

APPENDIX Q

Major Stormwater Management Plan

Major Stormwater Management Plan (Major SWMP)

For

Warner Ranch

(SP06-002, GPA06-009, R06-011, P06-016, TM5508)

Preparation/Revision Date:

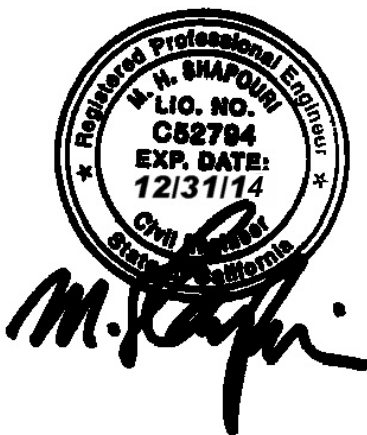
~~March 25, 2011~~

~~November 4, 2011~~

February 27, 2013

Prepared for:

*WHP Warner Ranch L.P
1545 Faraday Ave.
Carlsbad, CA 92008*



Prepared by:

*M.H. Shapouri, RCE C52794
Shapouri & Associates
PO Box 676221
Rancho Santa Fe, CA 92067
(858) 756-8340*

The selection, sizing, and preliminary design of stormwater treatment and other control measures in this plan have been prepared under the direction of the following Registered Civil Engineer and meet the requirements of Regional Water Quality Control Board Order R9-2007-0001 and subsequent amendments.

M.H. Shapouri, RCE #C52794

02-27-2013

~~11-4-2011~~
Date

OWNER'S CERTIFICATION

This project-specific Major Stormwater Management Plan (Major SWMP) has been prepared for Warner Ranch L.P. by Shapouri & Associates for the Warner Ranch project located in north San Diego County approximately 5 mile east of Interstate 15 along Pala Road/State Route 76.

This Major SWMP is intended to comply with the requirements of The County of San Diego for TM 5508, which includes the requirement for the preparation and implementation of a project-specific Major SWMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation of this Major SWMP and will ensure that this Major SWMP is amended as appropriate to reflect up-to-date conditions on the site. This Major SWMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this Major SWMP. At least one copy of this Major SWMP will be maintained at the project site or project office in perpetuity.

The undersigned is authorized to certify and to approve implementation of this Major SWMP. The undersigned is aware that implementation of this Major SWMP is enforceable under the County of San Diego Watershed Protection Ordinance (Municipal Ordinance No. 9926).

If the undersigned transfers its interest in the subject property/project, the undersigned shall notify the successor in interest in writing of its responsibility to implement this SWMP and maintain post-construction Best Management Practices (BMPs) in perpetuity. The undersigned shall provide the Department of Public Works, Watershed Protection Program with a copy of the signed notification, including the name, address, and contact information of the successor.

"I, the undersigned, certify under penalty of law that the provisions of this Major SWMP have been reviewed and accepted and that the Major SWMP and BMP maintenance requirements will be transferred to future successors in interest."

Owner's Signature

Date

WHP Warner Ranch L.P

Owner's Printed Name

Owner's Title/Position

Street Address 1545 Faraday
City, State Zip Carlsbad, CA 92008
Telephone: (760) 804-6900
E-Mail: hayden@capstoneadvisors.com

The Major Stormwater Management Plan (Major SWMP) must be completed in its entirety and accompany applications to the County for a permit or approval associated with certain types of development projects. To determine whether your project is required to submit a Major or Minor SWMP, please reference the County's Stormwater Intake Form for Development Projects.

Project Name:	<i>Warner Ranch</i>
Project Location:	<i>Pala Road/State Route 76</i>
Permit Number (Land Development Projects):	<i>SPA06-002, TM 5508, P06-016, STP 11-007</i>
Work Authorization Number (CIP only):	
Applicant:	<i>Mr. Mark Hayden</i>
Applicant's Address:	<i>1545 Faraday Ave., Carlsbad, CA 92008</i>
Plan Prepared By (<i>Leave blank if same as applicant</i>):	<i>Shapouri & Associates</i>
Preparer's Address:	<i>PO Box 676221, Rancho Santa Fe, CA 92067</i>
Date:	<i>February 27, 2013</i>

The County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance (WPO) (Ordinance No. 9926) requires all applications for a permit or approval associated with a Land Disturbance Activity to be accompanied by a Storm Water Management Plan (SWMP) (section 67.806.b). The purpose of the SWMP is to describe how the project will minimize the short and long-term impacts on receiving water quality. Projects that meet the criteria for a priority development project are required to prepare a Major SWMP.

Since the SWMP is a living document, revisions may be necessary during various stages of approval by the County. Please provide the approval information requested below.

Project Stages	Does the SWMP need revisions?		If YES, Provide Revision Date
	YES	NO	

Instructions for a Major SWMP can be downloaded at
<http://www.sdcounty.ca.gov/dpw/watersheds/susmp/susmp.html>

Completion of the following checklists and attachments will fulfill the requirements of a Major SWMP for the project listed above.

STEP 1

PRIORITY DEVELOPMENT PROJECT DETERMINATION

TABLE 1: IS THE PROJECT IN ANY OF THESE CATEGORIES?

Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	A	Housing subdivisions of 10 or more dwelling units. Examples: single-family homes, multi-family homes, condominiums, and apartments.
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	B	Commercial—greater than one acre. Any development other than heavy industry or residential. Examples: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	C	Heavy industry—greater than one acre. Examples: manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	D	Automotive repair shops. A facility categorized in any one of Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, or 7536-7539.
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	E	Restaurants. Any facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirements and hydromodification requirements.
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	F	Hillside development greater than 5,000 square feet. Any development that creates 5,000 square feet of impervious surface and is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	G	Environmentally Sensitive Areas (ESAs). All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. “Directly adjacent” means situated within 200 feet of the ESA. “Discharging directly to” means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	H	Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff.
Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	I	Street, roads, highways, and freeways. Any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	J	Retail Gasoline Outlets (RGOs) that are: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

To use the table, review each definition A through K. If any of the definitions match, the project is a Priority Development Project. Note some thresholds are defined by square footage of impervious area created; others by the total area of the development. Please see special requirements for previously developed sites and project exemptions on page 6 of the County SUSMP.

STEP 2

PROJECT STORMWATER QUALITY DETERMINATION

Total Project Site Area approximately 513.49 acres.

Estimated amount of disturbed acreage: ± 145.76 acres

(If >1 acre, you must also provide a WDID number from the SWRCB) WDID: _____

Complete A through C and the calculations below to determine the amount of impervious surface on your project before and after construction.

A. Total size of project site: approximately 513.49 acres.

B. Total impervious area (including roof tops) before construction ± 2.5 acres

C. Total impervious area (including roof tops) after construction _ ± 70.6 acres

Calculate percent impervious before construction: $B/A = \frac{0.5}{513.49} \%$

Calculate percent impervious after construction: $C/A = \frac{13.8}{513.49} \%$

Please provide detailed descriptions regarding the following questions:

TABLE 2: PROJECT SPECIFIC STORMWATER ANALYSIS

1.	Please provide a brief description of the project.	
	<i>See Attachment/Narrative below.</i>	
2.	Describe the current and proposed zoning and land use designation.	
	<i>See Attachment/Narrative below.</i>	
3.	Describe the pre-project and post-project topography of the project. (Show on Plan)	
	<i>See Attachment/Narrative below.</i>	
4.	Describe the soil classification, permeability, erodibility, and depth to groundwater for LID and Treatment BMP consideration. (Show on Plan) If infiltration BMPs are proposed, a Geotechnical Engineer must certify infiltration BMPs in Attachment E.	
	<i>See Attachment/Narrative below.</i>	
5.	Describe if contaminated or hazardous soils are within the project area. (Show on Plan)	
	N/A	
6.	Describe the existing site drainage and natural hydrologic features. (Show on Plan).	
	<i>See Attachment/Narrative below.</i>	
7.	Describe site features and conditions that constrain, or provide opportunities for stormwater control, such as LID features.	
	<i>See Attachment/Narrative below.</i>	
8.	Is this project within the environmentally sensitive areas as defined on the maps in Appendix A of the <i>County of San Diego Standard Urban Storm Water Mitigation Plan for Land Development and Public Improvement Projects</i> ?	
	Yes	No
9.	Is this an emergency project?	
	Yes	No

Project Specific Stormwater Analysis Description

Project Description

The project area consists of 780 residential units (534 single family detached, with lot size ranging from 3,000 sq. ft. 8,000 sq. ft., and 246 multi-family and attached townhomes)

- 7.7 acres of Private community parks, including a clubhouse
- 14.54 acres of Landscaped areas
- 4.23 acres of Public recreational park
- 359.05 acres of Preserved open space
- 10,000 sq. ft. On-site fire station

The proposed Warner Ranch Project is located in the unincorporated area in the northwestern portion of San Diego County, approximately five miles east of Interstate 15 on Pala Road (State Route (SR) 76). It is just west of Pala Temecula Road in the Pala Pauma Subregional Planning Area (Figures 1.38 and 1.39). It includes Assessor's Parcel Numbers (APNs) 110-021-09 and 10; 110-090-01, -17, -18; 110-021-32; and 110-040-22. Mostly agricultural areas are located along the western and southern boundary of the site. The project site consists of 513.49 acres situated between two small bodies (Gomez and Pala Creek) of intermittently flowing water on both sides.

Zoning and Land Use Designation

The proposed Zone Reclassification includes changing the current A70 and A72 zones to S88 (Specific Plan Area zoning); and S80 Open Space Zone for all preserved and recreational open space lands.

Topography

The Site is characterized by diverse topography with elevation ranging 350 feet to 1,000 feet above mean sea level; however, the entire basin study reaches a high elevation of 1,950. The northern portion of the site is generally depicted as moderate to steep slopes. The area contains a variety of vegetation types, including Chaparral and Coastal Sage Scrub, as well as habitats supporting a wide range of sensitive plants and animals. The

southern portion of the site is relatively flat and presently contains orchards, as well as a network of unimproved roads.

Site Drainage

The project site is situated between two small bodies (Gomez and Pala Creek) of intermittently flowing water on both sides. Gomez Creek runs through the western portion of the Project, and Pala Creek traverses through the eastern side, however, no disturbance is proposed within the Pala Creek basin. The total study area (Gomez Creek) is approximate 4,113 acres.

Soil Classification

Per Geocon Incorporated, "site soils and geologic condition study", dated March 3, 2011, top soils at the majority of the site consist of, "loose, silty, fine to coarse sands" and "gravelly medium to coarse sands". Actual percolation rates will be determined after the proposed grading is completed.

Site LID Features and Conditions

All eligible site design/source control/LID/Treatment BMPs have been considered to reduce stormwater runoff pollution and erosion control to the maximum extent practicable, such as the design of stormwater flow from parking lots/sidewalks/building to drain through proposed landscaping/vegetated swales/bioretenction/dry detention areas. Pre-existing sheet flow paths are proposed to be preserved and retained to the maximum extent practicable by designing the project outflow to the existing natural drainage path. Given the proposed land use and space constraints of the project site, it was determined that the use of bioretention/vegetated swales/dry detention as treatment BMPs, when used in conjunction with various LID/site design/source control BMPs, would be sufficient to minimize water quality pollution, erosion and sedimentation/siltation.

CHANNELS & DRAINAGES

Complete the following checklist to determine if the project includes work in channels.

TABLE 3: CHANNEL& DRAINAGE ANALYSIS

No.	CRITERIA	YES	NO	N/A	COMMENTS
1.	Will the project include work in channels?		✓		If YES go to 2 If NO go to 13.
2.	Will the project increase velocity or volume of downstream flow?				If YES go to 6.
3.	Will the project discharge to unlined channels?				If YES go to 6.
4.	Will the project increase potential sediment load of downstream flow?				If YES go to 6.
5.	Will the project encroach, cross, realign, or cause other hydraulic changes to a stream that may affect downstream channel stability?				If YES go to 8.
6.	Review channel lining materials and design for stream bank erosion.				Continue to 7.
7.	Consider channel erosion control measures within the project limits as well as downstream. Consider scour velocity.				Continue to 8.
8.	Include, where appropriate, energy dissipation devices at culverts.				Continue to 9.
9.	Ensure all transitions between culvert outlets/headwalls/wingwalls and channels are smooth to reduce turbulence and scour.				Continue to 10.
10.	Include, if appropriate, detention facilities to reduce peak discharges.				Continue to 11.
11.	“Hardening“ natural downstream areas to prevent erosion is not an acceptable technique for protecting channel slopes, unless pre-development conditions are determined to be so erosive that hardening would be required even in the absence of the proposed development.				Continue to 12.
12.	Provide other design principles that are comparable and equally effective.				Continue to 13.
13.	End				

TEMPORARY CONSTRUCTION BMPs

Please check the construction BMPs that may be implemented during construction of the project. The applicant will be responsible for the placement and maintenance of the BMPs incorporated into the final project design.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Silt Fence | <input type="checkbox"/> Desilting Basin |
| <input checked="" type="checkbox"/> Fiber Rolls | <input checked="" type="checkbox"/> Gravel Bag Berm |
| <input checked="" type="checkbox"/> Street Sweeping and Vacuuming | <input type="checkbox"/> Sandbag Barrier |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input checked="" type="checkbox"/> Material Delivery and Storage |
| <input checked="" type="checkbox"/> Stockpile Management | <input checked="" type="checkbox"/> Spill Prevention and Control |
| <input checked="" type="checkbox"/> Solid Waste Management | <input checked="" type="checkbox"/> Concrete Waste Management |
| <input checked="" type="checkbox"/> Stabilized Construction Entrance/Exit | <input checked="" type="checkbox"/> Water Conservation Practices |
| <input type="checkbox"/> Dewatering Operations | <input checked="" type="checkbox"/> Paving and Grinding Operations |
| <input type="checkbox"/> Vehicle and Equipment Maintenance | |
| <input checked="" type="checkbox"/> Any minor slopes created incidental to construction and not subject to a major or minor grading permit shall be protected by covering with plastic or tarp prior to a rain event, and shall have vegetative cover reestablished within 180 days of completion of the slope and prior to final building approval. | |

EXCEPTIONAL THREAT TO WATER QUALITY DETERMINATION

Complete the checklist below to determine if a proposed project will pose an “exceptional threat to water quality,” and therefore require Advanced Treatment Best Management Practices during the construction phase.

TABLE 4: EXCEPTIONAL THREAT TO WATER QUALITY DETERMINATION

No.	CRITERIA	YES	NO	INFORMATION
1.	Is all or part of the proposed project site within 200 feet of waters named on the Clean Water Act (CWA) Section 303(d) list of Water Quality Limited Segments as impaired for sedimentation and/or turbidity? Current 303d list may be obtained from the following site: http://www.swrcb.ca.gov/tmdl/docs/303dlists2006/approved/r9_06_303d_reqtmdls.pdf		✓	If YES, continue to 2. If NO, go to 5.
2.	Will the project disturb more than 5 acres, including all phases of the development?			If YES, continue to 3. If NO, go to 5.
3.	Will the project disturb slopes that are steeper than 4:1 (horizontal: vertical) with at least 10 feet of relief, and that drain toward the 303(d) listed receiving water for sedimentation and/or turbidity?			If YES, continue to 4. If NO, go to 5.
4.	Will the project disturb soils with a predominance of USDA-NRCS Erosion factors k_f greater than or equal to 0.4?			If YES, continue to 6. If NO, go to 5.
5.	Project is not required to use Advanced Treatment BMPs.	✓		Document for Project Files by referencing this checklist.
6.	Project poses an “exceptional threat to water quality” and is required to use Advanced Treatment BMPs.			Advanced Treatment BMPs must be consistent with WPO section 67.811(b)(20)(D) performance criteria

Exemption potentially available for projects that require advanced treatment: Project proponent may perform a Revised Universal Soil Loss Equation, Version 2 (RUSLE 2), Modified Universal Soil Loss Equation (MUSLE), or similar analysis that shows to the County official’s satisfaction that advanced treatment is not required

2006 CWA SECTION 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS REQUIRING TMDLS

SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

USEPA APPROVAL DATE: JUNE 28, 2007

REGION TYPE	NAME	CALWATER WATERSHED	POLLUTANT/STRESSOR	POTENTIAL SOURCES	ESTIMATED SIZE AFFECTED	PROPOSED TMDL COMPLETION
9	E	San Elijo Lagoon	Eutrophic <i>Estimated size of impairment is 330 acres.</i>	Nonpoint/Point Source	566 Acres	2019
			Indicator bacteria <i>Estimated size of impairment is 150 acres.</i>	Nonpoint/Point Source	566 Acres	2008
			Sedimentation/Siltation <i>Estimated size of impairment is 150 acres.</i>	Nonpoint/Point Source	566 Acres	2019
9	R	San Juan Creek	DDE		1 Miles	2019
			Indicator bacteria	Source Unknown	1 Miles	2005
9	E	San Juan Creek (mouth)	Indicator bacteria	Nonpoint/Point Source	6.3 Acres	2008
9	R	San Luis Rey River	Chloride <i>Impairment located at lower 13 miles.</i>	Urban Runoff/Storm Sewers Unknown Nonpoint Source Unknown point source	19 Miles	2019

STEP 3

HYDROMODIFICATION DETERMINATION

The following questions provide a guide to collecting information relevant to hydromodification management plan (HMP) issues. If the project is exempt from the HMP criteria, please provide the supporting documentation in Attachment H. Please reference the full descriptions of the HMP exemptions located in Figure 1-1 of the County SUSMP.

TABLE 5: HYDROMODIFICATION DETERMINATION

	QUESTIONS	YES	NO	Information
1.	Will the project reduce the pre-project impervious area and are the unmitigated post-project outflows (outflows without detention routing) to each outlet location less as compared to the pre-project condition?		✓	If NO, continue to 2. If YES, go to 7.
2.	Would the project site discharge runoff directly to an exempt receiving water, such as the Pacific Ocean, San Diego Bay, an exempt reservoir, or a tidally-influenced area?		✓	If NO, continue to 3. If YES, go to 7.
3.	Would the project site discharge to a stabilized conveyance system, which has the capacity for the ultimate Q_{10} , and extends to the Pacific Ocean, San Diego Bay, a tidally-influenced area, an exempt river reach or reservoir?		✓	If NO, continue to 4. If YES, go to 7.
4.	Does the contributing watershed area to which the project discharges have an impervious area percentage greater than 70 percent?		✓	If NO, continue to 5. If YES, go to 7.
5.	Is this an urban infill project which discharges to an existing hardened or rehabilitated conveyance system that extends beyond the “domain of analysis,” where the potential for cumulative impacts in the watershed are low, and the ultimate receiving channel has a “Low” susceptibility to erosion as defined in the SCCWRP channel assessment tool?		✓	If NO, continue to 6. If YES, go to 7.
6.	Project is required to manage hydromodification impacts.	✓		Reference Appendix G “Hydromodification Management Plan” of the County SUSMP.
7.	Project is not required to manage hydromodification impacts.			Hydromodification Exempt. Keep on file.

STEP 4

POLLUTANTS OF CONCERN DETERMINATION

WATERSHED

Please check the watershed(s) for the project.

<input type="checkbox"/> San Juan 901	<input type="checkbox"/> Santa Margarita 902	<input checked="" type="checkbox"/> San Luis Rey 903	<input type="checkbox"/> Carlsbad 904
<input type="checkbox"/> San Dieguito 905	<input type="checkbox"/> Penasquitos 906	<input type="checkbox"/> San Diego 907	<input type="checkbox"/> Sweetwater 909
<input type="checkbox"/> Otay 910	<input type="checkbox"/> Tijuana 911	<input type="checkbox"/> Whitewater 719*	<input type="checkbox"/> Clark 720*
<input type="checkbox"/> West Salton 721*	<input type="checkbox"/> Anza Borrego 722*	<input type="checkbox"/> Imperial 723*	

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

*Projects located fully within these watersheds require only a Minor SWMP.

HYDROLOGIC SUB-AREA NAME AND BASIN NUMBER(S)

Basin Number	Sub-Area Name
903.21	<i>Pala Hydrologic Unit Subarea of the Monserate Hydrologic Area of the San Luis Rey Hydrologic Unit</i>

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

SURFACE WATERS that each project discharge point proposes to discharge to.

SURFACE WATERS (river, creek, stream, etc.)	Hydrologic Unit Basin Number	Impairment(s) listed [303(d) listed waters or waters with established TMDLs]. List the impairments identified in Table 7 .	Distance to Project
<i>Gomez Creek</i>	<i>903.21</i>	<i>No Impairments of concern*</i>	<i>+125 feet</i>

http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303dlists2006/epa/r9_06_303d_reqtmlds.pdf

GROUND WATERS

Ground Waters	Hydrologic Unit Basin Number	MUN	AGR	IND	PROC	GWR	FRESH	POW	REC1	REC2	BIOL	WARM	COLD	WILD	RARE	SPWN
<i>Gomez Creek</i>	<i>903.21</i>	<i>X</i>	<i>X</i>	<i>X</i>					<i>X</i>	<i>X</i>		<i>X</i>	<i>X</i>	<i>X</i>		

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml

+ Excepted from Municipal

● Existing Beneficial Use

○ Potential Beneficial Use

*Secondary pollutants of concern as project does not exhibit any impairments, since post-project runoff discharge rates and durations due not exceed estimated pre-project discharge rates and durations where the increased discharge rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, therefore no primary pollutants of concern.

Table 2-2. BENEFICIAL USES OF INLAND SURFACE WATERS

Inland Surface Waters ^{1, 2}	Hydrologic Unit Basin Number	BENEFICIAL USE														
		M U N	A G R	I N D	P R O C	G W R	F R S H	P O W	R E C 1	R E C 2	B I O L	W A R M	C O L D	W I L D	R A R E	S P W N
San Luis Rey River Watershed - continued																
Chimney Creek	3.22	●	●	●				●	●	●			●	●		
French Creek	3.22	●	●	●				●	●	●			●	●		●
Lion Creek	3.22	●	●	●				●	●	●			●	●		●
Harrison Canyon	3.22	●	●	●				●	●	●			●	●		●
Jaybird Creek	3.22	●	●	●				●	●	●			●	●		
Frey Creek	3.22	●	●	●				●	●	●			●	●		
Agua Tibia Creek	3.22	●	●	●				●	●	●			●	●		●
San Luis Rey River	3.21	●	●	●					●	●			●	●		
Marion Canyon	3.21	●	●	●					●	●			●	●		
Magee Creek	3.21	●	●	●					●	●			●	●		
Castro Canyon	3.21	●	●	●					●	●			●	●		
Trujillo Creek	3.21	●	●	●					●	●			●	●		
Pala Creek	3.21	●	●	●					●	●			●	●		●
Gomez Creek	3.21	●	●	●					●	●			●	●		
Couser Canyon	3.21	●	●	●					●	●			●	●		
Double Canyon	3.21	●	●	●					●	●			●	●		
Rice Canyon	3.21	●	●	●					●	●			●	●		

● Existing Beneficial Use

¹ Waterbodies are listed multiple times if they cross hydrologic area or sub area boundaries.

² Beneficial use designations apply to all tributaries to the indicated waterbody, if not listed separately.

Table 2-3. BENEFICIAL USES OF COASTAL WATERS

Coastal Waters	Hydrologic Unit Basin Number	BENEFICIAL USE														
		I N D	N A V	R E C 1	R E C 2	C O M M	B I O L	E S T	W I L D	R A R E	M A R	A Q U A	M I G R	S P W N	W A R M	S H E L L
Pacific Ocean		●	●	●	●	●	●		●	●	●	●	●	●		●
Dana Point Harbor		●	●	●	●	●			●	●	●		●	●		●
Del Mar Boat Basin		●	●	●	●	●			●	●	●		●	●		●
Mission Bay		●		●	●	●		●	●	●			●	●		●
Oceanside Harbor		●	●	●	●	●			●	●	●		●	●		●
San Diego Bay ^{1, 3}		●	●	●	●	●	●	●	●	●			●	●		●
Coastal Lagoons																
Tijuana River Estuary	11.11			●	●	●	●		●	●			●	●		●
Mouth of San Diego River	7.11			●	●	●		●	●	●			●	●		●
Famosa Slough and Channel	7.11			●	●	●		●	●	●			●	●		●
Los Penasquitos Lagoon ²	6.10			●	●		●	●	●	●			●	●		●
San Dieguito Lagoon	5.11			●	●		●	●	●	●			●	●		
Batiquitos Lagoon	4.51			●	●		●	●	●	●			●	●		
San Elijo Lagoon	4.61			●	●		●	●	●	●			●	●		
Agua Hedionda Lagoon	4.31	●		●	●	●	●	●	●	●			●	●		●

¹ Includes the tidal prisms of the Otay and Sweetwater Rivers.

² Fishing from shore or boat permitted, but other water contact recreational (REC-1) uses are prohibited.

³ The Shelter Island Yacht Basin portion of San Diego Bay is designated as an impaired water body for dissolved copper pursuant to Clean Water Act section 303(d). A Total Maximum Daily Load (TMDL) has been adopted to address this impairment. See Chapter 3, Water Quality Objectives for Pesticides, Toxicity and Toxic Pollutants and Chapter 4, Total Maximum Daily Loads.

- Existing Beneficial Use

PROJECT ANTICIPATED AND POTENTIAL POLLUTANTS

Using Table 6, identify pollutants that are anticipated to be generated from the proposed priority project categories. Pollutants associated with any hazardous material sites that have been remediated or are not threatened by the proposed project are not considered a pollutant of concern.

TABLE 6: ANTICIPATED AND POTENTIAL POLLUTANTS GENERATED BY LAND USE TYPE

PDP Categories	General Pollutant Categories								
	Sediments	Nutrients	Heavy Metals	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Oil & Grease	Bacteria & Viruses	Pesticides
Detached Residential Development	X	X			X	X	X	X	X
Attached Residential Development	X	X			X	P ⁽¹⁾	P ⁽²⁾	P	X
Commercial Development 1 acre or greater	P ⁽¹⁾	P ⁽¹⁾		P ⁽²⁾	X	P ⁽⁵⁾	X	P ⁽³⁾	P ⁽⁵⁾
Heavy industry /industrial development	X		X	X	X	X	X		
Automotive Repair Shops			X	X ⁽⁴⁾⁽⁵⁾	X		X		
Restaurants					X	X	X	X	
Hillside Development >5,000 ft ²	X	X			X	X	X		X
Parking Lots	P ⁽¹⁾	P ⁽¹⁾	X		X	P ⁽¹⁾	X		P ⁽¹⁾
Retail Gasoline Outlets			X	X	X	X	X		
Streets, Highways & Freeways	X	P ⁽¹⁾	X	X ⁽⁴⁾	X	P ⁽⁵⁾	X		

X = anticipated

P = potential

(1) A potential pollutant if landscaping exists on-site.

(2) A potential pollutant if the project includes uncovered parking areas.

(3) A potential pollutant if land use involves food or animal waste products.

(4) Including petroleum hydrocarbons.

(5) Including solvents.

PROJECT POLLUTANTS OF CONCERN SUMMARY TABLE

Please summarize the identified project pollutant of concern by checking the appropriate boxes in the table below and list any surface water impairments identified. Pollutants anticipated to be generated by the project, which are also causing impairment of receiving waters, shall be considered the primary pollutants of concern. For projects where no primary pollutants of concern exist, those pollutants identified as anticipated shall be considered secondary pollutants of concern.

TABLE 7: PROJECT POLLUTANTS OF CONCERN

Pollutant Category	Anticipated (X)	Potential (P)	Surface Water Impairments
Sediments	✓*		N/A
Nutrients	✓*		N/A
Heavy Metals	✓*		N/A
Organic Compounds	✓*		N/A
Trash & Debris	✓*		N/A
Oxygen Demanding Substances	✓*		N/A
Oil & Grease	✓*		N/A
Bacteria & Viruses	✓*		N/A
Pesticides	✓*		N/A

**Secondary pollutants of concern as project does not exhibit any impairments, since post-project runoff discharge rates and durations due not exceed estimated pre-project discharge rates and durations where the increased discharge rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, therefore no primary pollutants of concern. (Refer to "Hydromodification Study" for TM 5508rpl4)*

STEP 5

LID AND SITE DESIGN STRATEGIES

Each numbered item below is a Low Impact Development (LID) requirement of the WPO. Please check the box(s) under each number that best describes the LID BMP(s) and Site Design Strategies selected for this project. LID BMPs selected on this table will be typically represented as a self-retaining area, self-treating area, pervious pavement and greenroof, which, should be delineated in the Drainage Management Area map in Attachment C.

TABLE 8: LID AND SITE DESIGN

1. Conserve natural Areas, Soils, and Vegetation
<input checked="" type="checkbox"/> Preserve well draining soils (Type A or B)
<input checked="" type="checkbox"/> Preserve Significant Trees
<input type="checkbox"/> Preserve critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions
<input checked="" type="checkbox"/> Other. Description: <i>The project area includes an open space buffer easement for the biological open space preserve located in the northern area of the project.</i>
2. Minimize Disturbance to Natural Drainages
<input checked="" type="checkbox"/> Set-back development envelope from drainages
<input type="checkbox"/> Restrict heavy construction equipment access to planned green/open space areas
<input type="checkbox"/> Other. Description:
3. Minimize and Disconnect Impervious Surfaces (see 5)
<input type="checkbox"/> Clustered Lot Design
<input checked="" type="checkbox"/> Items checked in 5
<input type="checkbox"/> Other. Description:
4. Minimize Soil Compaction
<input checked="" type="checkbox"/> Restrict heavy construction equipment access to planned green/open space areas
<input checked="" type="checkbox"/> Re-till soils compacted by construction vehicles/equipment
<input type="checkbox"/> Collect & re-use upper soil layers of development site containing organic materials
<input type="checkbox"/> Other. Description:
5. Drain Runoff from Impervious Surfaces to Pervious Areas
<u>LID Street & Road Design</u>
<input checked="" type="checkbox"/> Curb-cuts to landscaping
<input type="checkbox"/> Rural Swales
<input type="checkbox"/> Concave Median
<input type="checkbox"/> Cul-de-sac Landscaping Design
<input type="checkbox"/> Other. Description:

<u>LID Parking Lot Design</u>	
<input type="checkbox"/>	Permeable Pavements
<input checked="" type="checkbox"/>	Curb-cuts to landscaping
<input checked="" type="checkbox"/>	Other. Description: <i>Parking areas will drain into proposed bioretention/vegetated swale areas prior to outflow into existing spillway and eventually off-site into natural open space buffer area.</i>
<u>LID Driveway, Sidewalk, Bike-path Design</u>	
<input type="checkbox"/>	Permeable Pavements
<input checked="" type="checkbox"/>	Pitch pavements toward landscaping
<input checked="" type="checkbox"/>	Other. Description: <i>Sidewalks and pathways shall drain through proposed bioretention areas/vegetated swales prior to outflow into existing natural open space buffer area(s).</i>
<u>LID Building Design</u>	
<input type="checkbox"/>	Cisterns & Rain Barrels
<input type="checkbox"/>	Downspout to swale or landscaping
<input type="checkbox"/>	Vegetated Roofs
<input checked="" type="checkbox"/>	Other. Description: <i>Structural runoff is designed to drain into proposed bioretention areas/vegetated swales prior to outflow off-site into existing natural open space buffer area(s).</i>
<u>LID Landscaping Design</u>	
<input checked="" type="checkbox"/>	Soil Amendments
<input checked="" type="checkbox"/>	Reuse of Native Soils
<input checked="" type="checkbox"/>	Smart Irrigation Systems
<input checked="" type="checkbox"/>	Street Trees
<input checked="" type="checkbox"/>	Other. Description: <i>Structural/impervious perimeter landscaping shall provide additional (in)filtration prior to flow into detention ponds/vegetated swales.</i>
6. Minimize erosion from slopes	
<input checked="" type="checkbox"/>	Disturb existing slopes only when necessary
<input type="checkbox"/>	Minimize cut and fill areas to reduce slope lengths
<input type="checkbox"/>	Incorporate retaining walls to reduce steepness of slopes or to shorten slopes
<input checked="" type="checkbox"/>	Provide benches or terraces on high cut and fill slopes to reduce concentration of flows
<input checked="" type="checkbox"/>	Rounding and shaping slopes to reduce concentrated flow
<input checked="" type="checkbox"/>	Collect concentrated flows in stabilized drains and channels
<input type="checkbox"/>	Other. Description:

STEP 6

SOURCE CONTROL

Please complete the checklist on the following pages to determine Source Control BMPs. Below is instruction on how to use the checklist. (Also see instructions on page 60 of the *SUSMP*)

1. Review Column 1 and identify which of these potential sources of stormwater pollutants apply to your site. Check each box that applies and list in Table 9.
2. Review Column 2 and incorporate all of the corresponding applicable BMPs in your Source Control Exhibit in Attachment B.
3. Review Columns 3 and 4 and incorporate all of the corresponding applicable permanent controls and operational BMPs into Table 9.
4. Use the format in Table 9 below to summarize the project Source Control BMPs. Incorporate all identified Source Control BMPs in your Source Control Exhibit in Attachment B.

TABLE 9: PROJECT SOURCE CONTROL BMPS

<i>Potential source of runoff pollutants</i>	<i>Permanent source control BMPs</i>	<i>Operational source control BMPs</i>
On-Site storm drain inlets	See description below	& attachment B & C
Landscape/Outdoor pesticide use	See description below	& attachment B & C
Pools, Ponds and other water features	See description below	& attachment B & C
Roofing, gutters and trims	See description below	& attachment B & C
Plazas, sidewalks and parking lots	See description below	& attachment B & C

Describe your specific Source Control BMPs in an accompanying narrative, and explain any special conditions or situations that required omitting Source Control BMPs or substituting alternatives.

The project's potential sources of runoff pollutants were identified via Column 1 of the Source Control BMP checklist (Appendix E) and appropriate permanent/operational control BMPs were selected from columns 2/3/4 of the checklist. Please refer to said checklist below for reference.

IF THESE SOURCES WILL BE ON THE PROJECT SITE THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants – List in Table 9	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in Table 9 and Narrative	4 Operational BMPs—Include in Table 9 and Narrative
<input checked="" type="checkbox"/> A. On-site storm drain inlets	<input checked="" type="checkbox"/> Locations of inlets.	<input checked="" type="checkbox"/> Mark all inlets with the words “No Dumping! Flows to Bay” or similar where feasible.	<input checked="" type="checkbox"/> Maintain and periodically repaint or replace inlet markings. <input checked="" type="checkbox"/> Provide stormwater pollution prevention information to new site owners, lessees, or operators. <input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com <input type="checkbox"/> Include the following in lease agreements: “Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains.”
<input type="checkbox"/> B. Interior floor drains and elevator shaft sump pumps		<input type="checkbox"/> State that interior floor drains and elevator shaft sump pumps will be plumbed to sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.
<input type="checkbox"/> C. Interior parking garages		<input type="checkbox"/> State that parking garage floor drains will be plumbed to the sanitary sewer.	<input type="checkbox"/> Inspect and maintain drains to prevent blockages and overflow.

IF THESE SOURCES WILL BE ON THE PROJECT SITE THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants – List in Table 9	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in Table 9 and Narrative	4 Operational BMPs—Include in Table 9 and Narrative
<input type="checkbox"/> D1. Need for future indoor & structural pest control		<input type="checkbox"/> Note building design features that discourage entry of pests.	<input type="checkbox"/> Provide Integrated Pest Management information to owners, lessees, and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants – List in Table 9	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in Table 9 and Narrative	4 Operational BMPs—Include in Table 9 and Narrative
<input checked="" type="checkbox"/> D2. Landscape/ Outdoor Pesticide Use <u>Note: Should be consistent with project landscape plan (if applicable).</u>	<input checked="" type="checkbox"/> Show locations of native trees or areas of shrubs and ground cover to be undisturbed and retained. <input checked="" type="checkbox"/> Show self-retaining landscape areas, if any. <input checked="" type="checkbox"/> Show stormwater treatment facilities.	<p>State that final landscape plans will accomplish all of the following:</p> <input checked="" type="checkbox"/> Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. <input checked="" type="checkbox"/> Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. <input checked="" type="checkbox"/> Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. <input checked="" type="checkbox"/> Consider using pest-resistant plants, especially adjacent to hardscape. <input checked="" type="checkbox"/> To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	<input checked="" type="checkbox"/> Maintain landscaping using minimum or no pesticides. <input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-41, “Building and Grounds Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com <input type="checkbox"/> Provide IPM information to new owners, lessees and operators.

IF THESE SOURCES WILL BE ON THE PROJECT SITE THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants – List in Table 9	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in Table 9 and Narrative	4 Operational BMPs—Include in Table 9 and Narrative
<input checked="" type="checkbox"/> E. Pools, spas, ponds, decorative fountains, and other water features.	<input checked="" type="checkbox"/> Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet.	<input checked="" type="checkbox"/> If the local municipality requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.	<input checked="" type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-72, “Fountain and Pool Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
<input type="checkbox"/> F. Food service	<input type="checkbox"/> For restaurants, grocery stores, and other food service operations, show location (indoors or in a covered area outdoors) of a floor sink or other area for cleaning floor mats, containers, and equipment. <input type="checkbox"/> On the drawing, show a note that this drain will be connected to a grease interceptor before discharging to the sanitary sewer.	<input type="checkbox"/> Describe the location and features of the designated cleaning area. <input type="checkbox"/> Describe the items to be cleaned in this facility and how it has been sized to insure that the largest items can be accommodated.	<input type="checkbox"/>

IF THESE SOURCES WILL BE ON THE PROJECT SITE THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants – List in Table 9	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in Table 9 and Narrative	4 Operational BMPs—Include in Table 9 and Narrative
<input type="checkbox"/> G. Refuse areas	<input type="checkbox"/> Show where site refuse and recycled materials will be handled and stored for pickup. See local municipal requirements for sizes and other details of refuse areas. <input type="checkbox"/> If dumpsters or other receptacles are outdoors, show how the designated area will be covered, graded, and paved to prevent run-on and show locations of berms to prevent runoff from the area. <input type="checkbox"/> Any drains from dumpsters, compactors, and tallow bin areas shall be connected to a grease removal device before discharge to sanitary sewer.	<input type="checkbox"/> State how site refuse will be handled and provide supporting detail to what is shown on plans. <input type="checkbox"/> State that signs will be posted on or near dumpsters with the words “Do not dump hazardous materials here” or similar.	<input type="checkbox"/> State how the following will be implemented: Provide adequate number of receptacles. Inspect receptacles regularly; repair or replace leaky receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post “no hazardous materials” signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on-site. See Fact Sheet SC-34, “Waste Handling and Disposal” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
<input type="checkbox"/> H. Industrial processes.	<input type="checkbox"/> Show process area.	<input type="checkbox"/> If industrial processes are to be located on site, state: “All process activities to be performed indoors. No processes to drain to exterior or to storm drain system.”	<input type="checkbox"/> See Fact Sheet SC-10, “Non-Stormwater Discharges” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

IF THESE SOURCES WILL BE ON THE PROJECT SITE THEN YOUR STORMWATER CONTROL PLAN SHOULD INCLUDE THESE SOURCE CONTROL BMPs		
1 Potential Sources of Runoff Pollutants – List in Table 9	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in Table 9 and Narrative	4 Operational BMPs—Include in Table 9 and Narrative
<input type="checkbox"/> I. Outdoor storage of equipment or materials. (See rows J and K for source control measures for vehicle cleaning, repair, and maintenance.)	<input type="checkbox"/> Show any outdoor storage areas, including how materials will be covered. Show how areas will be graded and bermed to prevent run-on or run-off from area. <input type="checkbox"/> Storage of non-hazardous liquids shall be covered by a roof and/or drain to the sanitary sewer system, and be contained by berms, dikes, liners, or vaults. <input type="checkbox"/> Storage of hazardous materials and wastes must be in compliance with the local hazardous materials ordinance and a Hazardous Materials Management Plan for the site.	<input type="checkbox"/> Include a detailed description of materials to be stored, storage areas, and structural features to prevent pollutants from entering storm drains. Where appropriate, reference documentation of compliance with the requirements of local Hazardous Materials Programs for: <ul style="list-style-type: none"> ▪ Hazardous Waste Generation ▪ Hazardous Materials Release Response and Inventory ▪ California Accidental Release (CalARP) ▪ Aboveground Storage Tank ▪ Uniform Fire Code Article 80 Section 103(b) & (c) 1991 ▪ Underground Storage Tank 	<input type="checkbox"/> See the Fact Sheets SC-31, “Outdoor Liquid Container Storage” and SC-33, “Outdoor Storage of Raw Materials ” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

<input type="checkbox"/> J. Vehicle and Equipment Cleaning	<input type="checkbox"/> Show on drawings as appropriate: (1) Commercial/industrial facilities having vehicle /equipment cleaning needs shall either provide a covered, bermed area for washing activities or discourage vehicle/equipment washing by removing hose bibs and installing signs prohibiting such uses. (2) Multi-dwelling complexes shall have a paved, bermed, and covered car wash area (unless car washing is prohibited on-site and hoses are provided with an automatic shut-off to discourage such use). (3) Washing areas for cars, vehicles, and equipment shall be paved, designed to prevent run-on to or runoff from the area, and plumbed to drain to the sanitary sewer. (4) Commercial car wash facilities shall be designed such that no runoff from the facility is discharged to the storm drain system. Wastewater from the facility shall discharge to the sanitary sewer, or a wastewater reclamation system shall be installed.	<input type="checkbox"/> If a car wash area is not provided, describe measures taken to discourage on-site car washing and explain how these will be enforced.	Describe operational measures to implement the following (if applicable): <input type="checkbox"/> Washwater from vehicle and equipment washing operations shall not be discharged to the storm drain system. <input type="checkbox"/> Car dealerships and similar may rinse cars with water only. <input type="checkbox"/> See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
--	--	--	--

<input type="checkbox"/> K. Vehicle/Equipment Repair and Maintenance	<input type="checkbox"/> Accommodate all vehicle equipment repair and maintenance indoors. Or designate an outdoor work area and design the area to prevent run-on and runoff of stormwater. <input type="checkbox"/> Show secondary containment for exterior work areas where motor oil, brake fluid, gasoline, diesel fuel, radiator fluid, acid-containing batteries or other hazardous materials or hazardous wastes are used or stored. Drains shall not be installed within the secondary containment areas. <input type="checkbox"/> Add a note on the plans that states either (1) there are no floor drains, or (2) floor drains are connected to wastewater pretreatment systems prior to discharge to the sanitary sewer and an industrial waste discharge permit will be obtained.	<input type="checkbox"/> State that no vehicle repair or maintenance will be done outdoors, or else describe the required features of the outdoor work area. <input type="checkbox"/> State that there are no floor drains or if there are floor drains, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements. <input type="checkbox"/> State that there are no tanks, containers or sinks to be used for parts cleaning or rinsing or, if there are, note the agency from which an industrial waste discharge permit will be obtained and that the design meets that agency's requirements.	<p>In the SUSMP report, note that all of the following restrictions apply to use the site:</p> <input type="checkbox"/> No person shall dispose of, nor permit the disposal, directly or indirectly of vehicle fluids, hazardous materials, or rinsewater from parts cleaning into storm drains. <p>No vehicle fluid removal shall be performed outside a building, nor on asphalt or ground surfaces, whether inside or outside a building, except in such a manner as to ensure that any spilled fluid will be in an area of secondary containment. Leaking vehicle fluids shall be contained or drained from the vehicle immediately.</p> <input type="checkbox"/> No person shall leave unattended drip parts or other open containers containing vehicle fluid, unless such containers are in use or in an area of secondary containment.
--	--	---	---

<p><input type="checkbox"/> L. Fuel Dispensing Areas</p>	<p><input type="checkbox"/> Fueling areas¹ shall have impermeable floors (i.e., portland cement concrete or equivalent smooth impervious surface) that are: a) graded at the minimum slope necessary to prevent ponding; and b) separated from the rest of the site by a grade break that prevents run-on of stormwater to the maximum extent practicable.</p> <p><input type="checkbox"/> Fueling areas shall be covered by a canopy that extends a minimum of ten feet in each direction from each pump. [Alternative: The fueling area must be covered and the cover's minimum dimensions must be equal to or greater than the area within the grade break or fuel dispensing area¹.] The canopy [or cover] shall not drain onto the fueling area.</p>		<p><input type="checkbox"/> The property owner shall dry sweep the fueling area routinely.</p> <p><input type="checkbox"/> See the Business Guide Sheet, "Automotive Service—Service Stations" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com</p>
--	---	--	--

¹ The fueling area shall be defined as the area extending a minimum of 6.5 feet from the corner of each fuel dispenser or the length at which the hose and nozzle assembly may be operated plus a minimum of one foot, whichever is greater.

<input type="checkbox"/> M. Loading Docks	<input type="checkbox"/> Show a preliminary design for the loading dock area, including roofing and drainage. Loading docks shall be covered and/or graded to minimize run-on to and runoff from the loading area. Roof downspouts shall be positioned to direct stormwater away from the loading area. Water from loading dock areas should be drained to the sanitary sewer where feasible. Direct connections to storm drains from depressed loading docks are prohibited. Loading dock areas draining directly to the sanitary sewer shall be equipped with a spill control valve or equivalent device, which <input type="checkbox"/> shall be kept closed during periods of operation. Provide a roof overhang over the loading area or install door skirts (cowling) at each bay that enclose the end of the trailer. <input type="checkbox"/>		<input type="checkbox"/> Move loaded and unloaded items indoors as soon as possible. <input type="checkbox"/> See Fact Sheet SC-30, “Outdoor Loading and Unloading,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
<input type="checkbox"/> N. Fire Sprinkler Test Water		<input type="checkbox"/> Provide a means to drain fire sprinkler test water to the sanitary sewer.	<input type="checkbox"/> See the note in Fact Sheet SC-41, “Building and Grounds Maintenance,” in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com

<p>○. Miscellaneous Drain or Wash Water</p> <ul style="list-style-type: none"> <input type="checkbox"/> Boiler drain lines <input type="checkbox"/> Condensate drain lines <input type="checkbox"/> Rooftop equipment <input type="checkbox"/> Drainage sumps <input checked="" type="checkbox"/> Roofing, gutters, and trim. 		<ul style="list-style-type: none"> <input type="checkbox"/> Boiler drain lines shall be directly or indirectly connected to the sanitary sewer system and may not discharge to the storm drain system. <input type="checkbox"/> Condensate drain lines may discharge to landscaped areas if the flow is small enough that runoff will not occur. Condensate drain lines may not discharge to the storm drain system. <p>Rooftop mounted equipment with potential to produce pollutants shall be roofed and/or have secondary containment.</p> <p>Any drainage sumps on-site shall feature a sediment sump to reduce the quantity of sediment in pumped water.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff. <input checked="" type="checkbox"/> 	
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> P. Plazas, sidewalks, and parking lots. 			<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Plazas, sidewalks, and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing shall be collected to prevent entry into the storm drain system. Washwater containing any cleaning agent or degreaser shall be collected and discharged to the sanitary sewer and not discharged to a storm drain.

STEP 7

LID AND TREATMENT CONTROL SELECTION

A treatment control BMP and/or LID IMP must be selected to treat the project pollutants of concern identified in Table 7 “Project Pollutants of Concern”. A treatment control facility with a high or medium pollutant removal efficiency for the project’s most significant pollutant of concern shall be selected. It is recommended to use the design procedure in Chapter 4 of the SUSMP to meet NPDES permit LID requirements, treatment requirements, and flow control requirements. If your project does not utilize this approach, the project will need to demonstrate compliance with LID, treatment and hydromodification flow control requirements. Review Chapter 2 “Selection of Stormwater Treatment Facilities” in the SUSMP to assist in determining the appropriate treatment facility for your project.

Will this project be utilizing the unified LID design procedure as described in Chapter 4 of the Local SUSMP? <i>(If yes, please document in Attachment D following the steps in Chapter 4 of the County SUSMP)</i>	
Yes	No
If this project is not utilizing the unified LID design procedure, please describe how the alternative treatment facilities will comply with applicable LID criteria, stormwater treatment criteria, and hydromodification management criteria.	

- Indicate the project pollutants of concern (POCs) from Table 7 in Column 2 below.

TABLE 10: GROUPING OF POTENTIAL POLLUTANTS of Concern (POCs) by fate during stormwater treatment

Pollutant	Check Project Specific POCs	Coarse Sediment and Trash	Pollutants that tend to associate with fine particles during treatment	Pollutants that tend to be dissolved following treatment
Sediment	X *	X	X	
Nutrients	X *		X	X
Heavy Metals	X *		X	
Organic Compounds	X *		X	
Trash & Debris	X *	X		
Oxygen Demanding	X *		X	
Bacteria	X *		X	
Oil & Grease	X *		X	
Pesticides	X *		X	

**Secondary pollutants of concern as project does not exhibit any impairments, since post-project runoff discharge rates and durations due not exceed estimated pre-project discharge rates and durations where the increased discharge rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses, therefore no primary pollutants of concern. (Refer to "Hydromodification Study" for TM 5508rpl4)*

- Indicate the treatment facility(s) chosen for this project in the following table.

TABLE 11: GROUPS OF POLLUTANTS and relative effectiveness of treatment facilities

Pollutants of Concern	Bioretention Facilities (LID)	Settling Basins (Dry Ponds)	Wet Ponds and Constructed Wetlands	Infiltration Devices (LID)	Media Filters	Higher-rate biofilters	Higher-rate media filters	Trash Racks & Hydro-dynamic Devices	Vegetated Swales
Coarse Sediment and Trash	High	High	High	High	High	High	High	High	High
Pollutants that tend to associate with fine particles during treatment	High	High	High	High	High	Medium	Medium	Low	Medium
Pollutants that tend to be dissolved following treatment	Medium	Low	Medium	High	Low	Low	Low	Low	Low

- Please check the box(s) that best describes the Treatment Control BMP(s) and/or LID IMP selected for this project. Please check if the treatment facility is designed for water quality or hydromodification flow control.

TABLE 12: PROJECT LID AND TC-BMPS

LID and TC-BMP Type	Water Quality Treatment Only	Hydromodification Flow Control
Bioretention Facilities (LID)		
<input checked="" type="checkbox"/> Bioretention area		<input checked="" type="checkbox"/>
<input type="checkbox"/> Flow-through Planter		
<input type="checkbox"/> Cistern with Bioretention		
Settling Basins (Dry Ponds)		
<input checked="" type="checkbox"/> Extended/dry detention basin with grass/vegetated lining		<input checked="" type="checkbox"/>
<input type="checkbox"/> Extended/dry detention basin with impervious lining		
Infiltration Devices (LID)		
<input type="checkbox"/> Infiltration basin		
<input type="checkbox"/> Infiltration trench		
<input type="checkbox"/> Other _____		

Wet Ponds and Constructed Wetlands		
<input type="checkbox"/> Wet pond/basin (permanent pool)		
<input type="checkbox"/> Constructed wetland		
Vegetated Swales (LID⁽¹⁾)		
<input checked="" type="checkbox"/> Vegetated Swale	✓	
Media Filters		
<input type="checkbox"/> Austin Sand Filter		
<input type="checkbox"/> Delaware Sand Filter		
<input type="checkbox"/> Multi-Chambered Treatment Train (MCTT)		
Higher-rate Biofilters		
<input type="checkbox"/> Tree-pit-style unit		
<input type="checkbox"/> Other _____		
Higher-rate Media Filters		
<input type="checkbox"/> Vault-based filtration unit with replaceable cartridges		
<input type="checkbox"/> Other _____		
Hydrodynamic Separator Systems		
<input type="checkbox"/> Swirl Concentrator		
<input type="checkbox"/> Cyclone Separator		
Trash Racks		
<input checked="" type="checkbox"/> Catch Basin Insert	✓	
<input type="checkbox"/> Catch Basin Insert w/ Hydrocarbon boom		
<input type="checkbox"/> Other _____		

⁽¹⁾ Must be designed per SUSMP “Vegetated Swales” design criteria for water quality treatment credit (p. 65).

For design guidelines and calculations refer to Chapter 4 “Low Impact Development Design Guide” in the SUSMP. Please show all calculations and design sheets for all treatment control BMPs proposed in Attachment D.

- Create a Construction Plan SWMP Checklist for your project.

Instructions on how to fill out table

1. Number and list each measure or BMP you have specified in your SWMP in Columns 1 and Maintenance Category in Column 3 of the table. Leave Column 2 blank.
2. When you submit construction plans, duplicate the table (by photocopy or electronically). Now fill in Column 2, identifying the plan sheets where the BMPs are shown. List all plan sheets on which the BMP appears. **This table must be shown on the front sheet of the grading and improvement plans.**

Stormwater Treatment Control BMPs and LID BMPs			
Description / Type	Sheet	Maintenance Category	Revisions
Bioretention Areas		2	
Vegetated Swales *		To be determined.	
Dry Detention Basins		2	
Landscape Areas		2	
Catch basin inserts (Trash Racks)		2	

BMP's approved as part of Stormwater Management Plan (SWMP) dated xx/xx/xx on file with DPW. Any changes to the above BMP's will require SWMP revision and Plan Change approvals.

** The BMPs (vegetated swale) servicing the public right-of-way (SR76) will ultimately be maintained by caltrans or the owner/HOA. Agreements for maintenance will be secured prior to issuance of building permit.*

- Please describe why the chosen treatment control BMP(s) was selected for this project. For projects utilizing a low performing BMP, please provide a **feasibility analysis** that demonstrates utilization of a treatment control BMP with a high or medium removal efficiency ranking is infeasible.

All eligible site design/source control/LID/Treatment BMPs have been considered to reduce stormwater runoff pollution and erosion control to the maximum extent practicable, such as the design of stormwater flow from parking lots/sidewalks/building to drain through proposed landscaping/vegetated swales/bioretenction/dry detention areas. Pre-existing sheet flow paths are proposed to be preserved and retained to the maximum extent practicable by designing the project outflow to the existing natural drainage path. Given the proposed land use and space constraints of the project site, it was determined that the use of bioretention/vegetated swales/dry detention as treatment BMPs, when used in conjunction with various LID/site design/source control BMPs, would be sufficient to minimize water quality pollution, erosion and sedimentation/siltation. The project's proposed Treatment BMPs are designated as High/Medium for the secondary pollutants of concern. The treatment & LID BMPs were chosen because they are relatively low cost and they can be easily maintained by homeowners/HOA.

Please provide the sizing design calculations for each Drainage Management Area in Attachment D. Guidelines for design calculations are located in Chapter 4 of the County SUSMP. To assist in these calculations a BMP sizing calculator is available for use at the following location: http://www.projectcleanwater.org/html/wg_susmp.html

STEP 8

OPERATION AND MAINTENANCE

- Please check the box that best describes the maintenance mechanism(s) for this project.

TABLE 13: PROJECT BMP CATEGORY

CATEGORY	SELECTED		BMP Description
	YES	NO	
First ¹			Bioretention, Dry Detention Ponds, Landscaping, Catch Basin Inserts (Trash Racks)
Second ²	✓		
Third ³			
Fourth ⁴			

Note:

1. A maintenance notification will be required.
 2. A recorded maintenance agreement and access easement will be required.
 3. The project will be required to establish or be included in a watershed specific Community Facility District (CFD) for long-term maintenance.
 4. The developer would be required to dedicate the BMP (and the property on which it is located and any necessary access) to the County.
- Please list all individual LID and Treatment Control BMPs (TC-BMPs) incorporated into the project. Please ensure the “BMP Identifier” is consistent with the legend in Attachment C “Drainage Management Area Exhibit”. Please attach the record plan sheets upon completion of project and amend the Major SWMP where appropriate. For each type of LID or TC-BMP provide an inspection sheet in Attachment F “Maintenance Plan”.

TABLE 14: PROJECT SPECIFIC LID AND TC-BMPs

BMP Identifier*: (Identifier to match TC-BMPs on TC-BMP Table.)	Type	Record Plan Page for TC-BMP	BMP Pollutant of Concern Efficiency (H,M,L)
Bioretention	LID 3.1.3.4/TC-32	H,H,M	
Dry Detention Pond	LID 3.1.2.1/TC-22	H,H,L	
Landscaping	LID 2.2.5	H,H,M	
Curb Cuts	LID 3.3.3	N/A	
Vegetated Swale**	LID 3.1.3.1/TC-30	H,M,L	
Catch Basin Inserts (Trash Racks)	N/A	N/A	

* For location of BMP's, see approved Record Plan dated XX/XX/XX, plan (TYPE) sheet (#)

** The BMPs (vegetated swale) servicing the public right-of-way (SR76) will ultimately be maintained by Caltrans or the owner/HOA. Agreements for maintenance will be secured prior to issuance of building permit.

➤ Responsible Party for Long-term Maintenance:

Identify the parties responsible for long-term maintenance of the BMPs identified above and Source Controls specified in Attachment B. Include the appropriate written agreement with the entities responsible for O&M in Attachment F. Please see Chapter 5 “Stormwater Facility Maintenance” of the County SUSMP for appropriate maintenance mechanisms.

Representative Name: <i>Mr. Mark Hayden</i>
Company Name: <i>WHP Warner Ranch, L.P.</i>
Phone Number: <i>(760) 804-6900</i>
Street Address: <i>1545 Faradav</i>
City/State/Zip: <i>Carlsbad, CA 92008</i>
Email Address: <i>hayden@capstoneadvisors.com</i>

➤ Funding Source:

Provide the funding source or sources for long-term operation and maintenance of each BMP identified above. Please see Chapter 5 “Stormwater Facility Maintenance” of the County SUSMP for the appropriate funding source options. By certifying the Major SWMP the applicant is certifying that the funding responsibilities have been addressed and will be transferred to future owners.

For Second BMP category, The Warner Ranch HOA shall be financially responsible for maintenance and inspection of all LID/BMPs proposed within the project. The BMPs (vegetated swale) servicing the public right-of-way (SR76) will ultimately be maintain by caltrans or the owner/HOA. Agreements for maintenance will be secure prior to issuance of building permit.

ATTACHMENTS

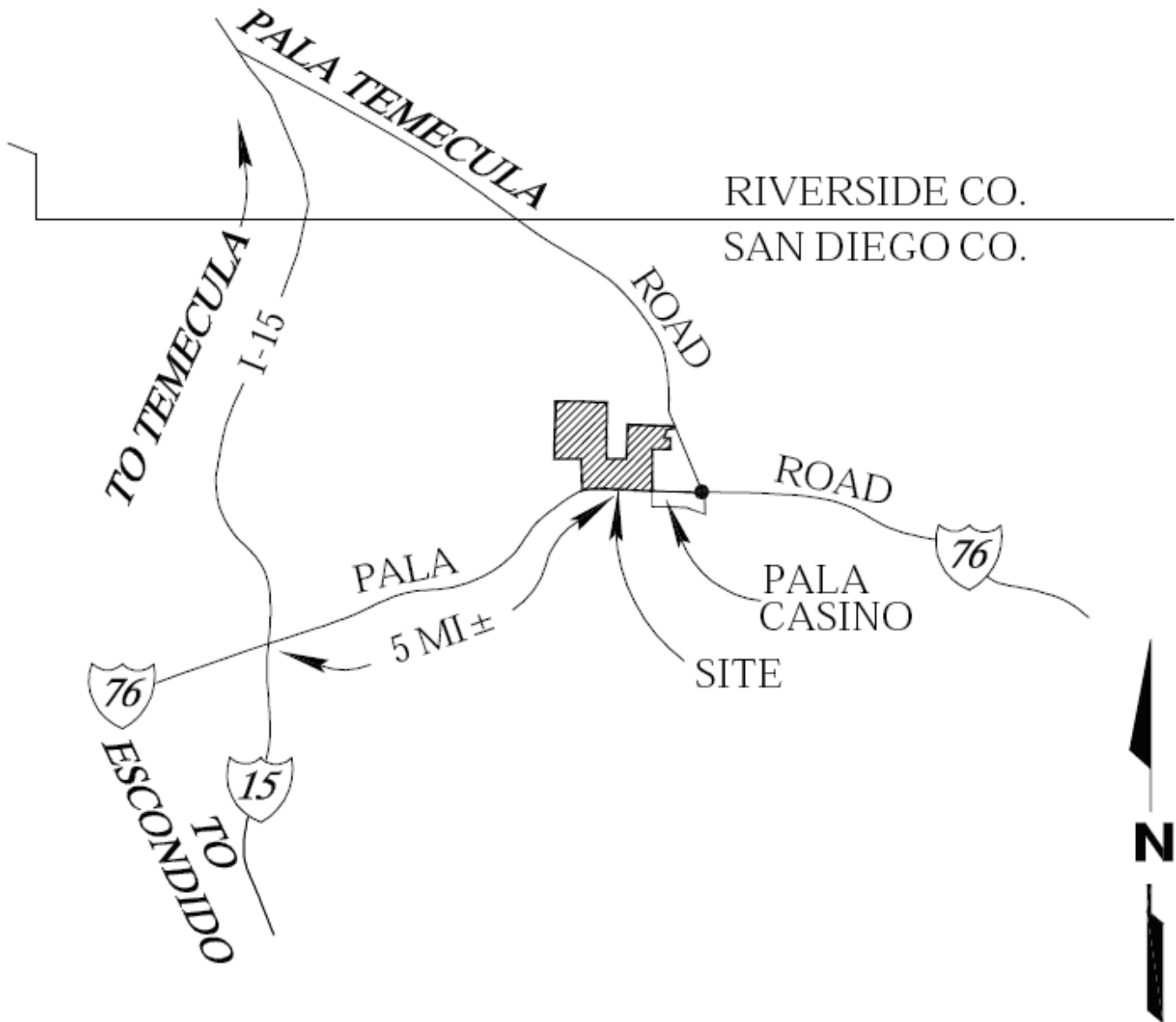
Please include the following attachments.

ATTACHMENT		COMPLETED	N/A
A	Project Location Map	✓	
B	Source Control Exhibit	✓	
C	Drainage Management Area (DMA) Exhibit	✓	
D	BMP Sizing Design Calculations (Water Quality and Hydromodification) and TC-BMP/IMP Design Details	✓	
E	Geotechnical Certification Sheet	✓	
F	Maintenance Plan	✓	
G	Treatment Control BMP Certification	✓	
H	HMP Exemption Documentation		✓
I	Addendum		✓

Note: Attachments B and C may be combined.

ATTACHMENT A

Project Location Map



ATTACHMENT B & C

**Source Control /
Drainage Management Area Exhibit**