



California Regional Water Quality Control Board San Diego Region



Linda S. Adams
Secretary for
Environmental Protection

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(858) 467-2952 • Fax (858) 571-6972
[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

October 1, 2010

Certified Mail – Return Receipt Requested
Article Number: 7010 1060 0000 4952 6900

Mr. Jay Goldstone
Chief Operating Officer
City of San Diego
202 C Street
San Diego, CA 92101

In reply refer to:
CIWQS Place ID. 255222: carias

Dear Mr. Goldstone:

**Subject: Notice of Violation No. R9-2010-0135 and Water Code Section 13267
Technical Report, City of San Diego**

Enclosed is Notice of Violation (NOV) No. R9-2010-0135 issued to the City of San Diego, Development Services Department and Engineering and Capital Projects Department, for violations of Order Nos. 2001-01 and R9-2007-0001, issued by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). As described in the NOV, the violations are subject to further enforcement pursuant to the California Water Code. The San Diego Water Board reserves the right to take any enforcement action authorized by law.

Water Code Section 13267¹ Technical Report Is Required by December 1, 2010

Pursuant to Water Code section 13267, **you are hereby required to provide a Technical Report by December 1, 2010** that includes the following information:

1. A description of how the deficiencies noted at the following Priority Development Projects (PDPs) have been or will be corrected by the City of San Diego, including a timetable for corrective actions: Highland Skypark, Carmax Kearny Mesa, Terraces at Copley Point, Murphy's Market, and Rosecrans Commercial Center;
2. A list of permanent treatment control Best Management Practices (BMPs) approved by the City of San Diego, including dates of approval;

¹ Water Code section 13267, subdivision (b), allows the Water Boards to conduct investigations and to require technical or monitoring reports from any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste in accordance with the conditions in the section.

3. A description of the City's inspection status including numbers of PDPs inspected, schedule for completion, and any findings that permanent BMPs were not designed and/or installed to remove pollutants to the maximum extent practicable per Provision F.1.b(2) of Order No. 2001-01 and Provision D.1.f of Order No. R9-2007-0001;
4. For each site where BMP deficiencies are identified in addition to those listed in item 1, a description of how the City of San Diego will correct the deficiencies, including a timetable for corrective actions; and
5. Verification that all permanent treatment control BMPs approved by the City of San Diego are maintained annually pursuant to Provision D.1.e of Order No. R9-2007-0001.

The violations documented in the attached NOV and two facility inspection reports support the requirement to provide the technical report. The report is necessary for the San Diego Water Board to determine the state of compliance with Order No. 2001-01 and Order No. R9-2007-0001 (which supersedes Order No. 2001-01). The report is also necessary to determine the potential or actual harm to human health or the environment from non-compliance. The burden, including costs of the reports, bears a reasonable relationship to the need for the reports and the benefits to be obtained from them.

Failure to comply with requirements made pursuant to Water Code section 13267, subdivision (b), may result in administrative civil liability pursuant to Water Code section 13268 up to \$1,000 per day.

In making the determination of whether and how to proceed with further enforcement action, the San Diego Water Board will consider both the time it takes to correct the identified violations and the sufficiency of the corrections.

In the subject line of any response, please include the requested "In reply refer to:" information located in the heading of this letter. For questions pertaining to the subject matter, please contact Christina Arias at (858) 627-3931 or carias@waterboards.ca.gov.

Respectfully,



DAVID T. BARKER, P.E.
Supervising Water Resource Control Engineer
Surface Waters Basins Branch

Signed under the authority delegated by the Executive Officer

DTB:esb:cma

Enclosures:

1. Notice of Violation No. R9-2010-0135
2. Facility Inspection Reports Dated January 20, 2010/April 5, 2010, and September, 2010

Cc via email: (w/encl.)

Tony Heinrichs, THeinrichs@san Diego.gov

Kelly Broughton, KBroughton@san Diego.gov

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CIWQS Entries:	Tech Staff Info & Use
Place ID	255222
Reg Msr ID	375983
NPDES No.	CAS0108758
WDID	900000510
Violation ID	881230, 881232



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San Diego Region



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City of San Diego
Various Priority Development Projects

NOTICE OF VIOLATION No. R9-2010-0135

Violations of Order Nos. 2001-01 and
R9-2007-0001

Place ID: 255222: carias

October 1, 2010

The City of San Diego is hereby notified that the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) reserves the right to take any enforcement action authorized by law for the violations described herein.

The City of San Diego, Development Services Department and Engineering and Capital Projects Department, is in violation of San Diego Water Board Order Nos. 2001-01 and R9-2007-0001, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS0108758, *Waste Discharge Requirements For Discharges Of Urban Runoff From the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds of the County of San Diego, the Incorporated Cities of San Diego County, the San Diego Unified Port District, and the San Diego County Regional Airport Authority.*

A. Summary of Violations

1. Failure to Implement Standard Urban Storm Water Mitigation Plan (SUSMP) Requirements

- a. Pursuant to Provision F.1.b.(2) of Order No. 2001-01: ...[E]ach Copermitee shall ensure that all new development and significant redevelopment projects...meet SUSMP requirements.
- b. Pursuant to Provision F.1.b.(2)(b) of Order No. 2001-01: The SUSMP shall require all new development and significant redevelopment projects...to implement a combination of best management practices (BMPs) selected from the recommended BMP list, including at a minimum (1) source control BMPs and (2) structural treatment BMPs.
- c. **Observations:** On January 20, 2010 and April 5, 2010, the San Diego Water Board inspected Priority Development Projects within the City of San Diego (Highland Skypark, Carmax Kearny Mesa, Terraces at Copley Point) and found that the permanent treatment control BMPs were either designed or installed incorrectly (i.e. storm water receives little to no treatment before being discharged offsite). Specific findings are discussed in the Facility Inspection Report dated January 20, 2010/April 5, 2010.

California Environmental Protection Agency

Additionally, the City of San Diego's Jurisdictional Urban Runoff Management Program (JURMP) Annual Report for Fiscal Year 2009 states that a number of the required private and public permanent BMPs were never installed.

2. Failure to Enforce Maximum Extent Practicable (MEP) Standard

- a. Pursuant to Provision F.1.b.(2)(b)xiv of Order No. 2001-01:** The BMPs shall, at a minimum, ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable (MEP).
- b. Observation:** The San Diego Water Board reviewed the Water Quality Technical Report (WQTR) for the Terraces at Copley Point, a Priority Development Project within the City of San Diego. Only one treatment control BMP, a hydrodynamic separator, was utilized for the 24-acre site. The WQTR states that infiltration-type BMPs were not used because the underlying soils would result in pavement failure, yet there was no accompanying feasibility analysis to support this conclusion, nor a discussion of why other, more effective BMPs were not selected. The San Diego Water Board inspected this site on April 5, 2010 and September 14, 2010 and found that there were several vegetated medians and perimeter landscaping that could have been designed for pollutant treatment. Specific findings are included in the two Facility Inspection Reports dated January 20, 2010/April 5, 2010, and September 14, 2010.

3. Failure to Verify Correct Installation of Treatment Control Best Management Practices (BMPs)

- a. Pursuant to Provision D.1.f of Order No. R9-2007-0001:** Each Copermittee shall, prior to occupancy of each Priority Development Project, inspect the constructed low impact development (LID), source control, and treatment control BMPs to verify that they have been constructed in compliance with all specifications, plans, permits, ordinances, and Order No. R9-2007-0001.

- b. Observation:** On September 14, 2010, the San Diego Water Board inspected Priority Development Projects within the City of San Diego (Murphy's Market, Rosecrans Commercial Center) and found permanent treatment control BMPs were either designed or installed incorrectly (i.e. storm water receives little to no treatment before being discharged offsite). Specific findings are included in the Facility Inspection Report dated September 14, 2010.

B. Summary of Potential Enforcement Options

These violations may subject you to additional enforcement by the San Diego Water Board or State Water Resources Control Board, including a potential civil liability assessment of \$10,000 per day of violation (Water Code section 13385) and/or any of the following enforcement actions:

Other Potential Enforcement Options	Applicable Water Code Section
Technical or Investigative Order	Sections 13267 or 13383
Cleanup and Abatement Order	Section 13304
Cease and Desist Order	Sections 13301-13303
Time Schedule Order	Sections 13300, 13308

In addition, the San Diego Water Board may consider revising or rescinding applicable waste discharge requirements, if any, referring the matter to other resource agencies, referring the matter to the State Attorney General for injunctive relief, and referral to the municipal or District Attorney for criminal prosecution.

Questions pertaining to this Notice of Violation should be directed to Christina Arias at 858-627-3931 or carias@waterboards.ca.gov.



DAVID T. BARKER, P.E.
 Supervising Water Resource Control Engineer
 Surface Waters Basins Branch

CIWQS Entries
 Place ID: 255222
 Reg Msr ID: 375952
 Violation IDs: 881230, 881232

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - SAN DIEGO REGION
WATERSHED PROTECTION PROGRAM

FACILITY INSPECTION REPORT

FACILITY: Permanent BMPs in San Diego INSPECTION DATE/TIME: 01/20/10; 04/05/10

WDID/FILE NO.: 9 000000510

REPRESENTATIVE(S) PRESENT DURING INSPECTION:

NAME: <u>Christina Arias</u>	AFFILIATION: <u>San Diego Water Board</u>
NAME: <u>Ben Neill</u>	AFFILIATION: <u>San Diego Water Board</u>
NAME: _____	AFFILIATION: _____
NAME: _____	AFFILIATION: _____
NAME: _____	AFFILIATION: _____

City of San Diego
NAME OF OWNER, AGENCY OR PARTY RESPONSIBLE FOR DISCHARGE

FACILITY OR DEVELOPER NAME (if different from owner)

9370 Chesapeake Drive, Ste. 100, MS 1900, SD 92123
OWNER MAILING ADDRESS

FACILITY ADDRESS

Kris McFadden 858/541-4300
OWNER CONTACT NAME AND PHONE #

FACILITY OR DEVELOPER CONTACT NAME AND PHONE #

APPLICABLE WATER QUALITY LICENSING REQUIREMENTS:

- | | |
|---|---|
| <input checked="" type="checkbox"/> MS4 URBAN RUNOFF REQUIREMENTS | <input type="checkbox"/> GENERAL OR INDIVIDUAL WASTE DISCHARGE REQUIREMENTS OR NPDES |
| <input type="checkbox"/> CONSTRUCTION GENERAL PERMIT | <input type="checkbox"/> GENERAL OR INDIVIDUAL WAIVER OF WASTE DISCHARGE REQUIREMENTS |
| <input type="checkbox"/> CALTRANS GENERAL PERMIT | <input type="checkbox"/> SECTION 401 WATER QUALITY CERTIFICATION |
| <input type="checkbox"/> INDUSTRIAL GENERAL PERMIT | <input type="checkbox"/> CWC SECTION 13264 |

INSPECTION TYPE (Check One):

- "A" TYPE COMPLIANCE--COMPREHENSIVE INSPECTION IN WHICH SAMPLES ARE TAKEN. (EPA TYPE S)
- "B" TYPE COMPLIANCE--A ROUTINE NONSAMPLING INSPECTION. (EPA TYPE C)
- NONCOMPLIANCE FOLLOW-UP--INSPECTION MADE TO VERIFY CORRECTION OF A PREVIOUSLY IDENTIFIED VIOLATION.
- ENFORCEMENT FOLLOW-UP--INSPECTION MADE TO VERIFY THAT CONDITIONS OF AN ENFORCEMENT ACTION ARE BEING MET.
- COMPLAINT--INSPECTION MADE IN RESPONSE TO A COMPLAINT.
- PRE-REQUIREMENT--INSPECTION MADE TO GATHER INFO. RELATIVE TO PREPARING, MODIFYING, OR RESCINDING REQUIREMENTS.
- NO EXPOSURE CERTIFICATION (NEC) - VERIFICATION THAT THERE IS NO EXPOSURE OF INDUSTRIAL ACTIVITIES TO STORM WATER.
- NOTICE OF TERMINATION REQUEST FOR INDUSTRIAL FACILITIES OR CONSTRUCTION SITES - VERIFICATION THAT THE FACILITY OR CONSTRUCTION SITE IS NOT SUBJECT TO PERMIT REQUIREMENTS.
- COMPLIANCE ASSISTANCE INSPECTION - OUTREACH INSPECTION DUE TO DISCHARGER'S REQUEST FOR COMPLIANCE ASSISTANCE.

INSPECTION FINDINGS:

Y WERE VIOLATIONS NOTED DURING THIS INSPECTION? (YES/NO/PENDING SAMPLE RESULTS)

Facility: Various within City of San Diego
Inspection Date: 1/20/10; 4/5/10

I. COMPLIANCE HISTORY

In September 2007, the San Diego Water Board and U.S. EPA conducted an audit on the City of San Diego's SUSMP program. The audit report finding stated: "There were no findings or deficiencies identified with this program element. The City appeared to have a comprehensive and effective SUSMP program in place and the program appeared to be equally implemented for both private and public development projects.... Based on the results of the inspection, continued routine compliance activities consisting of annual report reviews and periodic inspections appeared warranted."

The purpose of the field inspections was to verify the findings of the U.S. EPA audit and verify the functionality of permanent, post-construction BMPs installed within the past few years. The City of San Diego is required to ensure post-construction BMPs are designed and constructed to meet the requirements of Order Nos. 2001-01 and R9-2007-0001. Inspectors from the San Diego Water Board looked at the following three different sites during or after rain events within the Kearny Mesa area. Inspectors focused on bioswales since these types of permanent BMPs are easily accessible.

II. FINDINGS

Highland Skypark

On January 20, 2010, Christina Arias inspected bioswales in a business park located at 3701 Ruffin Road. Figures 1-4 show the bioswales. Note there are no curb cuts, and subsequently runoff from the parking lot is not channeled into the bioswales. The engineering specifications available in the Water Quality Technical Report (WQTR; Figure 15) likewise do not indicate that runoff from the parking lot is intended to be channeled into the bioswales. The specifications include hatch marks near the bioswales, but it is not clear that these markings pertain to the intended flow of storm water. Storm water from the parking lot appears to leave the site with little to no treatment.

Terraces at Copley Point

On April 9, 2010, Ben Neill and Christina Arias inspected bioswales at a business park located at the end of Copley Drive in Kearny Mesa. Ongoing construction limited access to all areas of the site. None of the 6 bioswales described in Appendix C of the City's 08/09 JURMP Annual Report were identified (engineering specifications were not obtained until after the site visit). Photos were taken of runoff leaving the parking lot, possibly untreated (Figures 5-8). Engineering specifications obtained for the site show that a CDS unit is used as the primary treatment BMP. Whether or not runoff from the parking lot eventually makes its way to the CDS unit before leaving the site is unknown and must be verified. The engineering specifications are included as Figure 16.

Carmax Kearny Mesa


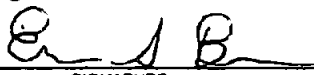
On April 9, 2010, Ben Neill and Christina Arias inspected two bioswales to treat runoff from the used car parking lot. The storm water runoff appeared to be untreated,

bypassing the bioswales (see Figures 9-14). Additionally, the bioswales did not appear to have the 3:1 side slopes or 4'-6" grass height recommended by CASQA. Engineering specifications and the WQTR for this location were not available.

III. RECOMMENDATIONS AND ADDITIONAL COMMENTS

1. The City of San Diego should verify whether or not the bioswales at Highland Skypark (which do not treat polluted storm water) were designed or constructed incorrectly, or both.
2. The City of San Diego should verify that runoff from the parking lot at the Terraces at Copley Point receives treatment via the CDS unit.
3. The City of San Diego should locate the WQTR for Carmax Kearny Mesa and verify that the bioswales were constructed per the engineering specifications.
4. For all three sites, the City of San Diego should verify that bioswales were constructed to provide an adequate hydraulic residence time.
5. The San Diego Water Board and the City of San Diego should further this investigation by conducting compliance inspections at additional sites.
6. The City of San Diego should take appropriate enforcement against any instances where permanent BMPs were not designed or constructed correctly, and ensure that corrective actions are taken.
7. This information will be used to assess the City of San Diego's compliance with the Order R9-2007-0001.

IV. SIGNATURE SECTION

Christina Arias		4/5/10
STAFF INSPECTOR	SIGNATURE	INSPECTION DATE
Eric Becker		8/30/10
REVIEWED BY SUPERVISOR	SIGNATURE	DATE

CIWQS:

Tech Staff Info & Use	
File No.	
WDID	900000510
Reg. Measure ID	329556
Pface ID	255222
Inspection ID	2764776

Facility: Various within City of San Diego
Inspection Date: 1/20/10; 4/5/10

All photos taken by Christina Arias



Figure 1. Top of Bioswale 1



Figure 2. Bioswale 1

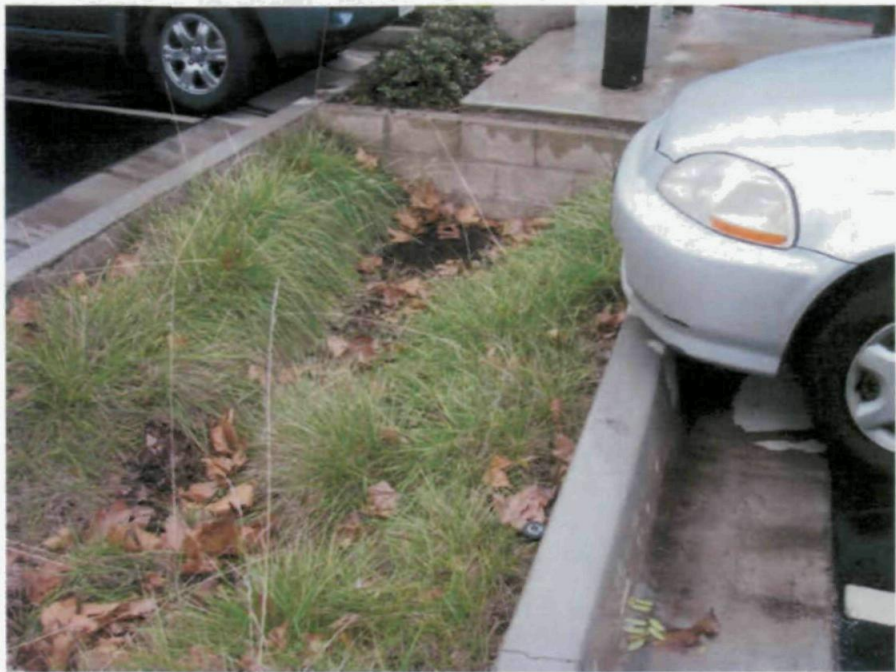


Figure 3. Storm drain at bottom of Bioswale 2



Figure 4. Top of Bioswale 2

Facility: Various within City of San Diego
Inspection Date: 1/20/10; 4/5/10



Runoff generated in parking lot....

Figure 5. Parking lot and U-ditch at Copley Point



...flows into this storm drain

Figure 6. Storm drain receiving runoff from parking lot

Facility: Various within City of San Diego
Inspection Date: 1/20/10; 4/5/10



Runoff from west side of development transported in U-ditch...

Figure 7. U-ditch receiving runoff from West side of buildings



...to this drain (which also receives runoff from parking lot. Storm water in this drain may leave site without treatment.

Figure 8. Storm drain receiving runoff from parking lot before leaving site

Facility: Various within City of San Diego
Inspection Date: 1/20/10; 4/5/10

Carmax Kearny Mesa
7766 Balboa Ave.
4/5/10



Figure 9. Inlet for Bioswale 1



Runoff seen short-circuiting bioswale and receiving little to no treatment

Runoff from parking lot contains oily sheen, sediment

Figure 10. Inlet for Bioswale 1 looking downstream

Facility: Various within City of San Diego
Inspection Date: 1/20/10; 4/5/10



Figure 11. Outlet for Bioswale 1 looking upstream



Figure 12. Inlet for Bioswale 2

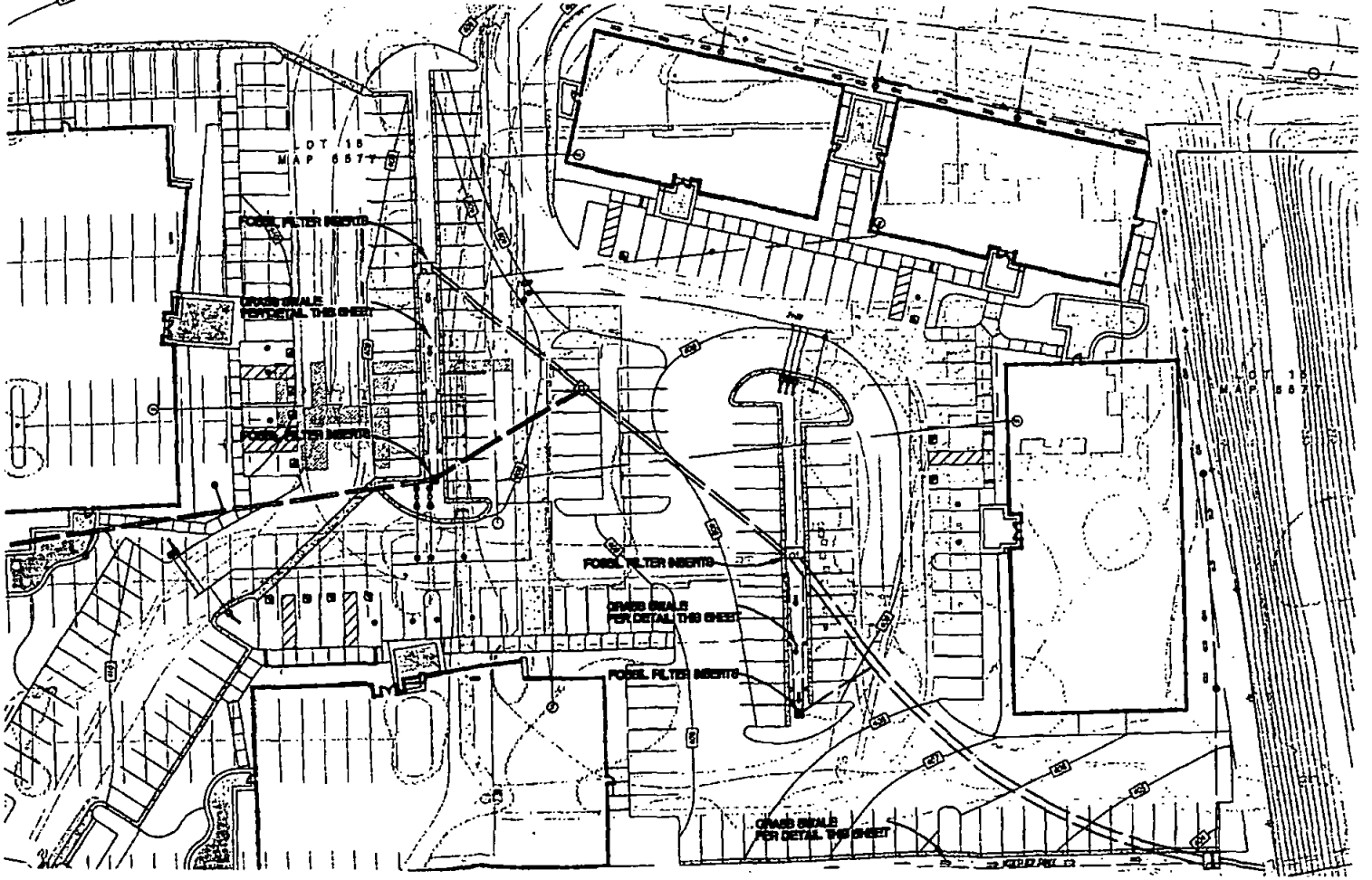
Facility: Various within City of San Diego
Inspection Date: 1/20/10; 4/5/10



Figure 13. Bioswale 2 looking downstream

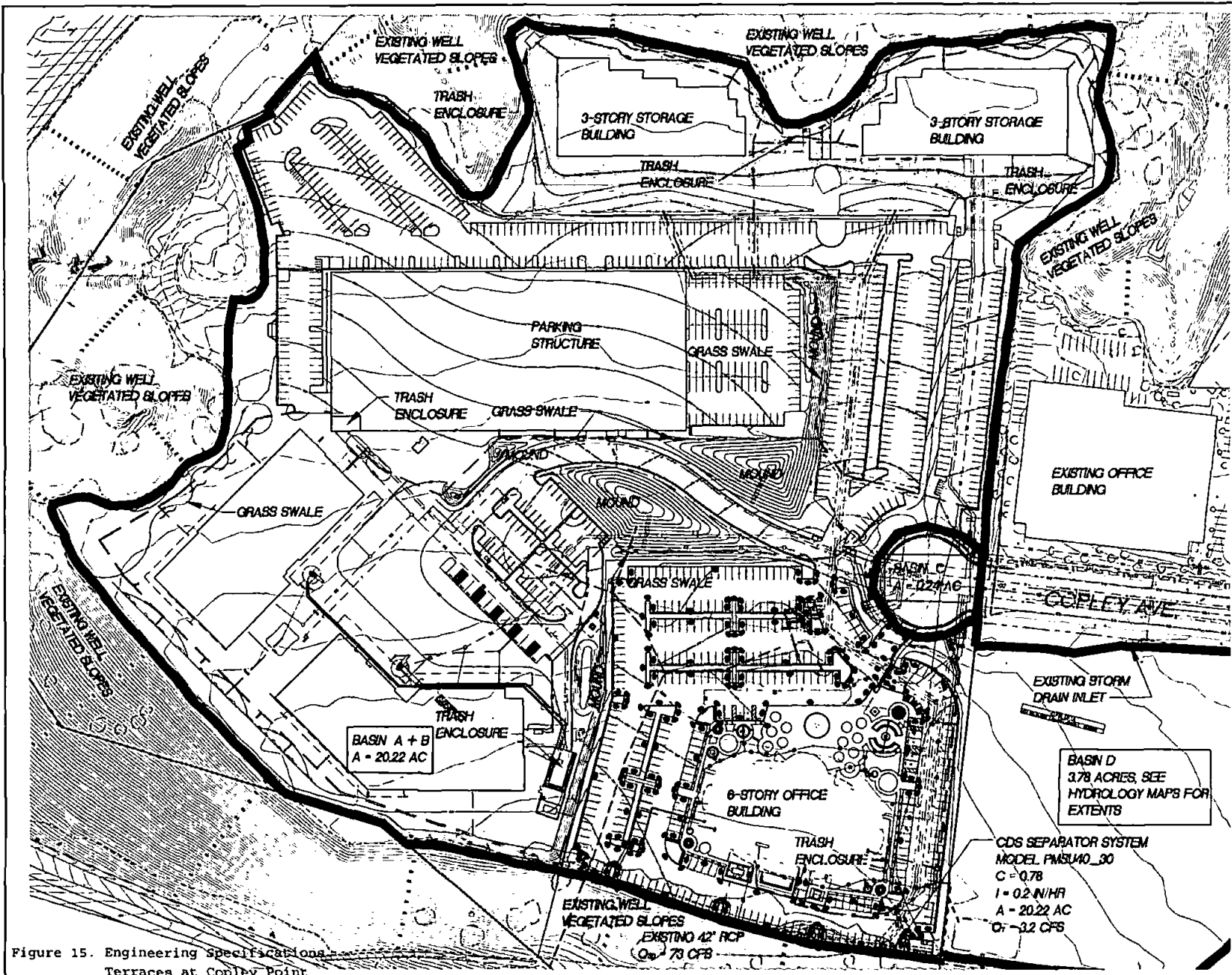


Figure 14. Outlet for Bioswale 2

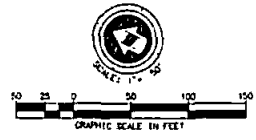


Highland Skypark

Figure 14. Engineering Specifications for Highland Skypark



WATER QUALITY TECHNICAL REPORT - SITE PLAN
 LAST REVISED: 2/27/07



BASIN D
 3.78 ACRES, SEE HYDROLOGY MAPS FOR EXTENTS

CDS SEPARATOR SYSTEM
 MODEL PMS140_30
 C = 0.78
 I = 0.2 IN/HR
 A = 20.22 AC
 Q_T = 3.2 CFS

Figure 15. Engineering Specifications Terraces at Copley Point

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD - SAN DIEGO REGION
WATERSHED PROTECTION PROGRAM

FACILITY INSPECTION REPORT

FACILITY: Permanent BMPs in San Diego INSPECTION DATE/TIME: 09/14/10 9:00

WDID/FILE NO.: 9 000000510

REPRESENTATIVE(S) PRESENT DURING INSPECTION:

NAME: <u>Christina Arias</u>	AFFILIATION: <u>San Diego Water Board</u>
NAME: <u>Laurie Walsh</u>	AFFILIATION: <u>San Diego Water Board</u>
NAME: <u>Sumer Hasenin</u>	AFFILIATION: <u>City of San Diego</u>
NAME: <u>Jim Nabong</u>	AFFILIATION: <u>City of San Diego</u>
NAME: <u>Jim Hook</u>	AFFILIATION: <u>City of San Diego</u>
NAME: <u>Julie Ballesteros</u>	AFFILIATION: <u>City of San Diego</u>

City of San Diego
NAME OF OWNER, AGENCY OR PARTY RESPONSIBLE FOR DISCHARGE

FACILITY OR DEVELOPER NAME (if different from owner)

9370 Chesapeake Drive, Ste. 100, MS 1900, SD 92123
OWNER MAILING ADDRESS

FACILITY ADDRESS

Kris McFadden 858/541-4300
OWNER CONTACT NAME AND PHONE #

FACILITY OR DEVELOPER CONTACT NAME AND PHONE #

APPLICABLE WATER QUALITY LICENSING REQUIREMENTS:

- | | |
|---|---|
| <input checked="" type="checkbox"/> MS4 URBAN RUNOFF REQUIREMENTS | <input type="checkbox"/> GENERAL OR INDIVIDUAL WASTE DISCHARGE REQUIREMENTS OR NPDES |
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| <input type="checkbox"/> INDUSTRIAL GENERAL PERMIT | <input type="checkbox"/> CWC SECTION 13264 |

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INSPECTION FINDINGS:

Y WERE VIOLATIONS NOTED DURING THIS INSPECTION? (YES/NO/PENDING SAMPLE RESULTS)

Facility: Various within City of San Diego
Inspection Date: 09/14/2010

I. COMPLIANCE HISTORY / PURPOSE OF INSPECTION

In January and April of 2010, Christina Arias and Ben Neill of the San Diego Water Board conducted inspections of permanent best management practices (BMPs) at three Priority Development Projects (PDPs) within the City of San Diego. Deficiencies were noted at the three sites and discussed in a separate Facility Inspection Report.

The purpose of the current field inspections was to follow up on one site visited in April to verify adequate storm water treatment, and also to investigate additional PDPs that received final approval and granted occupancy from the City of San Diego within the past year.

II. FINDINGS

Murphy's Market

Murphy's Market is a small supermarket in the City Heights area of the City of San Diego. The project received final approval from the City of San Diego in June 2009. Figures 1-7 below show low impact development (LID) BMPs installed in the parking lot. In addition to porous asphalt, the site contained two vegetated swales that treat runoff from the parking lot. Storm water enters the swales via curb cuts (see Figures 2-7). In some areas, the elevation of the vegetated swales was higher than the parking lot, in contrast with CASQA specifications (TC-30; vegetated buffer strip) that indicate that the top of the strip/swale should be installed 2-5 inches below the adjacent pavement. The installation may cause storm water to discharge from the site without treatment. The "Exhibit A" showing the post construction BMP map indicates that this device is a "biofilter swale," but it is unclear if this is supposed to function as a flow-based swale (which is usually lined with grass and contains no obstacles to impede flow) or volume-based bioretention area (which can include trees and shrubs). In either case, it appears that storm water will not remain in the vegetated area long enough for proper treatment, as discussed above.

A significant amount of trash was observed on the property and in the swales. Roof downspout filters on the engineering plans could not be located, and may be located inside the building.

Rosecrans Commercial Center

Rosecrans Commercial Center is in the Point Loma area of the City of San Diego and received final approval from the City in July 2009. Figures 8-13 show permanent BMPs installed in the parking lot. BMPs include porous pavers, a vegetated swale, and a trench drain with filter inserts (the swale is described as a bioswale in the engineering specifications and a grass swale on the BMP sheet). The storm drain shown in Figure 8 does not have an inlet filter. One roof drain discharges into a planter box; 3 roof drains discharge onto impervious asphalt.

The south side of the parking lot has a 3.9 percent grade towards the street. Figure 12 shows water stains from the high point of the parking lot flowing towards the street.

Facility: Various within City of San Diego
Inspection Date: 09/14/2010

Some runoff reaches the trench drain and pervious pavers; however, at higher flow rates, runoff may bypass both BMPs. There is additional opportunity for treatment via a planter box in the public right-of-way area. However, because of the steep grade, it is questionable whether or not all runoff generated onsite receives treatment in even a moderately-sized storm event.

Terraces at Copley Point

The Terraces at Copley Point is a large business park in the Kearny Mesa area of the City of San Diego, and received final approval for Phase I of the design in April 2007. Figures 14-21 show 3 grass swales at this site. A well vegetated grass swale on the east end (Figures 14-16) appears to treat runoff from a parking lot. However, the entrance to the swale is blocked by overgrown grass and should be maintained prior to the rainy season. The second grass swale adjacent to the parking structure (Figures 17-20) does not appear to be properly contoured or vegetated for proper detention time. The bottom of the swale has eroded, indicating that high flows from the parking structure are erosive and adequate detention time is not achieved. The outlet of the swale is surrounded by degraded gravel bags that appear to have been left onsite since the project finished construction (Figure 20). The grass swale on the west side is shown in Figures 21-22. This swale is well vegetated but does not treat any storm water runoff from the adjacent parking lot, since runoff is not channeled into the swale from any side.

Figure 23 shows water stains across the parking lot. Runoff from this area eventually reaches a curb and enters a storm drain. Figure 24 shows a storm drain that receives runoff from the North side of the property. Runoff shown in Figures 23 and 24 enter a pipe network that is directed to a CDS unit on the SE corner of the site before being discharged from the site (this needed to be verified from the earlier site inspection in April, 2010). Note: no runoff from this lower parking lot is directed to any sort of vegetated/pervious area, even though opportunities for such treatment exist among landscaped medians within the parking lot and landscaping along the perimeter of the property (Figures 23-25).

III. RECOMMENDATIONS AND ADDITIONAL COMMENTS

Murphy's Market

1. The City of San Diego needs to review the WQTR to verify whether or not the vegetated swales at Murphy Market were installed with proper elevation. The City should return to the site during a storm event to verify that storm water flows through the swale as intended.
2. The City of San Diego should indicate to property owners that inlet filters may have to be cleaned more frequently than originally specified because of the high volume of trash on the property. More trash cans may be needed onsite.
3. The City of San Diego should ensure that owners are aware of the downspout filters and the maintenance requirements since they were not visibly noticeable upon inspection of the perimeter.

Facility: Various within City of San Diego
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Rosecrans Commercial Center

4. Because of the steep slope on the south side of the parking lot, the City of San Diego should verify that runoff generated from the 85th percentile storm event is adequately treated before being discharged offsite.

Terraces at Copley Point

5. The only treatment control BMP cited in the WQTR is a CDS unit. The WQTR states that the grass swales are not to be considered treatment control BMPs and should be considered site design BMPs. Only 1 of the 3 grass swales appeared to treat parking lot runoff.
6. This site is approximately 24 acres and has several vegetated medians and perimeter landscaping that could have been used for pollutant treatment. The WQTR states that grass swales and filter strip were dismissed because the underlying soils would result in pavement failure. Use of amended soils and/or underdrains do not appear to have been evaluated. The City of San Diego did not enforce the MEP standard at this site because no detailed analysis regarding choice of treatment control BMPs was provided by the project proponent in the WQTR.

General Observations

7. Drainage channels and BMPs should be maintained prior to rainy season.
8. The City of San Diego should consider revising the maintenance agreements with property owners to include very clear BMP exhibits with maintenance descriptions and schedules, suitable for use by the average property owner.
9. The City of San Diego should ensure that construction type BMPs (such as gravel bags) are removed from sites prior to final approval.
10. The City of San Diego should ensure that personnel, like plan checkers, adequately enforce the storm water requirements to the MEP standard during the treatment control BMP selection process.
11. The information obtained from this inspection will be used to assess the City of San Diego's compliance with Order Nos. 2001-01 and R9-2007-0001.

IV. SIGNATURE SECTION

Christina Arias
 STAFF INSPECTOR



SIGNATURE

9/14/10

INSPECTION DATE

Eric Becker
 REVIEWED BY SUPERVISOR



SIGNATURE

9/30/10

DATE

CIWQS:

Tech Staff Info & Use	
File No.	
WDID	900000510
Reg. Measure ID	329556
Place ID	255222
Inspection ID	2764776

Facility: Various within City of San Diego
Inspection Date: 09/14/2010

All photos taken by Christina Arias



Figure 1. Porous asphalt infiltration trench



Vegetation at entrance may block storm water from entering swale

Figure 2. Vegetated swale—Fairmount Ave.

Facility: Various within City of San Diego
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Elevation of swale is higher than parking lot

Figure 3. Vegetated swale—Fairmount Ave.



Overflow pipe connected to MS4

Figure 4. Vegetated swale—Fairmount Ave.

Facility: Various within City of San Diego
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Figure 5. Vegetated swale—Dwight St.



Figure 6. Vegetated swale—Dwight St.

Except at inlet, swale elevation is higher than parking lot

Facility: Various within City of San Diego
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Styrofoam cups and food wrappers littered the swales

Figure 7. Vegetated swale—Dwight St.



Storm drain

Rosecrans Commercial Center
Rosecrans and Talbot

Runoff from parking lot either flows over pervious pavers or swale (behind wheel stop) before reaching storm drain

Figure 8. Pervious pavers at Rosecrans Commercial Center

Facility: Various within City of San Diego
 Inspection Date: 09/14/2010

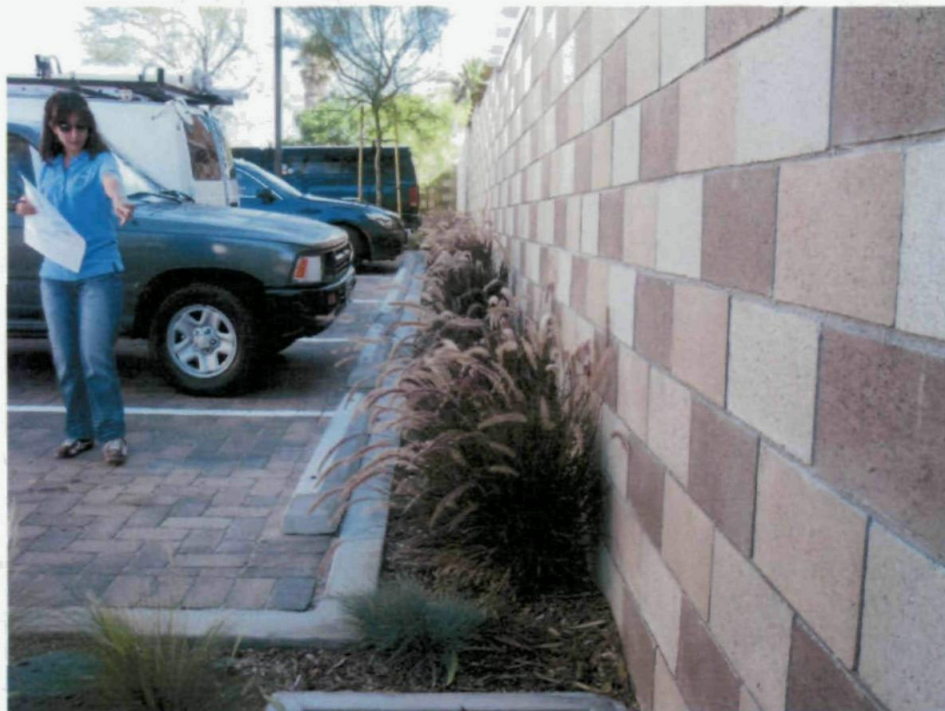


Figure 9. Looking upstream at vegetated swale (from storm drain)

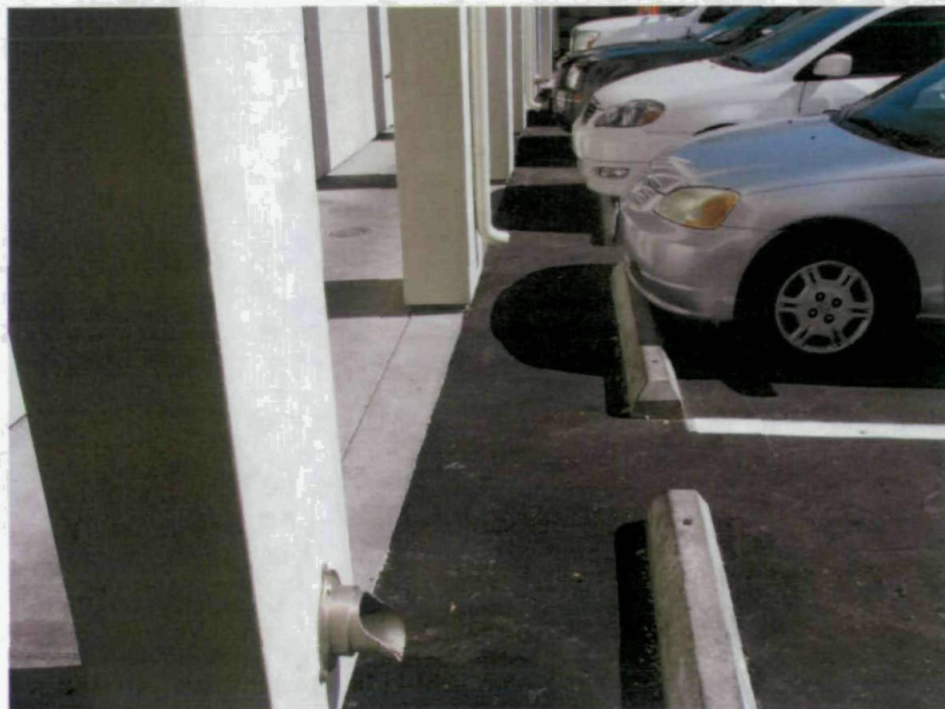


Figure 10. Roof drains at Rosecrans Commercial Center

Facility: Various within City of San Diego
Inspection Date: 09/14/2010

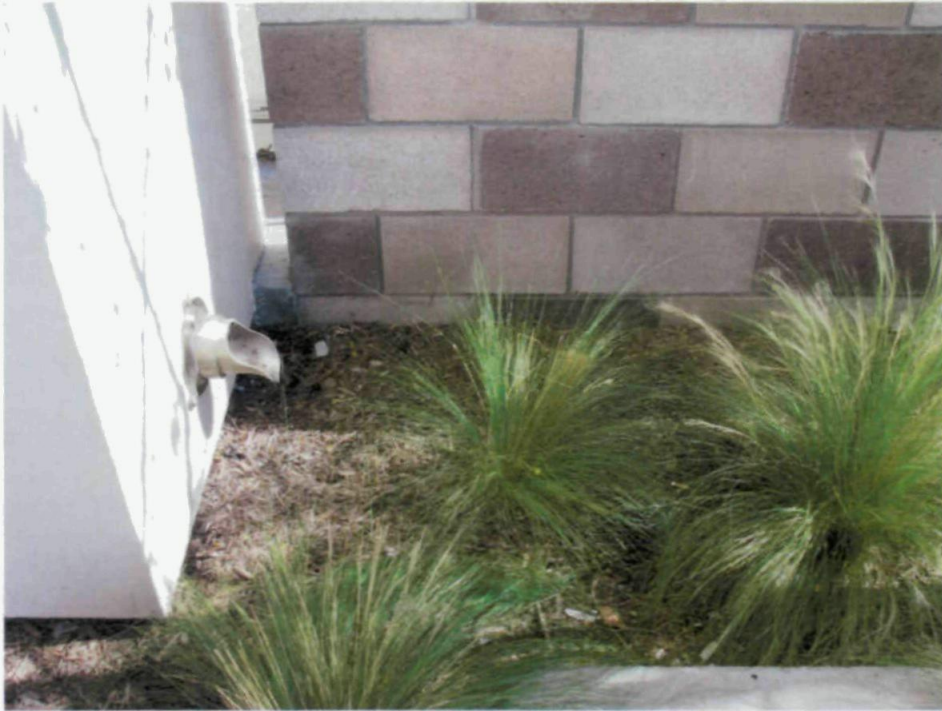
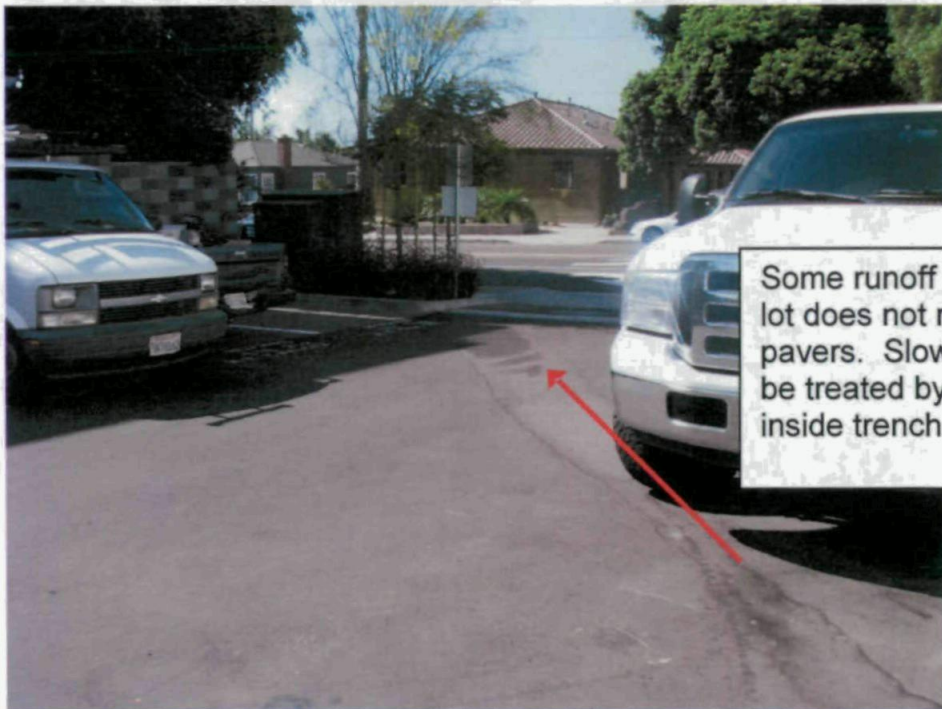


Figure 11. Roof draining into planter box



Some runoff from parking lot does not reach pervious pavers. Slower flows may be treated by filter insert inside trench drain.

Figure 12. Water stain on impervious asphalt

Facility: Various within City of San Diego
Inspection Date: 09/14/2010



Overflow from parking lot may reach the pervious pavers in tree wells

Figure 13. Driveway to Rosecrans Commercial Center



Terraces at Copley Point
East end of Copley Drive

Figure 14. Grass swale at east side looking upstream

Facility: Various within City of San Diego
Inspection Date: 09/14/2010



Figure 15. Grass swale inlet



Figure 16. Grass swale inlet

Overgrown grass may inhibit flow of storm water into swale

Facility: Various within City of San Diego
Inspection Date: 09/14/2010



Figure 17. Storm drain piping from roof of parking structure



Figure 18. Grass swale inlet (adjacent to parking structure)

Facility: Various within City of San Diego
Inspection Date: 09/14/2010



Note bottom of swale has eroded

Figure 19. Grass swale adjacent to parking lot



Gravel bags leftover from construction activities have degraded

Figure 20. Grass swale outlet

Facility: Various within City of San Diego
Inspection Date: 09/14/2010



Storm water carrying pollutants from parking lot is not able to enter swale

Figure 21. Grass swale on west side



Figure 22. Grass swale on west side looking downstream

Facility: Various within City of San Diego
Inspection Date: 09/14/2010



Storm water is directed to CDS unit without passing through pervious area first

Figure 23. Water stain on asphalt approaches SW corner of lot



Channel requires maintenance before start of rainy season

Figure 24. Storm drain system with irrigation runoff

Facility: Various within City of San Diego

Inspection Date: 09/14/2010



Figure 25. U-ditch on SW side of parking lot

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 City of San Diego
 202 C Street
 San Diego, CA 92101

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PS Form 3800, August 2006 See Reverse for Instructions