

CONSTRUCTION NOTES

- 1 AMMEND SOIL TO HAVE A PH BETWEEN 5.5 TO 6.5, ORGANIC CONTENT BETWEEN 1.5% TO 3%, SAND CONTENT BETWEEN 45% TO 60%, AND CLAY CONTENT LOWER THAN 12%.
CONTRACTOR SHALL SUBMIT SOIL TESTS RESULTS TO ENGINEER, ONE TEST PER BIO-CELL. TEST SHALL INCLUDE THE FOLLOWING:
1) GRANULOMETRIC ANALYSIS (SAND, SILT AND CLAY) PER WEIGHT (SAND BETWEEN 45-60%; CLAY LESS THAN 12%)
2) PH (5.5 TO 6.5)
3) PERCENTAGE OF ORGANIC MATTER IN THE SOIL (1.5% TO 3%)
4) DETERMINATION OF SOLUBLE SALT CONTENT (LESS THAN 500 PPM)
5) SATURATED HYDRAULIC CONDUCTIVITY TEST (HIGHER THAN 0.5 IN/HR)
- 2 MULCH PER LANDSCAPE PLANS & SPECIFICATIONS. **CONTRACTOR SHALL NOT ADD TOP SOIL TO BIO-CELL AREAS.**
- 3 SAND
- 4 PEA GRAVEL SIZE FROM 1/2" TO 1" IN DIAMETER.
- 5 IMPERMEABLE LINER PPL-40 TYP OR APPROVED EQUIVALENT, PLACED VERTICALLY, EXTENDING AT LEAST 2' BELOW SAND-GRAVEL INTERPHASE.
- 6 NON-WOVEN PERMEABLE GEOTEXTILE WITH NILEX NW80 OR SIMILAR, WITH AT LEAST 8oz/yd², 200lbs TENSILE STRENGTH AND PERMITTIVITY OF 1.4 SEC.,
- 7 PONDING ELEVATION OF BIO-CELL CORRESPONDS TO THE EXTENT OF AMENDED SOIL, SAND AND GRAVEL LAYER IN PLAN VIEW OF BIO-CELL.
- 8 INSTALL 6" PVC PERFORATED PIPE.
- 9 CURB OUTLET - PER PLAN
- 10 INSTALL RIP-RAP PER DETAIL 4 SHEET CD-1.3.

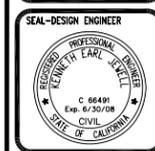
DATE	BY	REVISIONS
07/20/09	KEJ	ORIGINAL

Adams Engineering
8771 Orma Ave., Ste. 200 - Cathedral, California 92008 - (760) 796-0150
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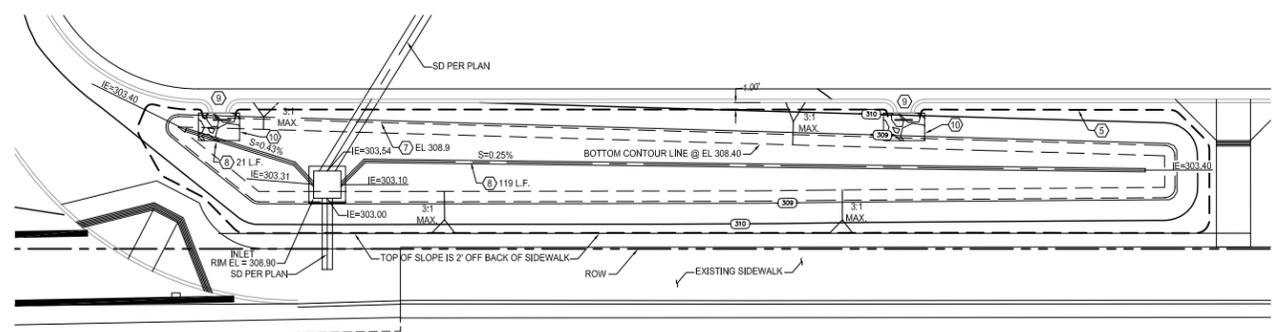


**STORM WATER MANAGEMENT
SITE PLANS
BIORETENTION CELL DETAIL
SHEET (1 OF 2)**

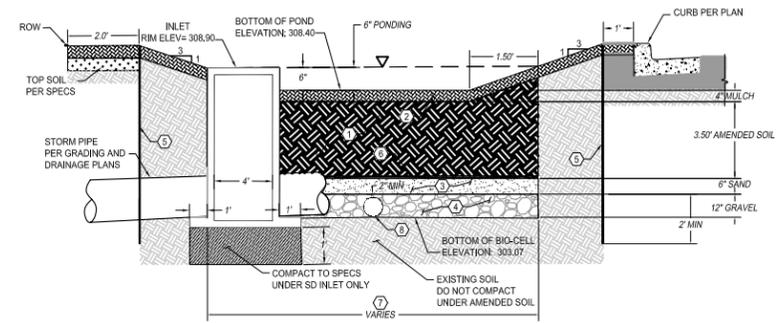
**SAM'S CLUB REMODEL
STORE No. 6614-01
4901 SANTA ANITA AVE.
EL MONTE, CALIFORNIA**



PROJECT MGR. KEJ
PROJECT TECH. EMT
JOB NO. 2002-0118
SHEET NO. SWQ-5



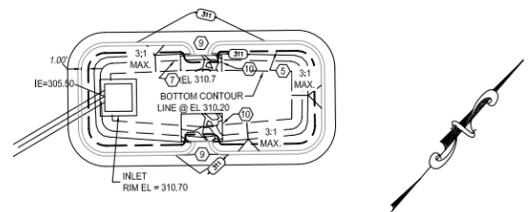
PLAN VIEW
SCALE: 1"=10'



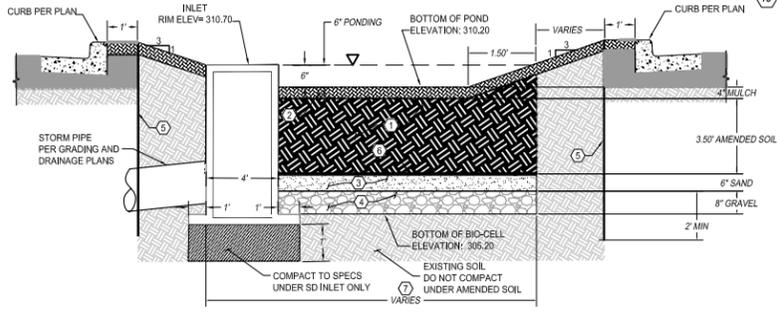
PROFILE
NOT TO SCALE

BIO-CELL 1

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.



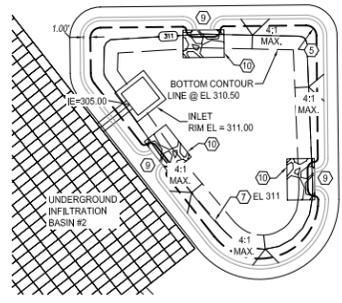
PLAN VIEW
SCALE: 1"=10'



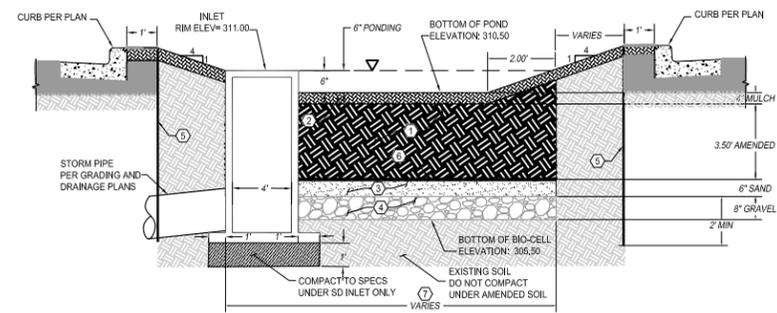
PROFILE
NOT TO SCALE

BIO-CELL 2

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.



PLAN VIEW
SCALE: 1"=10'



PROFILE
NOT TO SCALE

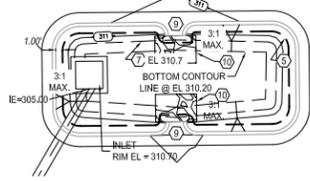
BIO-CELL 4

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.

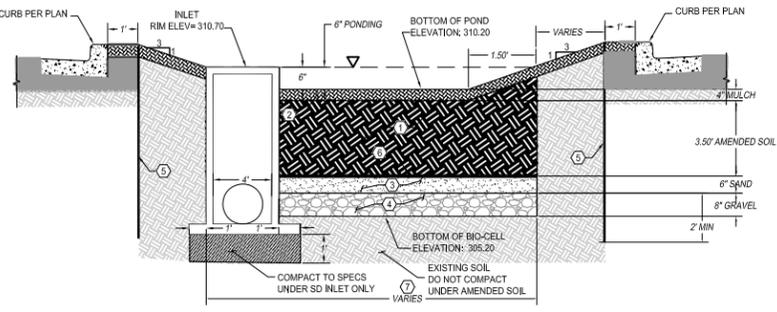
*** NOTICE TO CONTRACTORS ***
CONSTRUCTION ITEMS CONTAINED ON THIS PLAN ARE SUBJECT TO SPECIAL AND MANDATORY OBSERVATION AND INSPECTION. REFER TO SPECIFICATIONS FOR REQUIREMENTS.

BIO-CELL 3

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.

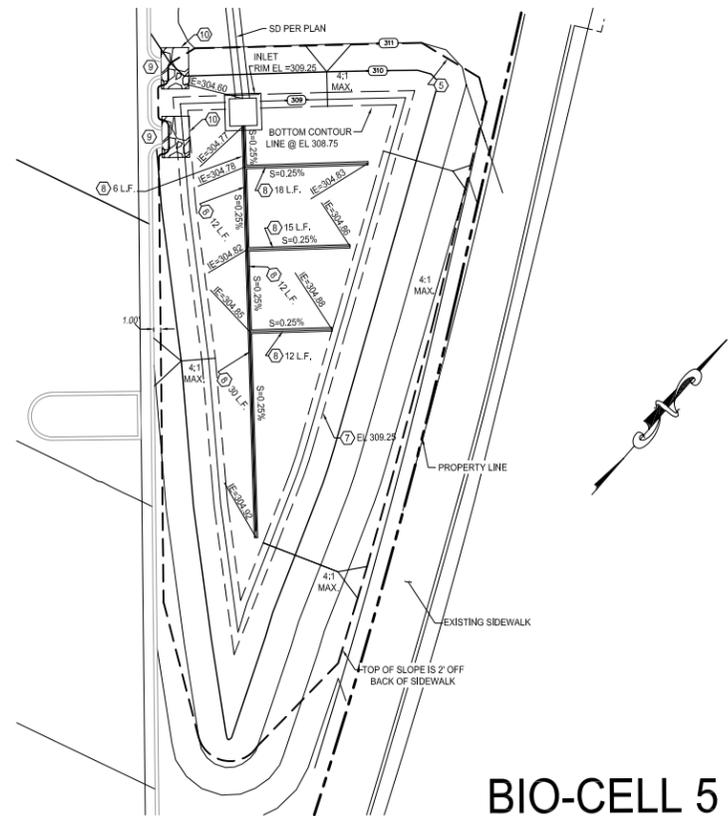


PLAN VIEW
SCALE: 1"=10'



PROFILE
NTS

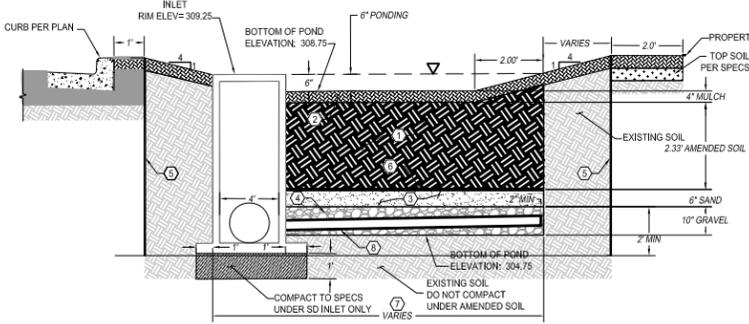




PLAN VIEW
SCALE: 1"=10'

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.

BIO-CELL 5



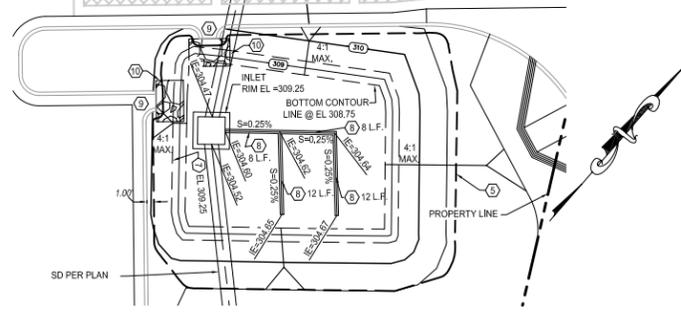
PROFILE
NOT TO SCALE

CONSTRUCTION NOTES

- 1) AMEND SOIL TO HAVE A PH BETWEEN 5.5 TO 6.5, ORGANIC CONTENT BETWEEN 1.5% TO 3% SAND CONTENT BETWEEN 45% TO 60%, AND CLAY CONTENT LOWER THAN 12%. CONTRACTOR SHALL SUBMIT SOIL TESTS RESULTS TO ENGINEER, ONE TEST PER BIO-CELL. TEST SHALL INCLUDE THE FOLLOWING:
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- 2) MULCH PER LANDSCAPE PLANS & SPECIFICATIONS. **CONTRACTOR SHALL NOT ADD TOP SOIL TO BIO-CELL AREAS.**
- 3) SAND
- 4) PEA GRAVEL SIZE FROM 1/2" TO 1" IN DIAMETER.
- 5) IMPERMEABLE LINER PPL-40 TYP OR APPROVED EQUIVALENT, PLACED VERTICALLY, EXTENDING AT LEAST 2' BELOW SAND-GRAVEL INTERPHASE.
- 6) NON-WOVEN PERMEABLE GEOTEXTILE WITH NILEX NW80 OR SIMILAR, WITH AT LEAST 8oz/yd², 200lbs TENSILE STRENGTH AND PERMITTIVITY OF 1.4 SEC.-1.
- 7) PONDING ELEVATION OF BIO-CELL CORRESPONDS TO THE EXTENT OF AMENDED SOIL, SAND AND GRAVEL LAYER IN PLAN VIEW OF BIO-CELL.
- 8) INSTALL 6" PVC PERFORATED PIPE.
- 9) CURB OUTLET - PER PLAN
- 10) INSTALL RIP-RAP PER DETAIL 4 SHEET CD-1.3.

** NOTICE TO CONTRACTORS **

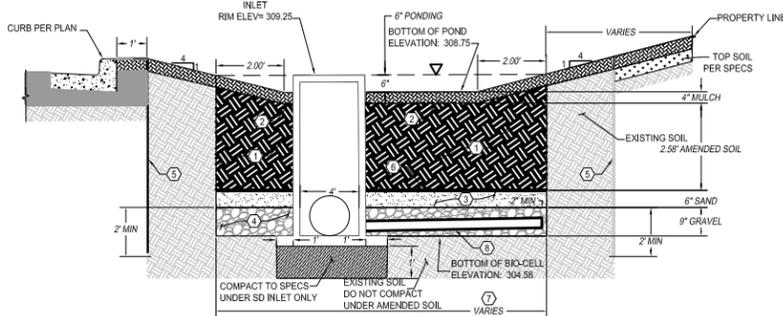
TOPOGRAHY INFORMATION TAKEN FROM A TOPOGRAHY SURVEY PERFORMED BY EXCEL ENGINEERING OF ESCONCADO, CALIFORNIA. THE CONTRACTOR SHALL VERIFY THE ENGINEER'S LIABILITY IN WRITING OF ANY DISCREPANCIES OR OMISSIONS TO THE TOPOGRAHY INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING THE LOCATION, HORIZONTAL/VERTICAL OF ANY BURIED CABLES, CONDUITS, PIPES AND STRUCTURES (STORM SEWER, SANITARY SEWER, WATER, GAS, TELEVISION, TELEPHONE, ETC) WITHIN THE CONSTRUCTION SITE. THE CONTRACTOR SHALL NOTIFY THE OWNER IF ANY DISCREPANCIES ARE FOUND BETWEEN THE ACTUAL CONDITIONS VERSUS THE DATA CONTAINED IN THE CONSTRUCTION PLANS. ANY COSTS INCURRED AS THE RESULT OF NOT CONFIRMING THE ACTUAL LOCATION (HORIZONTAL/VERTICAL) OF SAID CABLES, CONDUITS, PIPES, AND STRUCTURES SHALL BE BORNE BY THE CONTRACTOR.



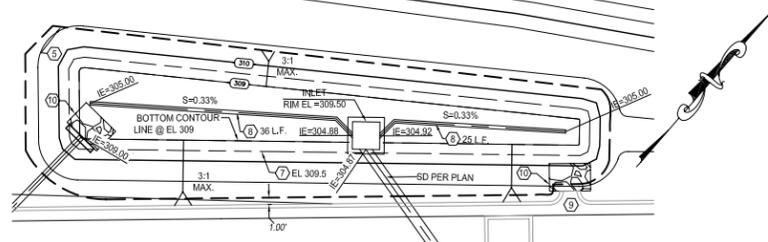
PLAN VIEW
SCALE: 1"=10'

BIO-CELL 6

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.



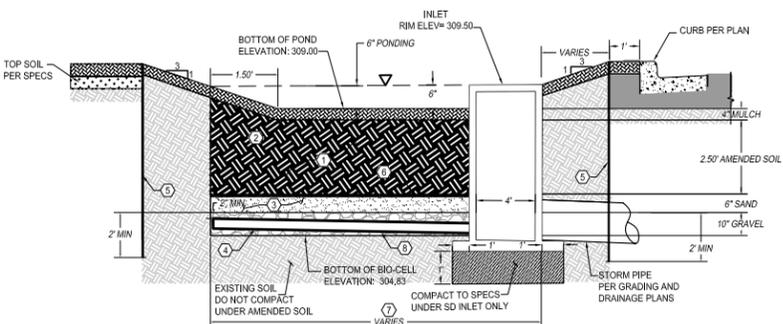
PROFILE
NOT TO SCALE



PLAN VIEW
SCALE: 1"=10'

BIO-CELL 8

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.



PROFILE
NOT TO SCALE

*** NOTICE TO CONTRACTORS ***

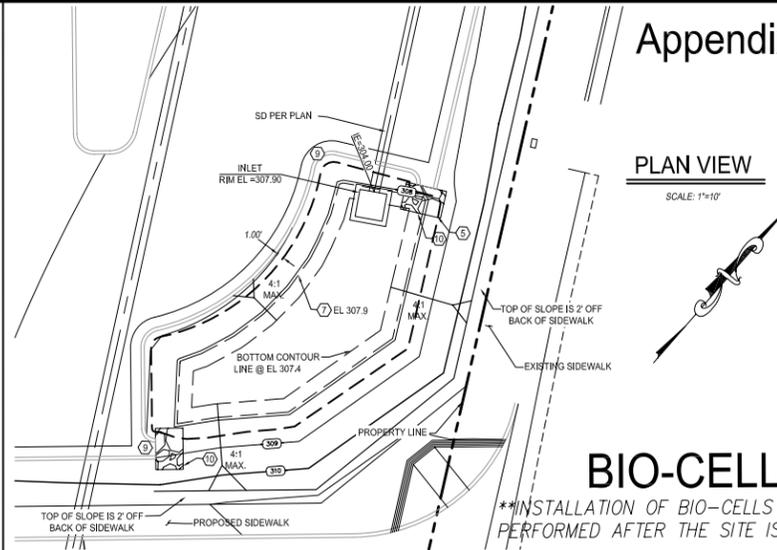
THE SITE WORK FOR THE SAWS PORTION OF THIS PROJECT SHALL BE LIMITED TO EXCEED THE "WALMART STANDARD SITEWORK SPECIFICATIONS". ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.

*** NOTICE TO CONTRACTORS ***

ALL QUESTIONS REGARDING THE GENERAL CONTRACTOR'S PREPARATION OF HIS BID SHALL BE DIRECTED TO THE WALMART'S CONTRACTS ADMINISTRATION DEPARTMENT. SUBTRACTORS SHOULD DIRECT THEIR QUESTIONS THROUGH THE GENERAL CONTRACTOR ONLY. THE CONSULTING ARCHITECT AND/OR ENGINEER SHALL NOT BE CONTACTED BY THE CONTRACTOR, SUBCONTRACTOR, OR SUPPLIER WITHOUT DIRECT PRIOR AUTHORIZATION FROM WALMART.

*** NOTICE TO CONTRACTORS ***

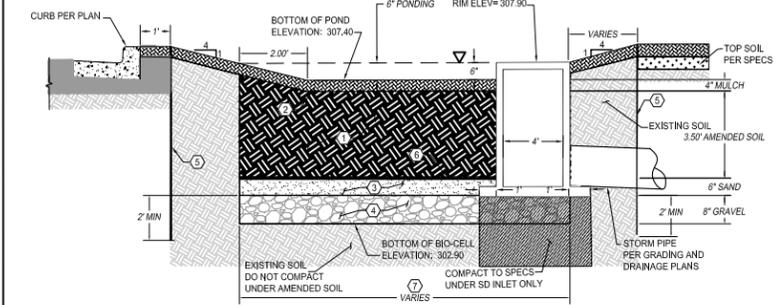
CONSTRUCTION ITEMS CONTAINED ON THIS PLAN ARE SUBJECT TO SPECIAL AND MANDATORY OBSERVATION AND INSPECTION. REFER TO SPECIFICATIONS FOR REQUIREMENTS.



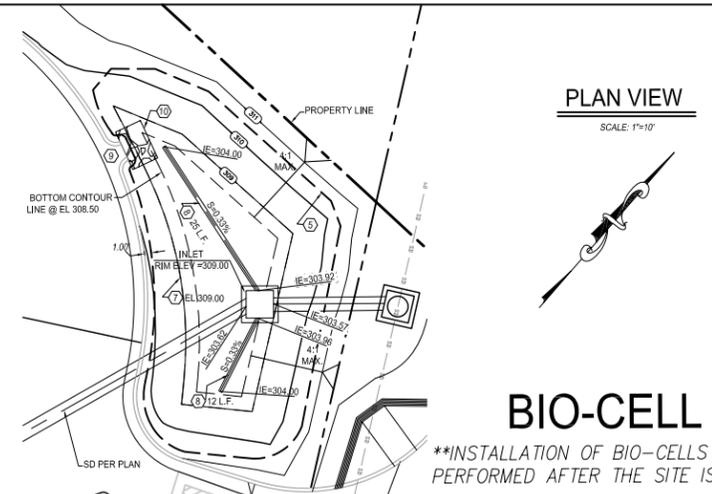
PLAN VIEW
SCALE: 1"=10'

BIO-CELL 7

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.



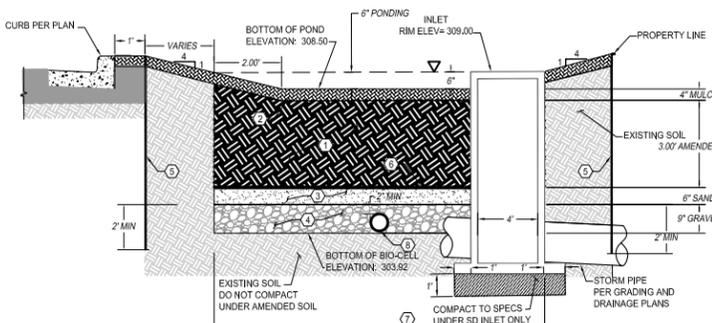
PROFILE
NOT TO SCALE



PLAN VIEW
SCALE: 1"=10'

BIO-CELL 9

INSTALLATION OF BIO-CELLS SHALL BE PERFORMED AFTER THE SITE IS PAVED.



PROFILE
NOT TO SCALE

Appendix B-6

DATE	BY	REVISIONS
07/20/08	KEJ	ORIGINAL

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**STORM WATER MANAGEMENT
SITE PLANS
BIORETENTION CELL DETAIL
SHEET (2 OF 2)**

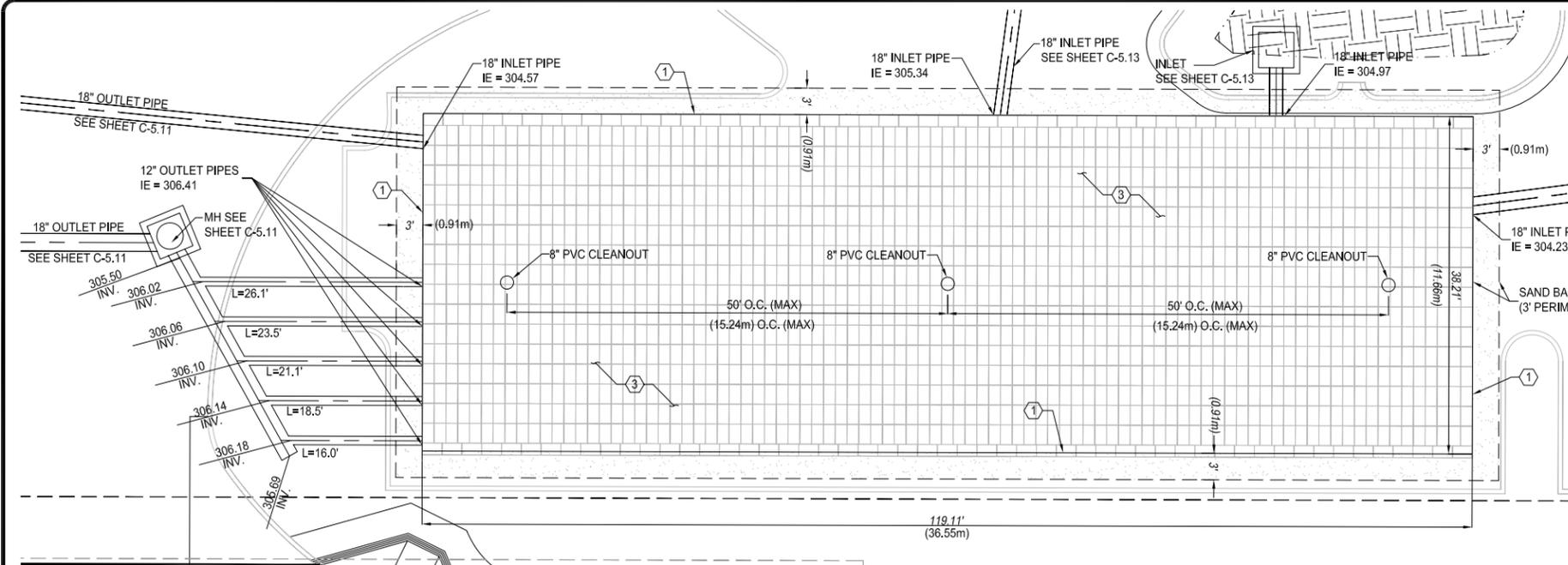


**SAM'S CLUB REMODEL
STORE No. 6614-01
4901 SANTA ANITA AVE.
EL MONTE, CALIFORNIA**

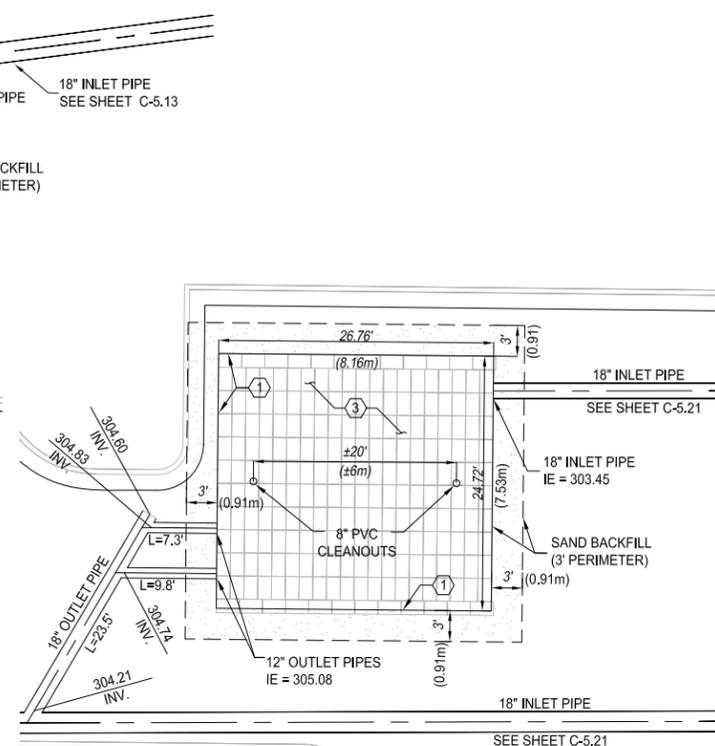


PROJECT MGR. KEJ
PROJECT TECH. EMT
JOB NO. 2002-0118
SHEET NO. SWQ-6

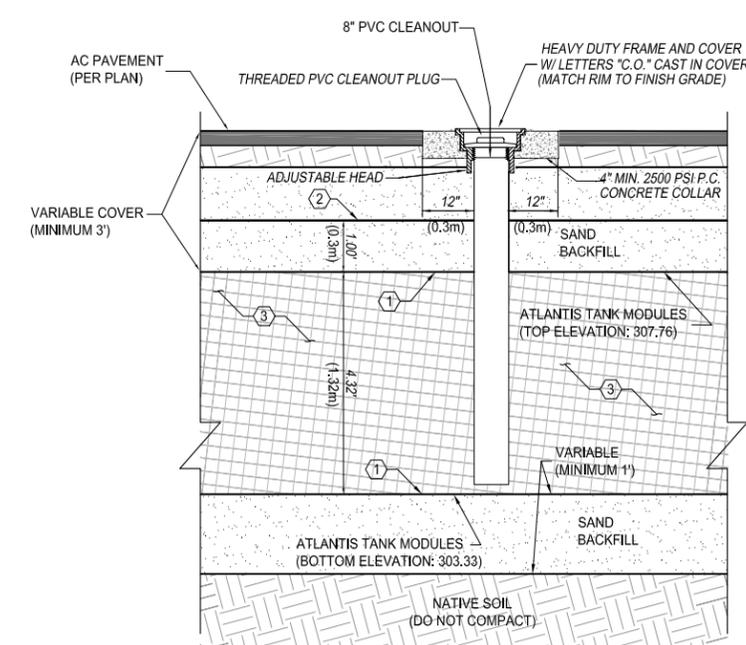




UNDERGROUND INFILTRATION BASIN #1 (PLAN VIEW)
NO SCALE

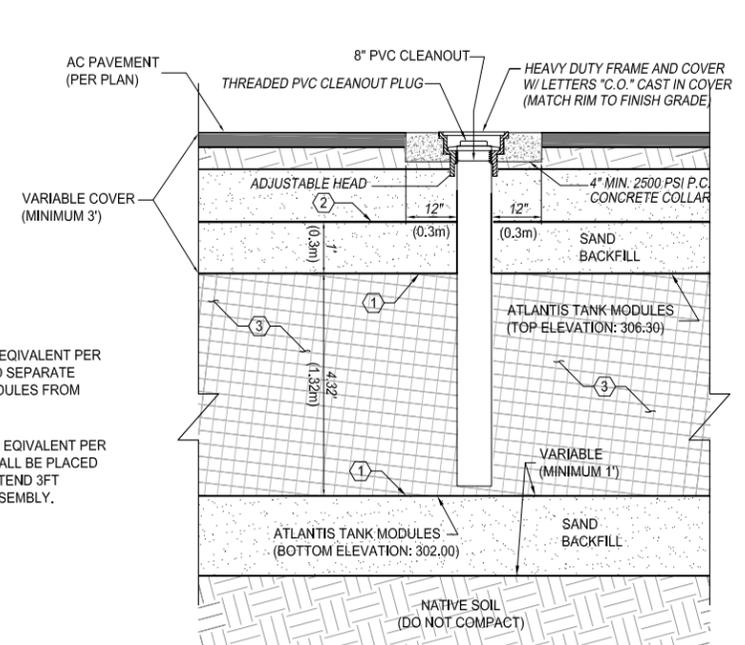


UNDERGROUND INFILTRATION BASIN #2 (PLAN VIEW)
NO SCALE



UNDERGROUND INFILTRATION BASIN #1 (PROFILE)
NO SCALE

- CONSTRUCTION NOTES**
- ① PERMEABLE GEOTEXTILE MEMBRANE (MIRAFI 180 N OR EQUIVALENT PER ATLANTIS D-RAINTANK™ TECHNICAL SPECIFICATION) TO SEPARATE RATE AMENDED SOIL FROM SAND LAYER AND TANK MODULES FROM SAND BACKFILL.
 - ② GEOGRID (TENSAR™ BX 120060, HUESKER FORNIT 30 OR EQUIVALENT PER ATLANTIS D-RAINTANK™ TECHNICAL SPECIFICATION) SHALL BE PLACED 1ft VERTICALLY ABOVE THE RAIN TANK MODULES AND EXTEND 3FT BEYOND THE PERIMETER OF THE RAIN TANK MODULE ASSEMBLY.
 - ③ INSTAL ATLANTIS D-RAINTANK INFILTRATION TANK PER SPECIFICATIONS



UNDERGROUND INFILTRATION BASIN #2 (PROFILE)
NO SCALE

DATE	02/20/08 KEJ
BY	KEJ
REVISIONS	
ORIGINAL	

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Adams ENGINEERING
8575 Owens Avenue, Ste. 200 • Chatham, California 92024 • (760) 766-8158

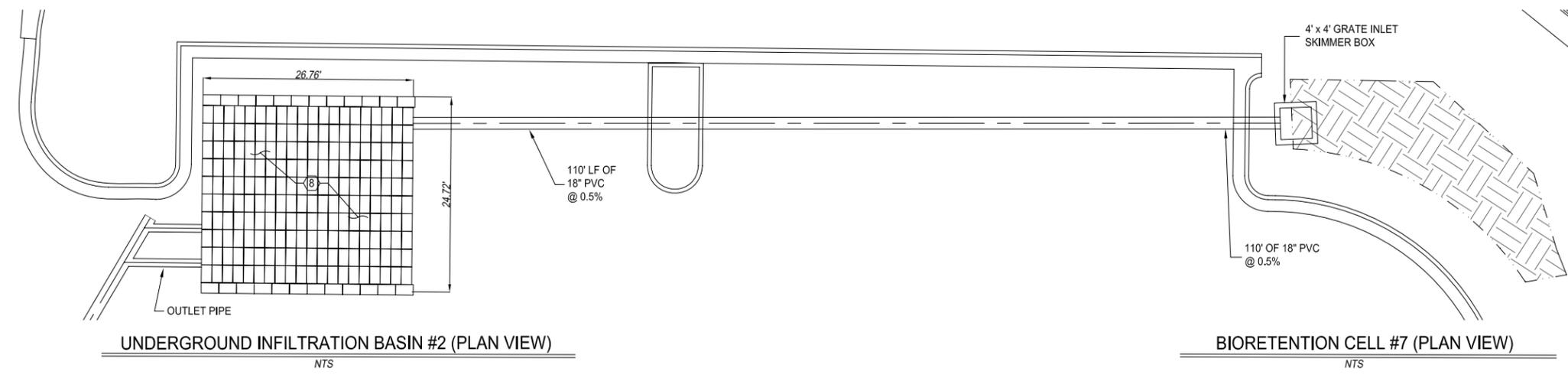
**STORM WATER MANAGEMENT
SITE PLANS
UNDERGROUND INFILTRATION
BASIN DETAIL**

SAM'S CLUB REMODEL
STORE No. 6614-01
4901 SANTA ANITA AVE.
EL MONTE, CALIFORNIA

SEAL-DESIGN ENGINEER
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. EARL, J.E.C.E.T.
C 86491
Exp. 02/20/08
CIVIL
STATE OF CALIFORNIA

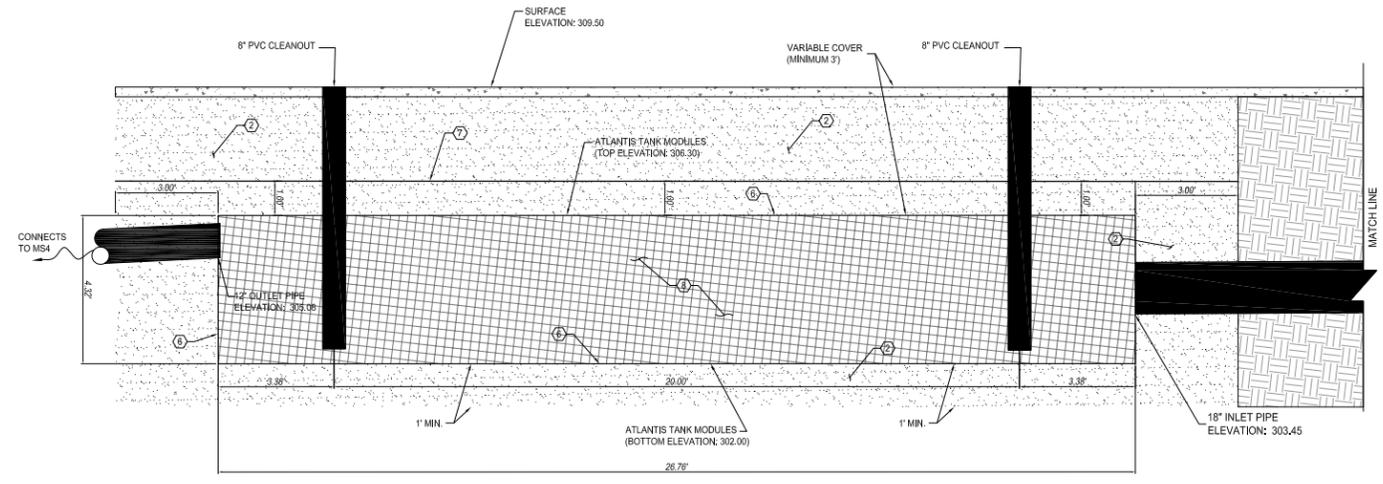
PROJECT MGR.
KEJ
PROJECT TECH
EMT
JOB NO.
2002-018
SHEET NO.
SWQ-7

DIGALERT
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CALL TOLL FREE 1-800-827-8800
TWO WORKING DAYS BEFORE YOU DIG

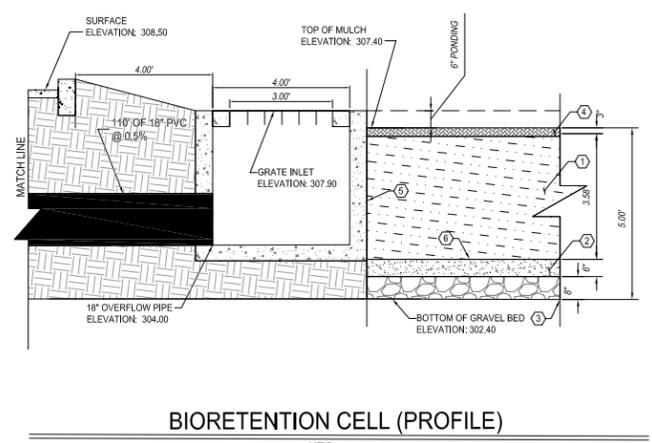


UNDERGROUND INFILTRATION BASIN #2 (PLAN VIEW)
NTS

BIORETENTION CELL #7 (PLAN VIEW)
NTS



UNDERGROUND INFILTRATION BASIN (PROFILE)
NTS



BIORETENTION CELL (PROFILE)
NTS

- NOTES:
- ① SOIL SHOULD BE AMENDED TO HAVE A PH BETWEEN 5.5 TO 6.5, ORGANIC CONTENT BETWEEN 1.5% TO 3%, A SAND CONTENT BETWEEN 45% TO 60%, AND A CLAY CONTENT LOWER THAN 12%. EXISTING IN-SITU SOILS OF THE FOLLOWING TYPES:
 - SANDS (S)
 - SILTY SAND (SM)
 - SANDY SILT (ML), WITH OR WITHOUT SOME ORGANICS CAN BE USED AS PART OF THE MIXTURE
 - ② SAND
 - ③ GRAVEL DEPTH IS 8" MINIMUM.
 - ④ MULCH SHALL BE PER LANDSCAPE PLANS.
 - ⑤ IMPERMEABLE GEOTEXTILE MEMBRANE (PPL-24 OR EQUIVALENT PER ATLANTIS D-RAINTANK™ TECHNICAL SPECIFICATION) TO BE PLACED VERTICALLY AROUND THE PERIMETER OF THE BIORETENTION CELL AS SHOWN IN THE PLAN VIEW.
 - ⑥ PERMEABLE GEOTEXTILE MEMBRANE (MIRAFI 180 N OR EQUIVALENT PER ATLANTIS D-RAINTANK™ TECHNICAL SPECIFICATION) TO SEPERATE AMENDED SOIL FROM SAND LAYER AND TANK MODULES FROM SAND BACKFILL.
 - ⑦ GEOGRID (TENSAR™ BX 120060, HUESKER FORNIT 30 OR EQUIVALENT PER ATLANTIS D-RAINTANK™ TECHNICAL SPECIFICATION) SHALL BE PLACED 1" VERTICALLY ABOVE THE RAIN-TANK MODULES AND EXTEND 3" BEYOND THE PERIMETER OF THE RAIN-TANK MODULE ASSEMBLY.
 - ⑧ INSTAL ATLANTIS D-RAINTANK™ INFILTRATION TANK PER SPECIFICATIONS

DATE	BY
02/20/08	KEJ

REVISIONS
ORIGINAL

Adams ENGINEERING
5875 Orma Avenue, Ste. 300 • Carlsbad, California 92008 • (760) 796-9150

STORM WATER MANAGEMENT SITE PLANS
BIORETENTION CELL TO INFILTRATION BASIN DETAIL

SAM'S CLUB REMODEL
STORE No. 6614-01
4901 SANTA ANITA AVE.
EL MONTE, CALIFORNIA

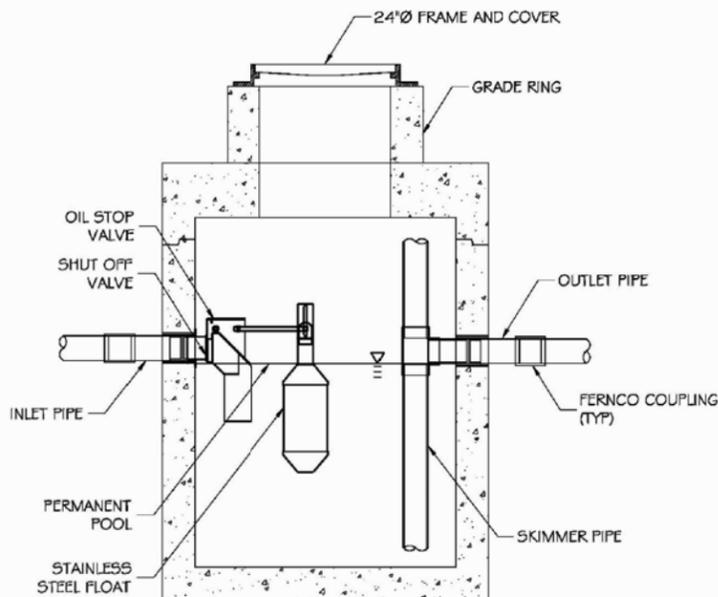
SEAL-DESIGN ENGINEER
REGISTERED PROFESSIONAL ENGINEER
REINHOLD EARL JENSEN
C 88491
Exp. 01/30/08
CIVIL
STATE OF CALIFORNIA

PROJECT MGR. KEJ
PROJECT TECH. EMT
JOB NO. 2002-018
SHEET NO. SWQ-8

DIGALERT
CALL BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
CALL: TOLL FREE 1-800-887-8800
TWO WORKING DAYS BEFORE YOU DIG

OIL STOP VALVE	DIAMETER		TYPICAL DEPTH (BELOW INVERT)		PEAK TREATMENT CAPACITY		MAXIMUM SIZE INLET \ OUTLET	
	ft	m	ft	m	gpm	lps	in	mm
OSV100	-	-	-	-	100	6.3	4	102
OSV148	4	1.22	4	1.22	100	6.3	4	102
OSV160	5	1.52	4	1.22	100	6.3	4	102
OSV300	-	-	-	-	280	17.7	6	152
OSV360	5	1.52	5	1.52	280	17.7	6	152
OSV372	6	1.83	5	1.52	280	17.7	6	152
OSV500	-	-	-	-	500	31.5	8	203
OSV560	5	1.52	5	1.52	500	31.5	8	203
OSV572	6	1.83	5	1.52	500	31.5	8	203

OIL STOP VALVE BY CONTECH STORMWATER SOLUTIONS; PORTLAND, OR (800) 548-4667; SCARBOROUGH, ME (877) 907-8676; ELKRIDGE, MD (866) 740-3318.



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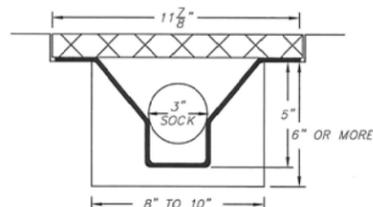


OIL STOP VALVE SECTION VIEW AND NOTES STANDARD DETAIL

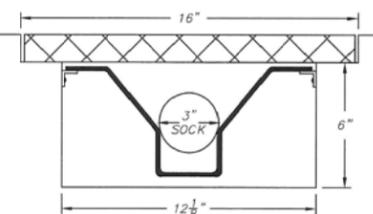
DATE: 04/15/08 SCALE: NONE FILE NAME: OSV-MH-DTL DRAWN: MMJ CHECKED: DS

OIL STOP VALVE DETAIL NTS

TRENCH GRATE FILTER MODEL # 5-12



FOR ODD SIZE TRENCHES FLANGES CAN BE CUT WITH ALMOST ANY SKILL SAW WITH CARBIDE BLADE



TO INSTALL THE MODEL 5-12 IN A WIDER OPENING SUCH AS SHOWN INSTALL 3/4\"/>

SUNTREE TECHNOLOGIES, INC.
798 CLEARLAKE RD, SUITE #2
COCOA, FL 32922
TRENCH GRATE FILTER
DATE: 04/24/07 SCALE: SF = 17.5
DRAFTER: N R B UNITS = INCHES

TRENCH DRAIN FILTER INSERT NTS

Part # GISB-36-36-25

TOP VIEW

Description of filter opening	Percent Open Based on Screen Dimensions	Total Square Inches per Unit	Square Inches of Total Unobstructed Openings	Flow Rate (Cubic Feet per Second)
Skimmer protected By-Pass	100%	381.5	381.5	13.4 cfs
Coarse Screen 3/4" x 1-3/4" stainless steel flattened expanded	62%	231.0	143.2	6.2 cfs
Medium Screen 10x10 mesh stainless steel	56%	231.0	129.3	6.4 cfs
Fine screen 14 x 18 mesh stainless steel	68%	283.5	192.8	10.8

MAXIMUM THROAT FLOW RATE Total: 18.8 cfs
SCREEN TREATED FLOW RATE Total: 23.4 cfs
FLOW RATES BASED ON UNOBSTRUCTED SCREEN OPENINGS

FLOW SCHEMATIC

SIDE VIEW

END VIEW

CONCRETE STRUCTURE

BOX MANUFACTURED FROM MARINE GRADE FIBERGLASS & GEL COATED FOR UV PROTECTION

5 YEAR MANUFACTURERS WARRANTY

PATENTED

ALL FILTER SCREENS ARE STAINLESS STEEL

REMOVE GRATE
INSERT GISB
REINSTALL GRATE

EXCLUSIVE CALIFORNIA DISTRIBUTOR:
BIO CLEAN ENVIRONMENTAL SERVICE
P.O. BOX 869, OCEANSIDE, CA, 92049
TEL: 760-433-7640 FAX: 760-433-3176
Email: info@biocleanenvironmental.net

SUNTREE QUALITY PRODUCTS ARE BUILT FOR EASY CLEANING AND ARE DESIGNED TO BE PERMANENT INFRASTRUCTURE AND SHOULD LAST FOR DECADES.

SUNTREE TECHNOLOGIES
798 CLEARLAKE RD, SUITE #2
COCOA FL 32922
TEL: 321-637-7552 FAX 321-637-7554
GRATE INLET SKIMMER BOX FOR FLORIDA DOT INLET STRUCTURES.
DATE: 04/12/04 SCALE: SF = 15
DRAFTER: N.R.B. UNITS = INCHES

GRATE INLET SKIMMER BOX NTS

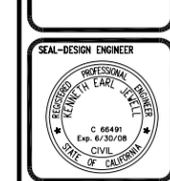
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ORIGINAL	02/20/08	KEJ

CONTECH STORMWATER SOLUTIONS
1000 SW 15th Ave, Suite 100
Portland, OR 97205
Tel: (503) 253-4667
Fax: (503) 253-4668
www.contechstormwater.com



STORM WATER MANAGEMENT SITE PLANS
FILTER INSERT DETAIL SHEET

SAM'S CLUB REMODEL
STORE No. 6614-01
4901 SANTA ANITA AVE.
EL MONTE, CALIFORNIA



PROJECT MGR: KEJ
PROJECT TECH: EMT
JOB NO.: 2002-018
SHEET NO.: SWQ-9