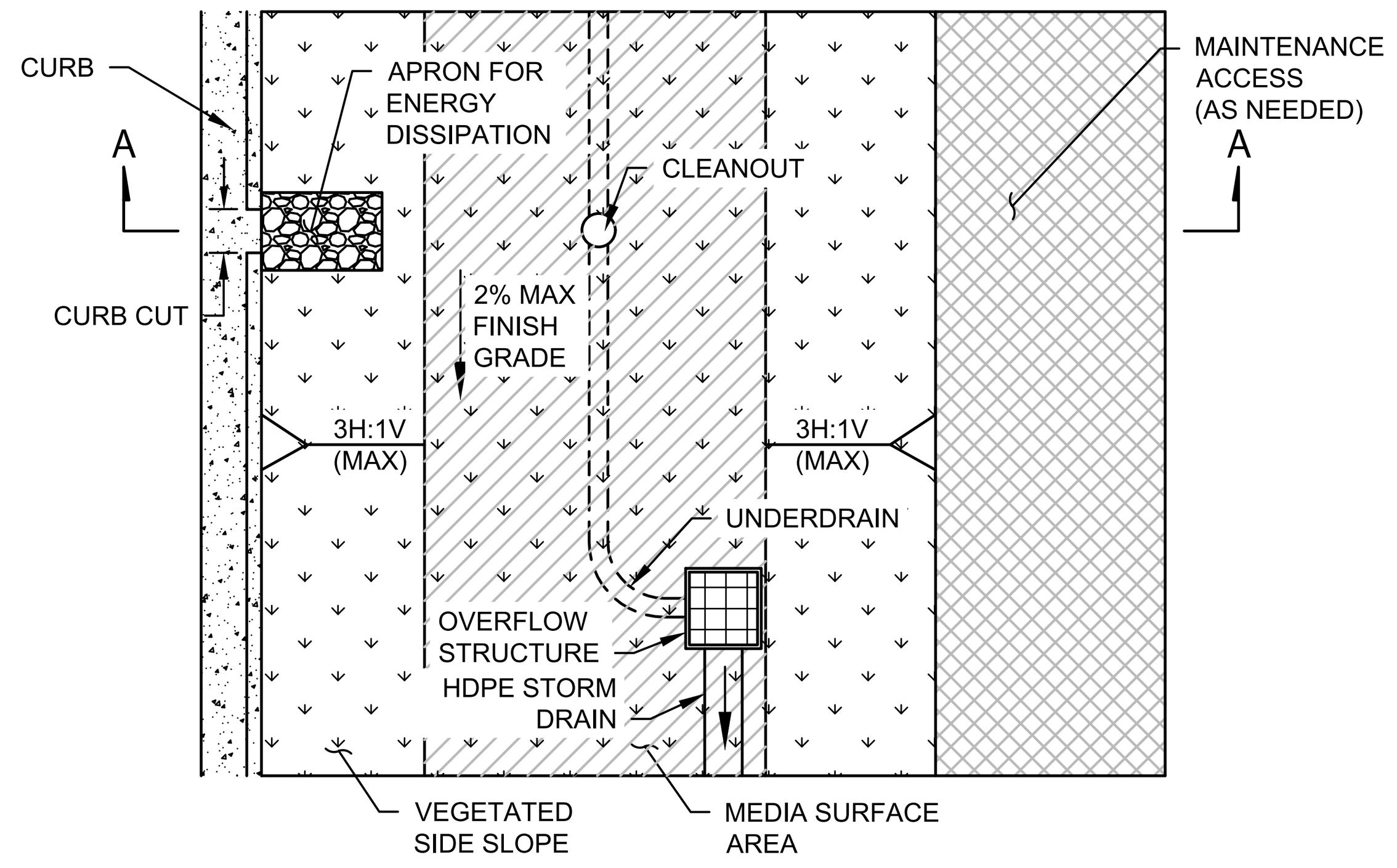
REVIEWED
BY PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
CIVIL DETAILS

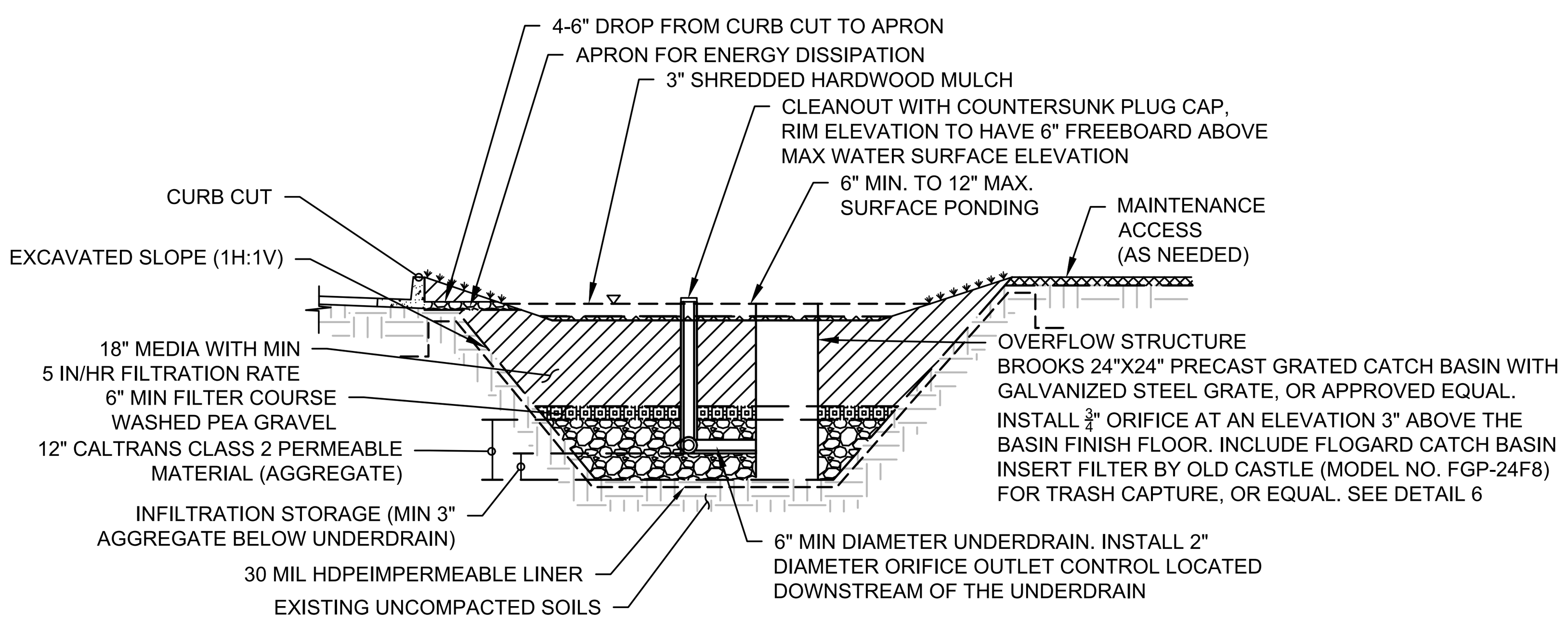
CITY W.O. NO. CIP 2018-31

DRAWING NO. **C1.10**
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31



PLAN



SECTION A-A

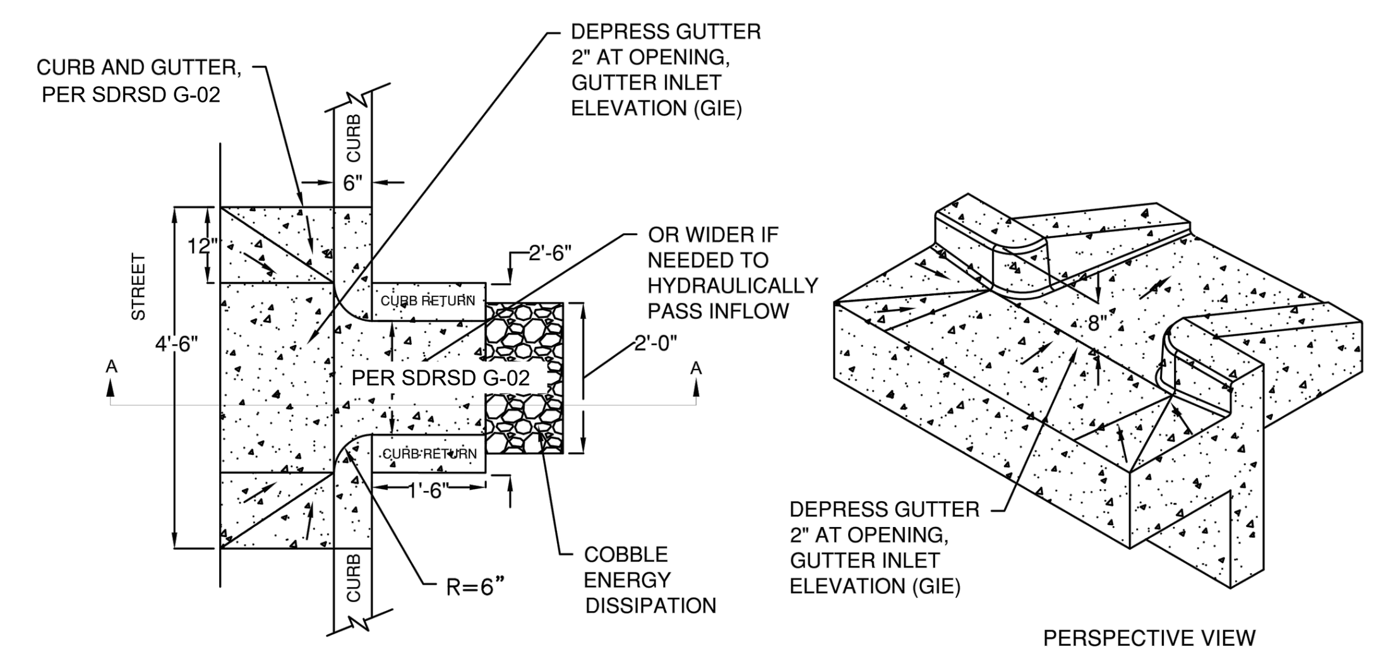
BIOFILTRATION PROTECTION DURING CONSTRUCTION:

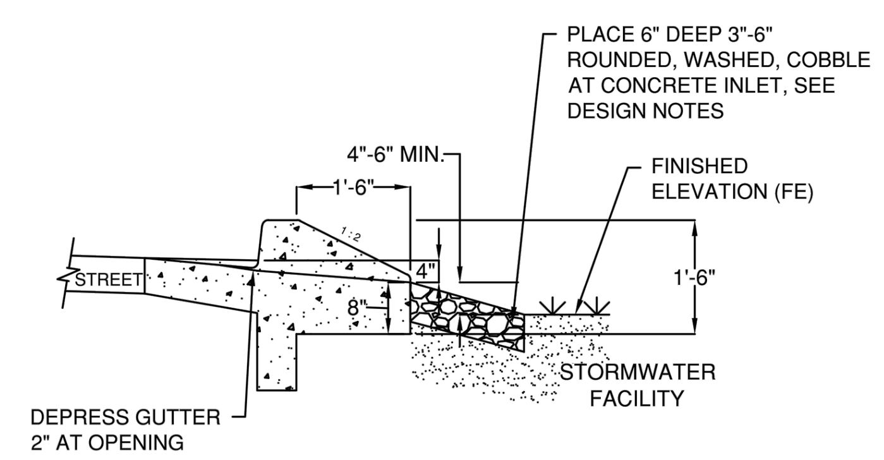
1. PREVENT OVER-COMPACTION OF NATIVE SOILS IN AREAS OF THE BASIN WHERE INFILTRATION WILL OCCUR. DELINEATE THE BIOFILTRATION AREA AND KEEP CONSTRUCTION TRAFFIC OFF. PROTECT SOILS WITH FENCING, PLYWOOD, ETC.
2. PROVIDE EROSION CONTROL IN THE CONTRIBUTING DRAINAGE AREAS OF THE DESIGNATED BIOFILTRATION AREA. STABILIZE UPSLOPE AREAS.
3. DRAINAGE SHOULD BE DIRECTED AWAY FROM BIORETENTION FACILITIES UNTIL UPSLOPE AREAS ARE STABILIZED. THE CONCENTRATION OF FINES COULD PREVENT POST-CONSTRUCTION INFILTRATION AND CAUSE DESIGN FAILURE.
4. IF DRAINAGE IS TO BE ALLOWED THROUGH THE FACILITY DURING CONSTRUCTION LEAVE OR BACKFILL AT LEAST 6 INCHES ABOVE THE FINAL GRADE. TEMPORARILY COVER THE UNDERDRAIN WITH PLASTIC OR FABRIC. LINE OR MULCH THE BIOFILTRATION AREA.
5. BIORETENTION FACILITIES SHOULD REMAIN OUTSIDE THE LIMIT OF DISTURBANCE TO PREVENT SOIL COMPACTION BY HEAVY EQUIPMENT. PROTECT BIORETENTION AREAS WITH SILT FENCE AND CONSTRUCTION FENCING.

6. VERIFY INSTALLATION OF UNDERDRAIN IS CORRECT PRIOR TO PLACING SOIL.

BIOFILTRATION BASIN DETAIL (1 / C1.11)

N.T.S.





BIORETENTION DESIGN NOTES

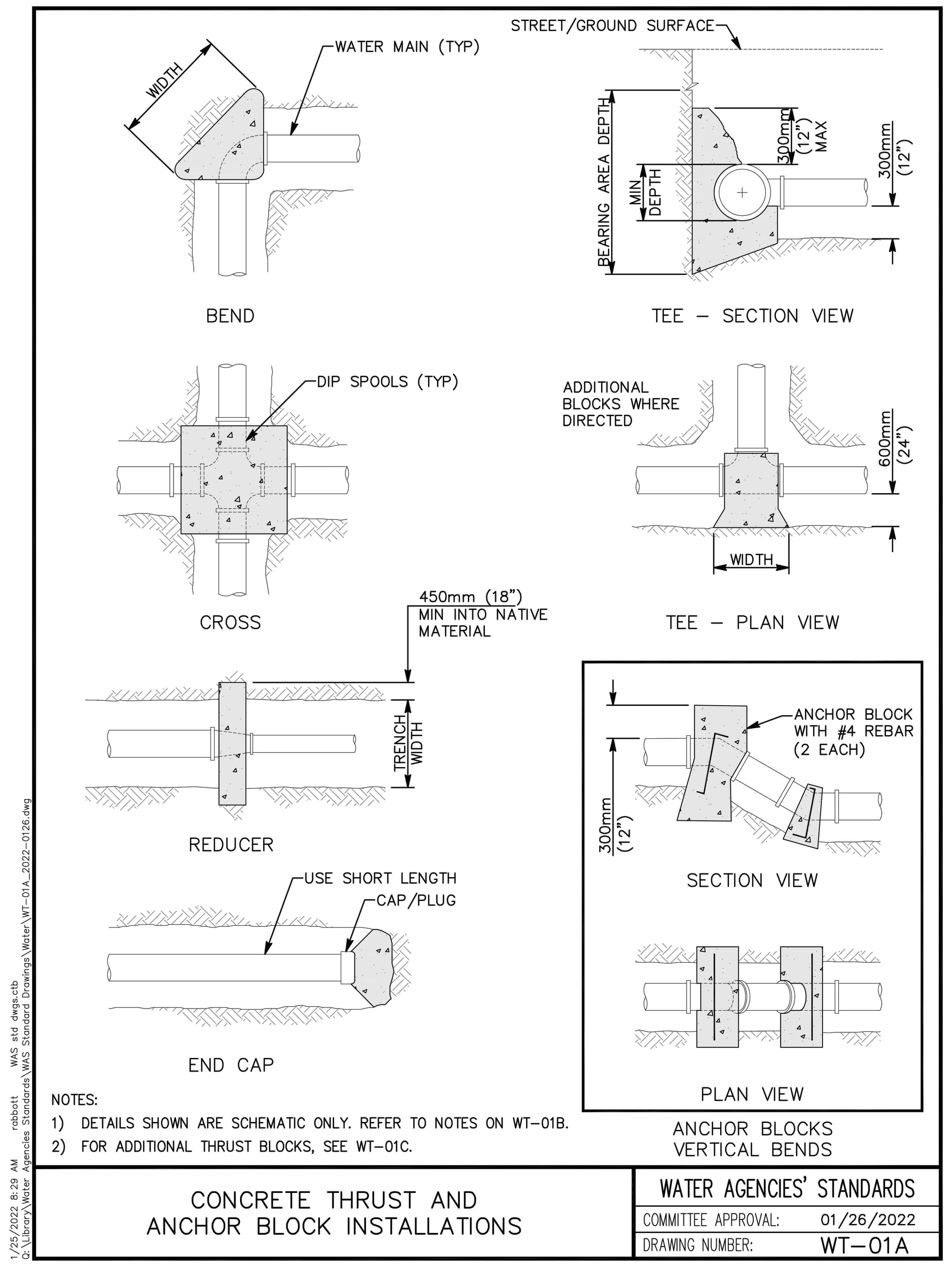
1. FOR USE WITH STORMWATER FACILITIES WITH SIDE SLOPES.
2. PROVIDE SPOT ELEVATIONS ON PLANS (FE, OE, GIE, IE). REFER TO GRADING SHEETS FOR SPOT ELEVATIONS.
3. CURB AND WALL DETAILS MAY BE MODIFIED BY CIVIL AND GEOTECHNICAL ENGINEERS SUBJECT TO APPROVAL BY CITY ENGINEER.
4. WHERE INLET FLOW VELOCITY IS HIGH, EXTEND COBBLE INTO FACILITY, BUT AVOID EXCESSIVE USE.

CONSTRUCTION NOTES

1. AFTER CONSTRUCTION PLACE SAND BAGS AT GUTTER OPENINGS TO KEEP STORM FLOWS FROM ENTERING FACILITY UNTIL VEGETATION IS ESTABLISHED.

CURB CUT INLET DETAIL (2 / C1.11)

N.T.S.



THRUST BLOCK DETAIL (3 / C1.11)

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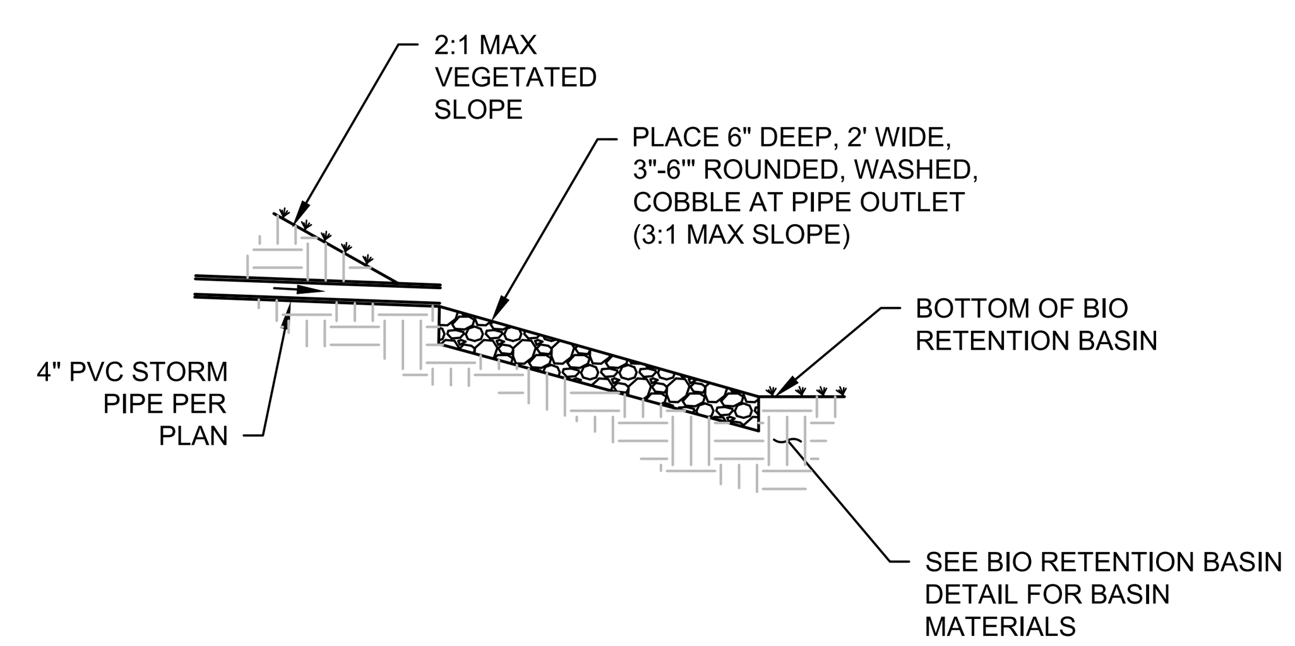
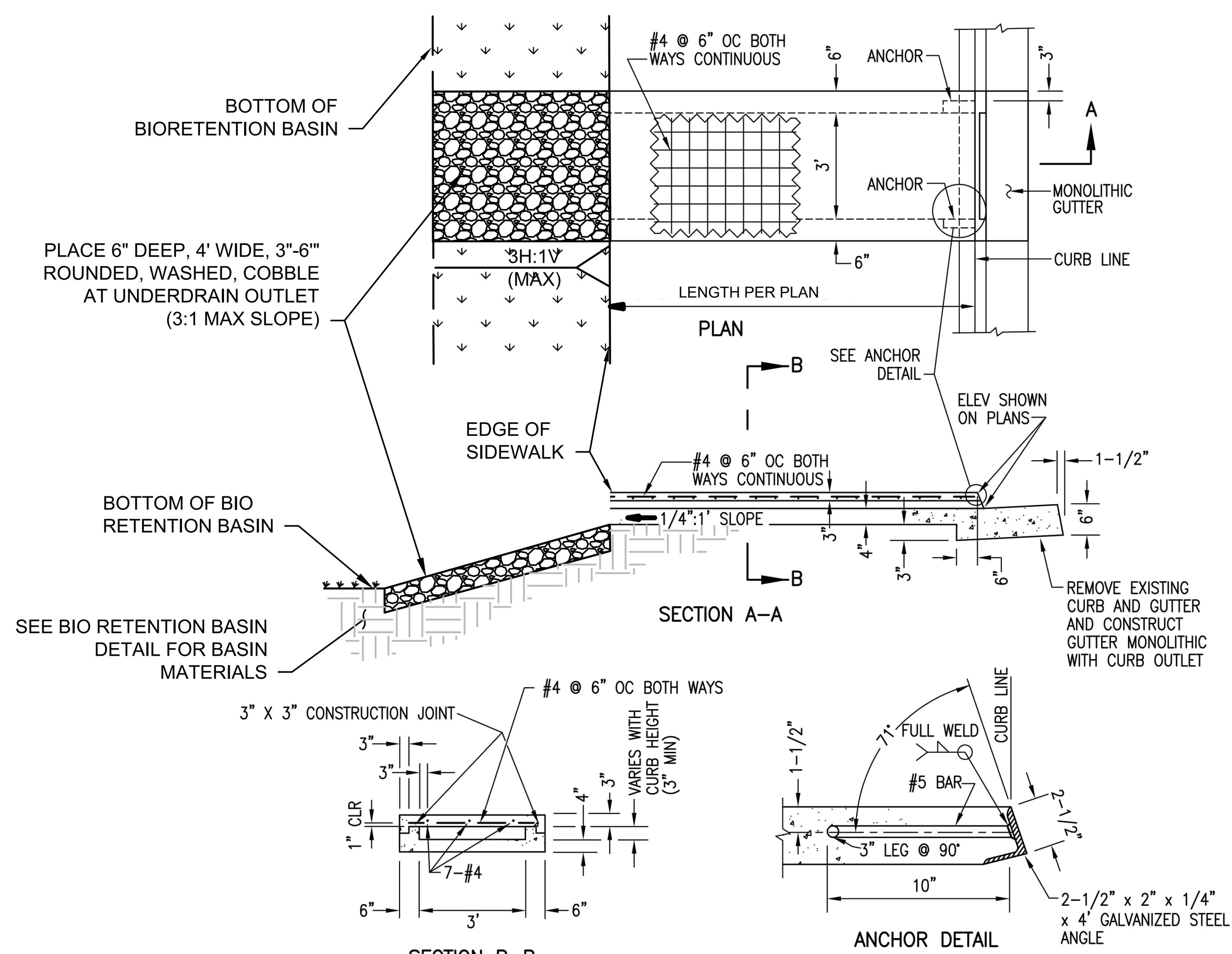
EXAMPLE STORM DRAIN SIGNAGE PER CASQA SD-13 (7 / C1.11)

NTS



COBBLE ENERGY DISSIPATION AT STORM PIPE OUTLETS (4 / C1.11)

N.T.S.



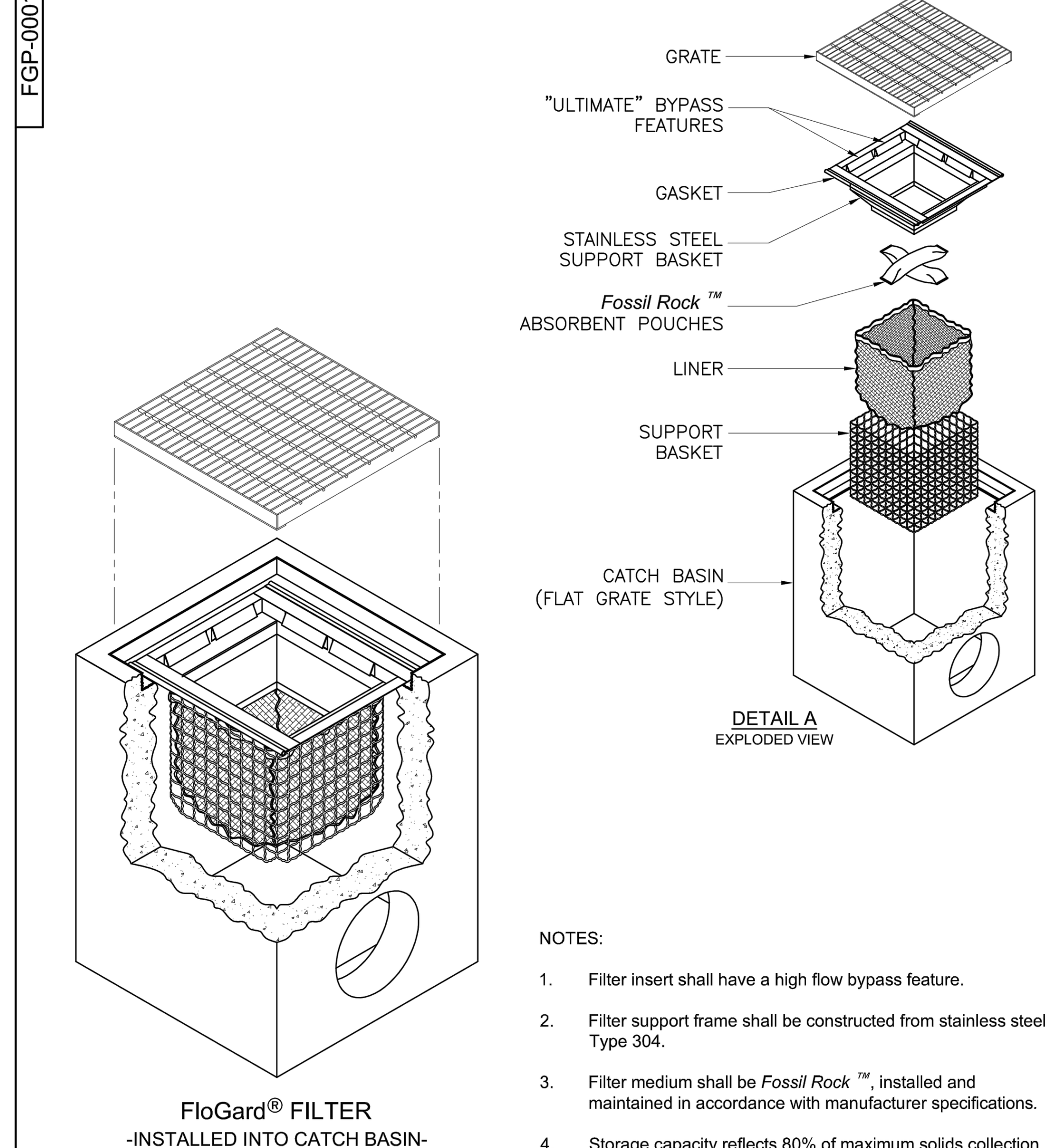
NOTES:

1. CONCRETE SHALL BE 500-C-3250.
2. SLOPE OF DRAINAGE CHANNEL TO BE SLOPED TOWARDS BIORETENTION BASIN. SLOPES OF FINISHED SIDEWALK PER PLAN.
3. SIDEWALK FINISH TO MATCH ADJACENT SIDEWALK.
4. PROVIDE ½" TOOLED GROOVE IN TOP SLABE IN LINE WITH BACK OF ADJACENT CURB.
5. THIS DETAIL IS A MODIFICATION OF SDRSD D-25A.

SIDEWALK UNDERDRAIN (5 / C1.11)

NTS

FGP-0001



NOTES:

1. Filter insert shall have a high flow bypass feature.
2. Filter support frame shall be constructed from stainless steel Type 304.
3. Filter medium shall be *Fossil Rock* ™, installed and maintained in accordance with manufacturer specifications.
4. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.

U.S. PATENT # 6,00,023 & 6,877,029

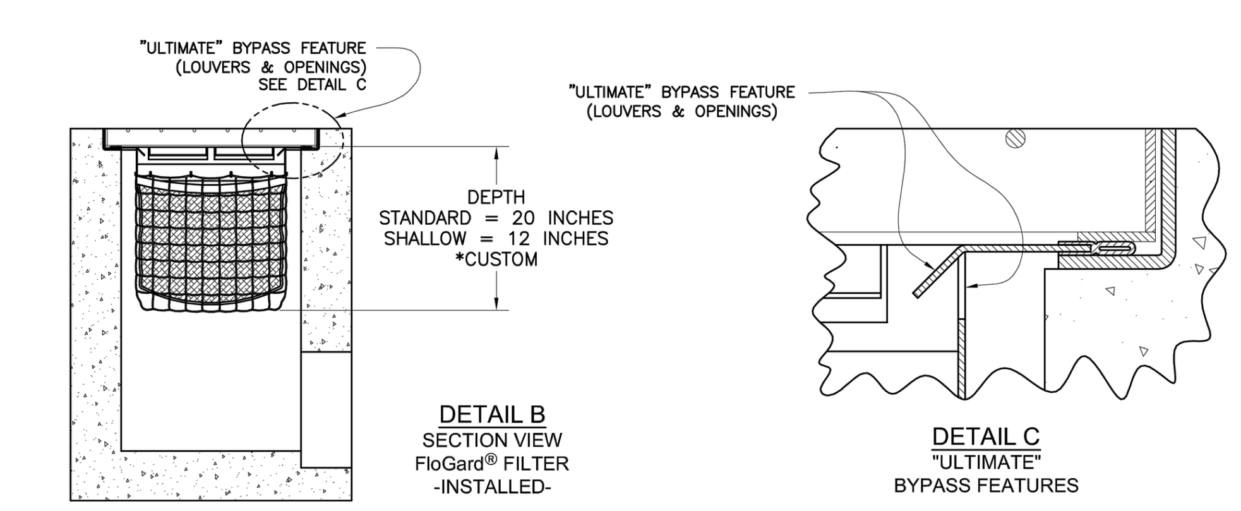
FloGard® *Catch Basin Insert Filter* *Grated Inlet Style*

Oldcastle® Stormwater Solutions
7921 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

FGP-0001 | G | ECO-0142 JPR 7/13/16 | JPR 11/3/06 | SHEET 1 OF 2

FGP-0001

U.S. PATENT # 6,00,023 & 6,877,029



* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

SPECIFIER CHART

MODEL NO. STANDARD DEPTH	STANDARD & SHALLOW DEPTH (Data in these columes is the same for both STANDARD & SHALLOW versions)			STANDARD DEPTH -20 Inches-		MODEL NO. SHALLOW DEPTH	SHALLOW DEPTH -12 Inches-	
	INLET ID Inside Dimension (inch x inch)	GRATE OD Outside Dimension (inch x inch)	TOTAL BYPASS CAPACITY (cu. ft. / sec.)	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)		SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25
FGP-16F	16 X 16	16 X 19	4.7	0.8	0.7	FGP-16F8	.45	.4
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4
FGP-1824F	16 X 22	18 X 24	5.0	1.5	1.2	FGP-1824F8	.85	.7
FGP-1836F	18 X 36	18 X 40	6.9	2.3	1.6	FGP-1836F8	1.3	.9
FGP-2024F	18 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55
FGP-21F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-21F8	1.25	.85
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35
FGP-28F	28 X 28	32 X 32	6.3	2.2	1.5	FGP-28F8	1.25	.85
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0	FGP-30F8	2.05	1.15
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25
FGP-SD24F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-SD24F8	1.25	.85

FloGard® *Catch Basin Insert Filter* *Grated Inlet Style*

Oldcastle® Stormwater Solutions
7921 Southpark Plaza, Suite 200 | Littleton, CO | 80120 | Ph: 800.579.8819 | oldcastlestormwater.com

FGP-0001 | G | ECO-0142 JPR 7/13/16 | JPR 11/3/06 | SHEET 2 OF 2

FLOGARD CATCH BASIN INSERT FILTER (6 / C1.11)

NTS

REGISTERED PROFESSIONAL ENGINEER SARAH K. CURRAN No. C69620 CIVIL STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
CONTRACTOR					
INSPECTOR					
DATE COMPLETED					

BENCH MARK
THE BENCHMARK USED FOR THIS SURVEY IS GPS STATION "FP7" PER RECORD OF SURVEY 20986, BEING A STANDARD STREET SURVEY MONUMENT, M-10 WITH PUNCH ONLY.
ELEVATION: 355.96 FEET FROM ROS 20986, FOR THE PURPOSES OF THIS SURVEY IT IS 356.05 FEET.
DATUM: NAVD88

SCALE — HORIZ: AS SHOW — VERT: AS SHOW

DESIGNED BY	DRAWN BY	CHECKED BY
SKC	GPY	EH

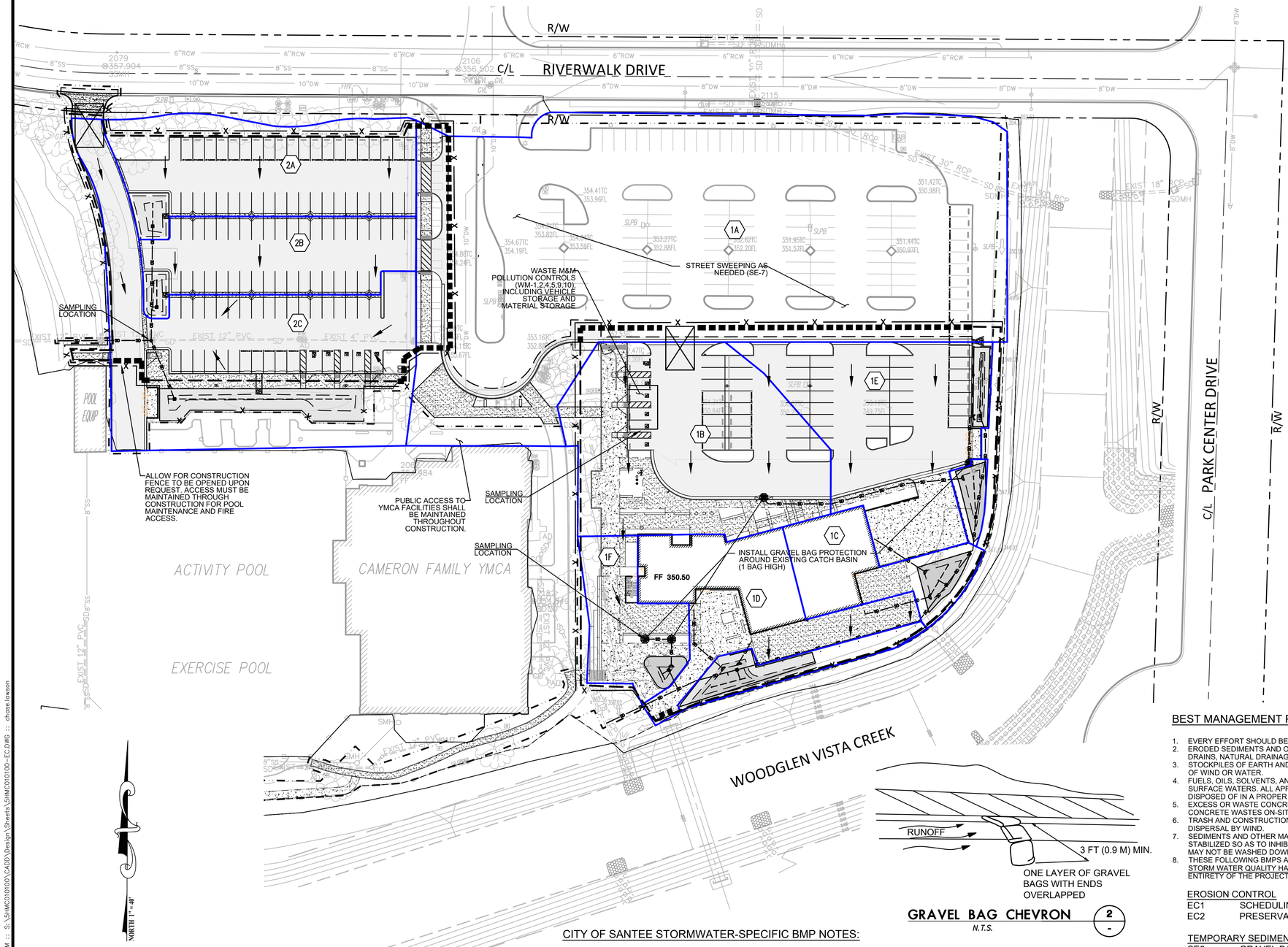
PLANS PREPARED UNDER THE SUPERVISION OF SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED ____
BY ____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR:
SANTEE COMMUNITY CENTER
CIVIL DETAILS

CITY W.O. NO. CIP 2018-31
DRAWING NO. C1.11
SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31



NORTH 1" = 40'

40' 0' 40' 80' 120'

GRAPHIC SCALE
1 INCH = 40 FEET

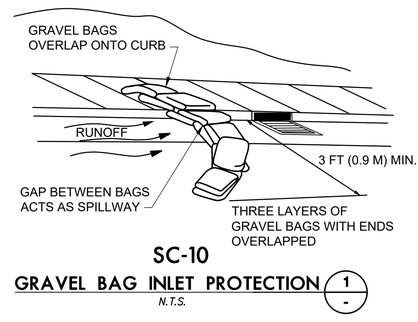
DIGALERT 811
Call 2 Full Working Days In Advance

LEGEND

- INSTALL CONTINUOUS SILT FENCE PER CALTRANS CONSTRUCTION SITE BMP MANUAL (2017) SC-1
- INSTALL CONTINUOUS GRAVEL BAG CHECK DAM ON TOP OF EXISTING PAVEMENT (NO GAPS) (SE-6)
- INSTALL GRAVEL BAG INLET PROTECTION AT ALL INLETS EXPOSED TO CONSTRUCTION RUNOFF PER DETAIL THIS SHEET. (SE-10)
- LIMITS OF WORK
- INSTALL TEMPORARY CONSTRUCTION FENCING. MAINTAIN 4' MINIMUM WALKWAY CLEARANCE WHERE FENCE IS INSTALLED ON SIDEWALK. AREAS OF SOIL DISTURBANCE TO BE LIMITED TO WITHIN THE PROPOSED FENCE LINE.
- 351 — PROPOSED CONTOUR
- XX.X — PROPOSED SPOT ELEVATION
- 351 — EXISTING CONTOUR
- XX.XXX — EXISTING SPOT ELEVATION
- EXISTING TREE
- FLOW ARROW
- CONSTRUCTION ENTRANCE PER CALTRANS C9ONSTRUCTION SITE BMP MANUAL (2017) (TC-1)
- 1A — PROPOSED DRAINAGE MANAGEMENT AREA (DMA). SEE PROPOSED DMA EXHIBIT FOR MORE DETAIL.

GENERAL NOTES

1. REFER TO THE LATEST EDITION OF THE CALIFORNIA STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK FOR THE BMP OUTLINED ON THIS PLAN.
2. INSTALL INLET PROTECTION ON ALL EXISTING INLETS PRIOR TO DEMOLITION.
3. SAMPLING LOCATIONS SHOWN MAY BE MODIFIED IN THE FIELD DURING STORM EVENTS AT THE DISCRETION OF THE QSP.
4. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.



SC-10
GRAVEL BAG INLET PROTECTION 1/-
N.T.S.

GRAVEL BAG CHEVRON 2/-
N.T.S.

BEST MANAGEMENT PRACTICES:

1. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES.
2. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
3. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
4. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
7. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
8. THESE FOLLOWING BMPS AS OUTLINED IN, BUT NOT LIMITED TO, THE LATEST EDITION OF THE CASQA CONSTRUCTION BMP ONLINE HANDBOOK OR CALTRANS STORM WATER QUALITY HANDBOOKS (CONSTRUCTION SITE BMP MANUAL) MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT AND APPLY TO THE ENTIRETY OF THE PROJECT SITE.

EROSION CONTROL
- EC1 SCHEDULING
- EC2 PRESERVATION OF EXISTING VEGETATION

TEMPORARY SEDIMENT CONTROL
- SE6 GRAVEL BAG BERM
- SE7 STREET SWEEPING
- SE8 SANDBAG BARRIER
- SE10 TEMPORARY DRAINAGE INLET PROTECTION

WIND EROSION CONTROL
- WE1 WIND EROSION CONTROL

WASTE MANAGEMENT & MATERIAL POLLUTION CONTROL
- WM1 MATERIAL DELIVERY AND STORAGE
- WM2 MATERIAL USE
- WM3 STOCKPILE MANAGEMENT
- WM4 SPILL PREVENTION AND CONTROL
- WM5 SOLID WASTE MANAGEMENT
- WM9 SANITARY/SEPTIC WASTE MANAGEMENT
- WM10 LIQUID WASTE MANAGEMENT

EQUIPMENT TRACKING CONTROL
- TC1 TEMPORARY CONSTRUCTION ENTRANCE/EXIT

NON-STORMWATER MANAGEMENT
- NS1 WATER CONSERVATION PRACTICES
- NS3 PAVING AND GRINDING OPERATIONS
- NS6 ILLICIT CONNECTION/DISCHARGE
- NS7 POTABLE WATER/IRRIGATION
- NS8 VEHICLE AND EQUIPMENT CLEANING
- NS9 VEHICLE AND EQUIPMENT FUELING
- NS10 VEHICLE AND EQUIPMENT MAINTENANCE
- NS15 DEMOLITION ADJACENT TO WATER

CITY OF SANTEE STORMWATER-SPECIFIC BMP NOTES:

THIS PROJECT SHALL COMPLY WITH ALL REQUIREMENTS OF THE CITY OF SANTEE AND STATE OF CALIFORNIA WATER QUALITY CONTROL BOARD, SAN DIEGO REGION

1. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMPs) DURING ALL PHASES OF CONSTRUCTION.
2. SUFFICIENT BMPs MUST BE INSTALLED TO PREVENT SILT, MUD, OR OTHER CONSTRUCTION DEBRIS FROM BEING TRACKED INTO THE ADJACENT STREET(S) OR STORM WATER CONVEYANCE SYSTEMS DUE TO CONSTRUCTION VEHICLES OR ANY OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ANY SUCH DEBRIS THAT MAY BE IN THE STREET OR CONVEYANCE SYSTEM AT THE ENDS OF EACH WORK DAY OR AFTER A STORM EVENT THAT CAUSED A BREECH IN THE INSTALLED CONSTRUCTION BMPs.
3. STORM WATER POLLUTION PREVENTION DEVICES AND OR PRACTICES SHALL BE MODIFIED AS NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS. IF AT ANY TIME, BMPs ARE FOUND TO BE INTENTIONALLY DISABLED, RUN-OVER, REMOVED, OR OTHERWISE INEFFECTIVE, THEY SHALL BE MODIFIED AND REPLACED IMMEDIATELY.
4. TRASH AND CONSTRUCTION SOLID WASTES SHALL BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OR RAINWATER AND DISPERSAL BY WIND. THE STORAGE OF ALL CONSTRUCTION MATERIALS AND CONSTRUCTION WASTES MUST BE PROTECTED AGAINST THE POTENTIAL RELEASE OF POLLUTANTS INTO THE ENVIRONMENT.
5. A CONCRETE WASHOUT SHALL BE PROVIDED ON ALL PROJECTS WHICH PROPOSE THE CONSTRUCTION OF ANY CONCRETE IMPROVEMENTS THAT ARE TO BE POURED IN PLACE ON THE SITE.
6. ALL BMPs SHALL BE MAINTAINED IN WORKING ORDER AT ALL TIMES. ALL SLOPES THAT ARE CREATED OR DISTURBED BY CONSTRUCTION ACTIVITY MUST BE PROTECTED AGAINST EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.
7. IF TRENCHING/DIGGING ACTIVITIES ARE NOT COMPLETED WITHIN ONE DAY, PROPER BMPs WILL BE IMPLEMENTED.
8. IF DEBRIS OR MATERIALS WILL BE STORED FOR LONGER THAN ONE DAY, PROPER BMPs WILL BE IMPLEMENTED.

REGISTERED PROFESSIONAL ENGINEER — SARAH K. CURRAN — CIVIL — STATE OF CALIFORNIA

CONSTRUCTION RECORD	REFERENCES	DATE	BY	REVISIONS	ACPTD
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INSPECTOR					
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PLANS PREPARED UNDER THE SUPERVISION OF
SARAH CURRAN DATE 04/04/2025
RCE NO. C69620 EXPIRES 06/30/2026

REVIEWED _____
BY _____ PROJECT ENGINEER

CITY OF SANTEE — DEPARTMENT OF DEVELOPMENT SERVICES
IMPROVEMENT PLANS FOR: SANTEE COMMUNITY CENTER
EROSION CONTROL PLAN

CITY W.O. NO. CIP 2018-31

DRAWING NO. C1.12

SHEET X OF X

IMPROVEMENT PLANS - SANTEE COMMUNITY CENTER, CIP 2018-31

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