

**Major Stormwater Management Plan  
(Major SWMP)  
For  
*LILAC HILLS RANCH-MASTER TM  
TM – 5571 RPL-5  
Valley Center, San Diego County, California***

**Preparation/Revision Date: 7-1-2015**

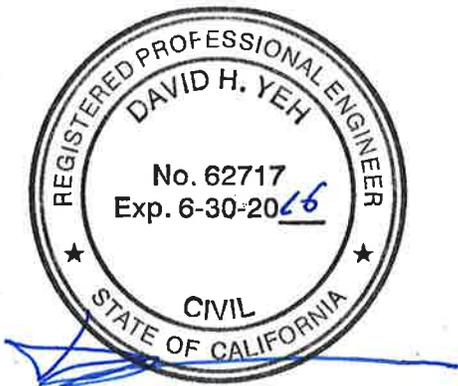
**Prepared for:**

Accretive Investments, Inc.  
12275 El Camino Real, Suite 110  
San Diego, Ca 92130

**Prepared by:**

Landmark Consulting  
9555 Genesee Ave. Ste. 200  
San Diego, Ca 92121  
858-587-8070

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.



David Yeh, RCE 62717, Exp 6-30- 16

7-1-2015

Date



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:	Lilac Hills Ranch,
Project Location:	S'y of W. Lilac Road, E'y of I-15
Permit Number (Land Development Projects):	TM 5571 RPL-3
Work Authorization Number ( <b>CIP only</b> ):	
Applicant:	Accretive Investments, Inc.
Applicant's Address:	12275 El Camino Real, Suite 110 San Diego, Ca 92130
Plan Prepared By ( <i>Leave blank if same as applicant</i> ):	Landmark Consulting
Preparer's Address:	9555 Genesee Ave. Ste. 200 San Diego, Ca 92121
Date:	5-3-13

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	
Revision			
Revision			
Revision			

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 type="checkbox"/>	No <input checked="" 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 type="checkbox"/>	No <input checked="" 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 **608.0 Acres**

Estimated amount of disturbed acreage: **440 Acres**

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

WDID: **Deferred to during final engineering**

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: **608.0 Acres**

B. Total impervious area (including roof tops) before construction **71 Acres**

C. Total impervious area (including roof tops) after construction **72 Acres**

Calculate percent impervious before construction:  $B/A = \underline{\underline{11.7\%}}$

Calculate percent impervious after construction:  $C/A = \underline{\underline{11.8\%}}$

Please provide detailed descriptions regarding the following questions:

TABLE 2: PROJECT SPECIFIC STORMWATER ANALYSIS

1.	Please provide a brief description of the project.
	The project is a master-planned community on approximately 608.0 acre rural land with existing estate type single-family homes, agriculture, some paved roads and some undisturbed natural areas, in the community of Valley Center and Bonsall, County of San Diego.
2.	Describe the current and proposed zoning and land use designation.
	The proposed development consists of the creating of 6 vacant lots and access roads for the eventual creation of a 1746 dwelling unit master planned community. The existing zoning is A70 and the proposed zoning consists of RU2, RU4, RU 7, RU 10, R10 and C34.
3.	Describe the pre-project and post-project topography of the project. (Show on Plan)
	<p>The project is located on the east side of Interstate 15, southerly of W. Lilac Road in the County of San Diego, State of California.</p> <p>Under the pre-project conditions, the overall project site is on a general north to south sloping terrain over rolling hills and valleys. There are a few existing rural estate type homes surrounded by crop land and agricultural buildings and green houses with access roads amongst natural trees and shrubs.</p> <p>The grading of the proposed development will follow the general land form with mass graded building pads.</p> <p><b>All storm water management for all offsite improvements will be addressed in later phases' implementing tentative maps.</b></p>
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.
	The site soil is classified as Type "C" as defined in the San Diego County Hydrology Manual and is characterized as having very slow infiltration rate when thoroughly wetted, Chiefly clays that have a high shrink-swell potential, soils that have a high permanent water table, soils that have a claypan or clay layer at or near the surface, or soils that are shallow over nearly impervious material. Rate of water transmission is very slow.
5.	Describe if contaminated or hazardous soils are within the project area. (Show on Plan)
	No contaminated or hazardous soils are encountered within the project area.
6.	Describe the existing site drainage and natural hydrologic features. (Show on Plan).
	<p>The project is located on the east side of Interstate 15, southerly of W. Lilac Road in the County of San Diego, State of California.</p> <p>Under the existing conditions, there are three sub-basins on the project site - the northerly, central and southerly sub-basins. The northerly sub-basin drains the southwesterly along a web of natural drainage channels and into a major natural channel</p>

along the westerly project boundary.

The central sub-basin also drains southwesterly and into the same westerly natural channel along the westerly project boundary, approximately 1000' southerly of the discharge point from the northerly sub-basin.

The southerly sub-basin drains westerly across the project site and into a tributary of the westerly natural channel.

Under the proposed conditions, the runoff pattern will be preserved where the runoff from the proposed pads and driveways will be designed to flow into the existing receiving sub-basin areas and be conveyed to the eventual discharge point exiting the site.

Existing drainage consists of natural swales and ravines that convey the runoff from the site southwesterly into a natural drainage channel that is tributary to San Luis Rey River.

7.	Describe site features and conditions that constrain, or provide opportunities for stormwater control, such as LID features.
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The project site is covered with heavy vegetation that prevent soil erosion from runoff discharge.

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> ?
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**No**

9.	Is this an emergency project?
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**No**

## CHANNELS & DRAINAGES

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

TABLE 3: PROJECT SPECIFIC STORMWATER ANALYSIS

No.	CRITERIA	YES	NO	N/A	COMMENTS
1.	Will the project include work in channels?		X		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	X			

### **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 checked="" 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 checked="" 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: <a href="http://www.swrcb.ca.gov/tmdl/docs/303dlists2006/approved/r9_06_303d_reqtmlds.pdf">http://www.swrcb.ca.gov/tmdl/docs/303dlists2006/approved/r9_06_303d_reqtmlds.pdf</a>		X	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.	X		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

## STEP 3

### HYDROMODIFICATION DETERMINATION

The following questions provide a guide to collecting information relevant to hydromodification management issues.

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?	X		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 <i>Q10</i> , 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.	X		Hydromodification Exempt. Keep on file.

**An exemption is potentially available for projects that are required (No. 5. in Table 5 above) to manage hydromodification impacts:** The project proponent may conduct an independent geomorphic study to determine the project's full hydromodification impact.

The study must incorporate sediment transport modeling across the range of geomorphically-significant flows and demonstrate to the County's satisfaction that the project flows and sediment reductions will not detrimentally affect the receiving water to qualify for the exemption.

## 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"/> <b>San Luis Rey 903</b>	<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](http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml)

#### HYDROLOGIC SUB-AREA NAME AND NUMBER(S)

Number	Name
903.11	Sub-area San Luis Rey River
903.12	Bonsall

[http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/basin\\_plan/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml)

**SURFACE WATERS** that each project discharge point proposes to discharge to. List the impairments identified in Table 7.

SURFACE WATERS (river, creek, stream, etc.)	Hydrologic Unit Basin Number	Impairment(s) listed [303(d) listed waters or waters with established TMDLs ]	Distance to Project
<b>San Luis Rey River</b>	903.1		Approximately 1.5miles south

[http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/docs/303dlists2006/epa/r9\\_06\\_303d\\_reqtmls.pdf](http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303dlists2006/epa/r9_06_303d_reqtmls.pdf)

#### GROUND WATERS

Ground Waters	Hydrologic Unit Basin Number	MUN	AGR	IND	PROC	GWR	FRESH	POW	REC1	REC2	BIOL	WARM	COLD	WILD	RARE	SPWN
<b>Lower San Luis</b>	903.1	●	●	●												

[http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/basin\\_plan/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml)

+ Excepted from Municipal

● Existing Beneficial Use

○ Potential 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

<i><b>PDP Categories</b></i>	<i><b>General Pollutant Categories</b></i>								
	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 <sup>(1)</sup>	P <sup>(2)</sup>	P	X
Commercial Development 1 acre or greater	P <sup>(1)</sup>	P <sup>(1)</sup>		P <sup>(2)</sup>	X	P <sup>(5)</sup>	X	P <sup>(3)</sup>	P <sup>(5)</sup>
Heavy industry /industrial development	X		X	X	X	X	X		
Automotive Repair Shops			X	X <sup>(4)(5)</sup>	X		X		
Restaurants					X	X	X	X	
<b>Hillside Development &gt;5,000 ft<sup>2</sup></b>	<b>X</b>	<b>X</b>			<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>
Parking Lots	P <sup>(1)</sup>	P <sup>(1)</sup>	X		X	P <sup>(1)</sup>	X		P <sup>(1)</sup>
Retail Gasoline Outlets			X	X	X	X	X		
<b>Streets, Highways &amp; Freeways</b>	<b>X</b>	<b>P<sup>(1)</sup></b>	<b>X</b>	<b>X<sup>(4)</sup></b>	<b>X</b>	<b>P<sup>(5)</sup></b>	<b>X</b>		

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

<b>Pollutant Category</b>	<b>Anticipated (X)</b>	<b>Potential (P)</b>	<b>Surface Water Impairments</b>
Sediments	X		
Nutrients	X		X
Heavy Metals	X		
Organic Compounds	X		
Trash & Debris	X		
Oxygen Demanding Substances	X		
Oil & Grease	X		
Bacteria & Viruses			
Pesticides	<u>X</u>		X



- Home
- Overview
- Planning Efforts
- Watersheds
  - San Juan
  - Santa Margarita
  - San Luis Rey
  - Carlsbad
  - San Dieguito
  - Penasquitos
  - San Diego
  - Pueblo
  - Sweetwater
  - Otay
  - Tijuana
- For Kids
- Report Dumping
- Search

## San Luis Rey River Watershed

Plan

Projects

Stewards



### Hydrologic Unit 903.11 - 903.32

<b>Hydrologic Areas:</b>	Lower San Luis 903.1 Monserate 903.2 Warner Valley 903.3
<b>Major Water Bodies:</b>	San Luis Rey River and Lake Henshaw
<b>CWA 303(d) List:</b>	Pacific Ocean shoreline: indicator bacteria; San Luis Rey River (lower 13 miles): chloride; San Luis Rey River (lower 19 miles): total dissolved solids.
<b>Major Impacts:</b>	Surface water quality degradation, habitat loss, invasive species, channel bed erosion
<b>Constituents of Concern:</b>	Indicator bacteria and nutrients
<b>Sources / Activities:</b>	Agriculture, orchards, livestock, domestic animals, urban runoff, and septic systems

The San Luis Rey River Watershed is located in northern San Diego County. It is bordered to the north by the Santa Margarita River Watershed and to the south by the Carlsbad and San Dieguito River Watersheds. The San Luis Rey River originates in the Palomar and Hot Springs Mountains, both over 6,000 feet above mean sea level, as well as several other mountain ranges along the western border of the Anza Borrego Desert Park. The river extends over 55 miles across northern San Diego County forming a watershed with an area of approximately 360,000 acres or 562 square miles. The river ultimately discharges to the Pacific Ocean near the City of Oceanside. Of the nine major watersheds in the San Diego region, the San Luis Rey is the third



largest.

About half (49%) of the land in the watershed is privately owned, 37% is publicly owned, and the remaining 14% consists of six federally recognized Tribal Indian Reservations. In the western half of the watershed, private ownership dominates. Population centers include the City of Oceanside and the unincorporated communities of Fallbrook, Bonsall, and Valley Center. Moving east through the watershed, public lands become increasingly dominant. Over 54% of the land in the watershed is vacant or undeveloped. The next largest land uses in the watershed are residential (15%) and agriculture (14%). Principal agricultural uses include cattle grazing, nurseries, citrus groves, and avocado groves.

The watershed is comprised of three Hydrologic Areas (HAs), which have been delineated by the San Diego Regional Water Quality Control Board based on drainage patterns: Lower San Luis (HA 903.1), Monserate (HA 903.2), and Warner Valley (HA 903.3). The Warner Valley HA is upstream of Lake Henshaw, a reservoir owned and operated by the Vista Irrigation District. Water from the San Luis Rey River is diverted approximately ten miles downstream of Henshaw Dam to serve the municipal drinking water needs of customers in Escondido and Vista.

Beneficial water uses within the San Luis Rey Watershed as designated in the State Water Resources Control Board's [San Diego Region Basin Plan](#).

<b>Beneficial Uses</b>	<b>Inland Surface Water</b>	<b>Coastal Waters</b>	<b>Reservoirs and Lakes</b>	<b>Ground Water</b>
Municipal and Domestic Supply	<b>X</b>		<b>X</b>	<b>X</b>
Agricultural Supply	<b>X</b>		<b>X</b>	<b>X</b>
Industrial Service Supply	<b>X</b>		<b>X</b>	<b>X</b>
Industrial Process Supply			<b>X</b>	<b>X</b>
Hydropower Generation	<b>X</b>		<b>X</b>	
Navigation		<b>X</b>		
Freshwater Replenishment	<b>X</b>		<b>X</b>	<b>X</b>
Contact Water Recreation	<b>X</b>	<b>X</b>	<b>X</b>	
Non-Contact Water Recreation	<b>X</b>	<b>X</b>	<b>X</b>	
Commercial and Sport Fishing		<b>X</b>		
Biological Habitats of Special Signif.		<b>X</b>		
Warm Freshwater Habitat	<b>X</b>		<b>X</b>	
Cold Freshwater Habitat	<b>X</b>			
Wildlife Habitat	<b>X</b>	<b>X</b>	<b>X</b>	
Rare, Threatened, or End.	<b>X</b>	<b>X</b>	<b>X</b>	
Marine Habitat		<b>X</b>		
Migration of Aquatic Organisms		<b>X</b>		
Aquaculture		<b>X</b>		
Shellfish Harvesting		<b>X</b>		
Spawning, Reprod. and/ or Early Develop.		<b>X</b>		

## 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.

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 checked="" type="checkbox"/> Preserve critical (or problematic) areas such as floodplains, steep slopes, wetlands, and areas with erosive or unstable soil conditions
<input type="checkbox"/> Other. Description:
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 checked="" type="checkbox"/> Clustered Lot Design
<input 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
LID Street & Road Design
<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 checked="" type="checkbox"/> Other. Description: all runoff from streets and roadways are conveyed to proposed detention basins for settling and filtration prior to discharge off-site.
LID Parking Lot Design
<input type="checkbox"/> Permeable Pavements

<input type="checkbox"/>	Curb-cuts to landscaping
<input type="checkbox"/>	Other. Description:
LID Driveway, Sidewalk, Bike-path Design	
<input type="checkbox"/>	Permeable Pavements
<input type="checkbox"/>	Pitch pavements toward landscaping
<input type="checkbox"/>	Other. Description:
LID Building Design	
<input type="checkbox"/>	Cisterns & Rain Barrels
<input type="checkbox"/>	Downspout to swale
<input type="checkbox"/>	Vegetated Roofs
<input type="checkbox"/>	Other. Description:
LID Landscaping Design	
<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 type="checkbox"/>	Other. Description:
6.	Minimize erosion from slopes
<input checked="" type="checkbox"/>	Disturb existing slopes only when necessary
<input checked="" type="checkbox"/>	Minimize cut and fill areas to reduce slope lengths
<input checked="" 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	Mark all inlets with the words “No Dumping! Flows to Bay” or similar.	Maintain and periodically repaint or replace inlet markings Provided stormwater pollution prevention information to new site owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>
Landscape/Outdoor Pesticide Use	Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. 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. Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. Consider using pest-resistant plants, especially adjacent to hardscape. To insure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain,	Maintain landscaping using minimum or no pesticide use.

	land use, air movement, ecological consistency, and plant interactions.	
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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.

Once the site is mass graded, and before slope planting and pad stabilization is established, the disturbed areas should be hydroseeded and/or stabilized with BFM to prevent sediment generation and transport. The hydroseed mix should be native pest and drought tolerant species to reduce the amount of irrigation that can generate runoff and erosion, and the amount of pesticides and fertilizer that can be carried by the runoff to downstream water bodies. Due to large size of the site, people accessing the site may leave behind trash and debris that may accumulate at drain inlets and enter the storm drain and, subsequently, be conveyed to downstream water bodies. Prohibitive signs should be installed at the drain inlets to remind people not to leave trash, debris and other pollutants behind, especially near the inlets that can enter the drainage system. The site manager should be vigilant to keep the site clean, especially around drain inlets and prior and post runoff producing storms.

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	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table 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.	<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.  See applicable operational BMPs in Fact Sheet SC-44, “Drainage System Maintenance,” in the CASQA Stormwater Quality Handbooks at <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>  <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		
<p style="text-align: center;">1</p> <p>Potential Sources of Runoff Pollutants</p>	<p style="text-align: center;">2</p> <p>Permanent Controls—Show on Source Control Exhibit, Attachment B</p>	<p style="text-align: center;">3</p> <p>Permanent Controls—List in SUSMP Table and Narrative</p>	<p style="text-align: center;">4</p> <p>Operational BMPs—Include in SUSMP Table and Narrative</p>
<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	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
<input checked="" type="checkbox"/> D2. Landscape/ Outdoor Pesticide Use  Note: Should be consistent with project landscape plan (if applicable).	<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.	State that final landscape plans will accomplish all of the following:  <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 type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-41, “Building and Grounds Maintenance,” in the CASQA Stormwater Quality Handbooks at <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>  <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	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table and Narrative
<input type="checkbox"/> E. Pools, spas, ponds, decorative fountains, and other water features.	<input type="checkbox"/> Show location of water feature and a sanitary sewer cleanout in an accessible area within 10 feet.	<input 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 type="checkbox"/> See applicable operational BMPs in Fact Sheet SC-72, “Fountain and Pool Maintenance,” in the CASQA Stormwater Quality Handbooks at <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>
<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	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table 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 <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>
<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 <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>

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	2 Permanent Controls—Show on Source Control Exhibit, Attachment B	3 Permanent Controls—List in SUSMP Table and Narrative	4 Operational BMPs—Include in SUSMP Table 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"> <li>▪ Hazardous Waste Generation</li> <li>▪ Hazardous Materials Release Response and Inventory</li> <li>▪ California Accidental Release (CalARP)</li> <li>▪ Aboveground Storage Tank</li> <li>▪ Uniform Fire Code Article 80 Section 103(b) &amp; (c) 1991</li> <li>▪ Underground Storage Tank</li> </ul>	<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 <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>

<p><input type="checkbox"/> J. Vehicle and Equipment Cleaning</p>	<p><input type="checkbox"/> Show on drawings as appropriate:</p> <p>(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.</p> <p>(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).</p> <p>(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.</p> <p>(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.</p>	<p><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.</p>	<p>Describe operational measures to implement the following (if applicable):</p> <p><input type="checkbox"/> Wastewater from vehicle and equipment washing operations shall not be discharged to the storm drain system.</p> <p><input type="checkbox"/> Car dealerships and similar may rinse cars with water only.</p> <p><input type="checkbox"/> See Fact Sheet SC-21, "Vehicle and Equipment Cleaning," in the CASQA Stormwater Quality Handbooks at <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a></p>
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<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.  <input type="checkbox"/> 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.  <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.
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<p><input type="checkbox"/> L. Fuel Dispensing Areas</p>	<p><input type="checkbox"/> Fueling areas<sup>1</sup> 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 area<sup>1</sup>.] 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 <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a></p>
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<sup>1</sup> 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 shall be kept closed during periods of operation.  <input type="checkbox"/> 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 <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>
<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 <a href="http://www.cabmphandbooks.com">www.cabmphandbooks.com</a>

<p>○ Miscellaneous Drain or Wash Water</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Boiler drain lines</li> <li><input type="checkbox"/> Condensate drain lines</li> <li><input type="checkbox"/> Rooftop equipment</li> <li><input type="checkbox"/> Drainage sumps</li> <li><input type="checkbox"/> Roofing, gutters, and trim.</li> </ul>		<ul style="list-style-type: none"> <li><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.</li> <li><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.</li> </ul> <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"> <li><input type="checkbox"/> Avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.</li> <li><input type="checkbox"/></li> </ul>	
<ul style="list-style-type: none"> <li><input type="checkbox"/> P. Plazas, sidewalks, and parking lots.</li> </ul>			<ul style="list-style-type: none"> <li><input 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.</li> </ul>



## STEP 7

### LID AND TREATMENT CONTROL SELECTION

A treatment control BMP and/or LID facility 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 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>	
<b>Yes</b>	
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	
Oil & Grease	X		X	
Pesticides	X		X	

- 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 Facilities or Practices (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 BMP(s) and/or LID BMP selected for this project.

TABLE 12: PROJECT LID AND TC-BMPS

LID and TC-BMP Type	Water Quality Treatment Only	Hydromodification Flow Control
<b>Bioretention Facilities (LID)</b>		
<input checked="" type="checkbox"/> Bioretention area	X	
<input type="checkbox"/> Flow-through Planter		
<input type="checkbox"/> Cistern with Bioretention		
<b>Settling Basins (Dry Ponds)</b>		
<input checked="" type="checkbox"/> Extended/dry detention basin with grass/vegetated lining	X	X
<input checked="" type="checkbox"/> Extended/dry detention basin with impervious lining	X	
<b>Infiltration Devices (LID)</b>		
<input type="checkbox"/> Infiltration basin		
<input type="checkbox"/> Infiltration trench		
<input type="checkbox"/> Other _____		
<b>Wet Ponds and Constructed Wetlands</b>		
<input type="checkbox"/> Wet pond/basin (permanent pool)		
<input type="checkbox"/> Constructed wetland		
<b>Vegetated Swales (LID<sup>(1)</sup>)</b>		
<input type="checkbox"/> Vegetated Swale		

<b>Media Filters</b>		
<input type="checkbox"/> Austin Sand Filter		
<input type="checkbox"/> Delaware Sand Filter		
<input type="checkbox"/> Multi-Chambered Treatment Train (MCTT)		
<b>Higher-rate Biofilters</b>		
<input type="checkbox"/> Tree-pit-style unit		
<input type="checkbox"/> Other _____		
<b>Higher-rate Media Filters</b>		
<input type="checkbox"/> Vault-based filtration unit with replaceable cartridges		
<input type="checkbox"/> Other _____		
<b>Hydrodynamic Separator Systems</b>		
<input type="checkbox"/> Swirl Concentrator		
<input type="checkbox"/> Cyclone Separator		
<b>Trash Racks</b>		
<input type="checkbox"/> Catch Basin Insert		
<input type="checkbox"/> Catch Basin Insert w/ Hydrocarbon boom		
<input type="checkbox"/> Other _____		

<sup>(1)</sup> 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 facilities 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 and LID BMP's			
Description / Type	Sheet	Maintenance Category	Revisions
Bioretention Area		1	
Settling Basin - Detention Basins w/vegetated lining Settling Basin – Dry Detention Basin with Impervious lining (Sediment Traps)		3	

The selected vegetated swales have high efficiency treating sediments (pollutant of concern per [www.projectcleanwater.org](http://www.projectcleanwater.org)) and trash& debris, median efficiency treating all other types of pollutants, including nutrients and bacteria & viruses (pollutants of concern per [www.projectcleanwater.org](http://www.projectcleanwater.org)). The proposed vegetated swales along with landscaped areas will also provide water quality runoff retention storage space within the porous spaces in the underlying soft soil, and over time, allowing the water quality runoff volume to slowing infiltrating into the compacted soil. The bioretention and infiltration capabilities of the proposed vegetated swale and landscaped areas have high efficiencies in removed all anticipated and potential pollutants associated with the proposed grading construction.

## 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	X		Irrigation and Bioretention, Detention Basins, sediment traps
Second <sup>1</sup>	X		
Third <sup>2</sup>	X		
Fourth			

Note:

1. A recorded maintenance agreement will be required.
  2. Project will be required to establish or be included in a Stormwater Maintenance Assessment District for the long-term maintenance of treatment BMPs.
- Please list all individual LID and Treatment Control BMPs (TC-BMPs) incorporated into project. Please ensure the “BMP Identifier” is consistent with the legend in Attachment C “LID and/or TC-BMP 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*	LID or TC-BMP Type	BMP Pollutant of Concern Efficiency (H,M,L) – Table 11	Final Construction Date <i>(to be completed by County inspector)</i>	Final Construction Inspector Name <i>(to be completed by County inspector)</i>
Irrigation and Bioretention in landscaped areas	Irrigation and Bioretention	Sediment (H) Nutrients (H) Bacteria & Viruses (H)		
Detention basins	Settling and filtration	Sediment (H) Nutrients (H) Bacteria & Viruses (H)		
Sediment Traps	Settling	Sediment (H) Nutrients (H) Bacteria & Viruses (H)		

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 “Private Ownership and Maintenance” on page 94 of the County SUSMP for appropriate maintenance mechanisms.

Name:	Randy Goodson
Company Name:	Accretive Capital Partners, LLC
Phone Number:	858-546-0700
Street Address:	3655 Nobel Drive, Suite 650
City/State/Zip:	San Diego, Ca 92122
Email Address:	

Funding Source:

Provide the funding source or sources for long-term operation and maintenance of each BMP identified above. By certifying the Major SWMP the applicant is certifying that the funding responsibilities have been addressed and will be transferred to future owners.

The primary funding mechanism will be a special assessment under the authority of the Flood Control District. The assessment will be collected with property tax. Because this primary funding mechanism will require substantial amount of time to establish and collect assessments, a developer fee is required to cover the initial maintenance period of 24 months

**ATTACHMENTS**

Please include the following attachments.

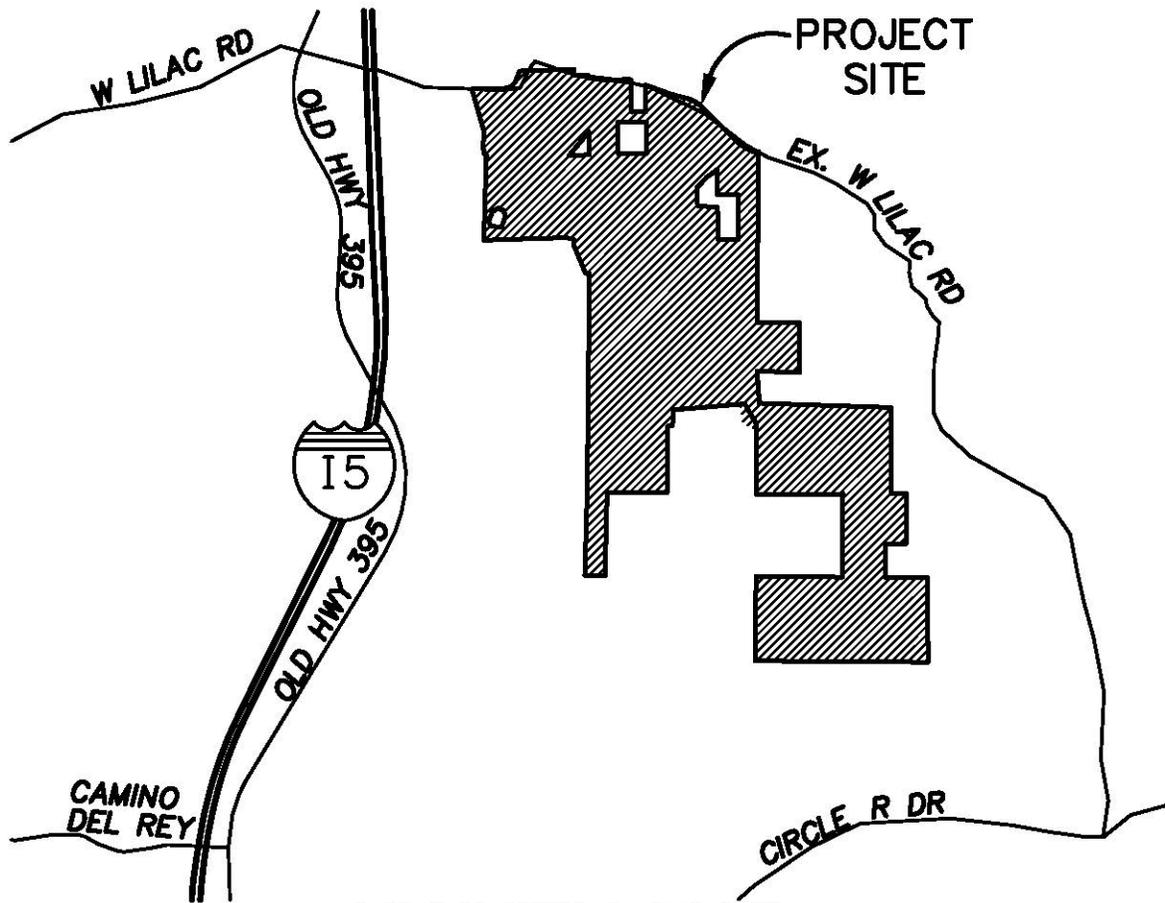
ATTACHMENT		COMPLETED	N/A
A	Project Location Map	X	
B	Source Control Exhibit	X	
C	LID and/or TC-BMP Exhibit	X	
D	Drainage Management Area (DMA) Maps, Sizing Design Calculations and BMP/IMP Design Details	X	
E	Geotechnical Certification Sheet		X
F	Maintenance Plan	X	
G	Tracking Report	X	
H	Addendum		

**Note:** Attachments B and C may be combined.



# ATTACHMENT A

## Project Location Map



### VICINITY MAP

NOT TO SCALE

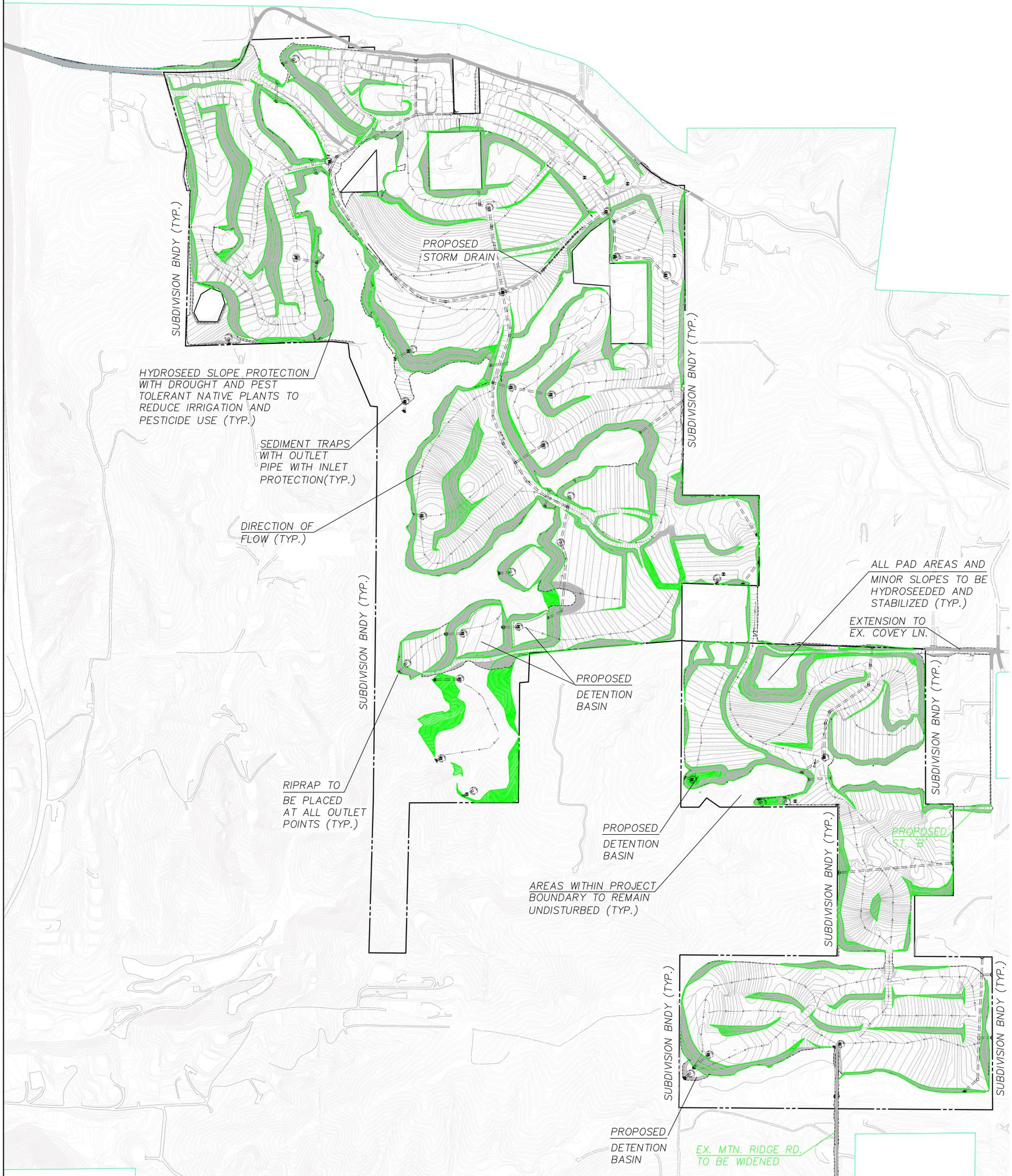


# **ATTACHMENT B**

## **Source Control Exhibit**



# SOURCE CONTROL BMP MAP FOR LILAC HILLS RANCH, TM 5571 RPL-2



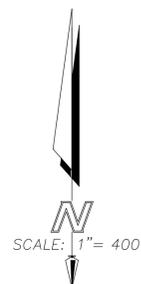
## LEGEND

HYDROSEED/SLOPE PLANTING W/ NATIVE DROUGHT AND PEST TOLLERANT PLANTS

UNDISTURBED AREAS

PROPOSED STORM DRAIN

PROPOSED STORM DRAIN INLETS WITH "NO DUMPING SIGNS OR STAMPS"



# ATTACHMENT C

## Drainage Management Area (DMA) Exhibit

