

UTILITY COMPANY CONTACTS

COMPANY	CONTACT	PHONE NO.
AT&T DISTRIBUTION	RICK RODRIGUEZ	(510) 645-2929
CHARTER	AL RUIZ	(951) 406-1601
CITY OF CULVER CITY	YANNI DEMITRI	(310) 253-5600
CRIMSON PIPELINE	DAN COBUM	(562) 355-7259
CROWN CASTLE	DAVID ANTOL	(724) 416-2180
FRONTIER	CATHY BROWN	(310) 264-5100
LADWP	EVERETT BURNETT	(213) 367-2659
LA SANITATION	RACHEL BASS	(310) 575-8612
SOUTHERN CALIFORNIA EDISON	KIM GURULE	(714) 796–9932
SOUTHERN CALIFORNIA EDISON - TELECOMM	AUSTIN STEPHENS	(714) 737-7296
SOUTHERN CALIFORNIA GAS COMPANY - DISTRIBUTION	JASUN SUM	(310) 687-2011
SOUTHERN CALIFORNIA GAS COMPANY - TRANSMISSION		(818)-701-4546
METROPOLITAN WATER DISTRICT	SUBSTRUCTURE TEAM	(213) 217-4663
SPECTRUM / CHARTER	ABRAHAM RODRIGUEZ	(951)-406-1601
TING FIBER	JEREMY LUYMES	(416)-535-0123
TORRANCE LOGISTICS	ADRIAN SIMON	(310)-625-3886
GOLDEN STATE WATER	RAY BURK	(562)-907-9200
MCI / VERIZON	DESIGN	(800)-624-9675
LUMEN COMMUNICATIONS	AREA REPRESENTATIVE	(877)-366-8344
SHELL OIL NORTH	ALEX GARCIA	(310)-816-2024

ENGINEER'S NOTICE TO CONTRACTOR

THE ESTIMATED QUANTITY FOR EACH SPECIFIC ITEM OF THE WORK DESIGNATED ON THE PLANS SHALL BE CONSIDERED AS APPROXIMATE ONLY AND NO GUARANTEE IS MADE THAT THE QUANTITIES WHICH CAN BE DETERMINED BY COMPUTATIONS, BASED ON THE DETAILS AND DIMENSIONS SHOWN ON THESE PLANS, WILL EQUAL THE ESTIMATED QUANTITIES. THE ESTIMATE OF QUANTITIES IS PROVIDED BY THE ENGINEER ONLY FOR THE CONVENIENCE OF THE CITY. ANY ITEM OF WORK, OR PORTION THEREOF. REQUIRED BY THESE PLANS WHICH IS NOT SPECIFICALLY LISTED IN THE ESTIMATE OF QUANTITIES SHALL BE CONSIDERED AS INCLUDED IN THE OTHER ITEMS OF WORK.

VERTICAL DATUM

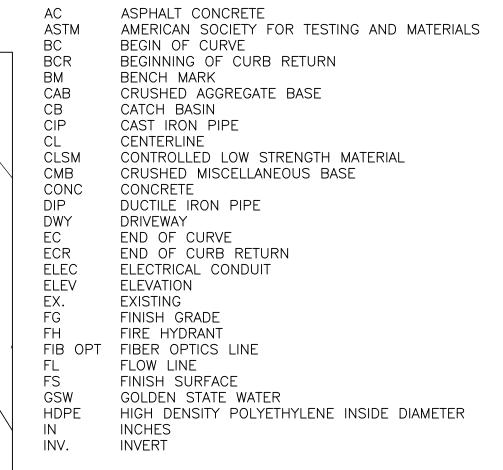
NORTH AMERICAN VERTICAL DATUM OF 1988.



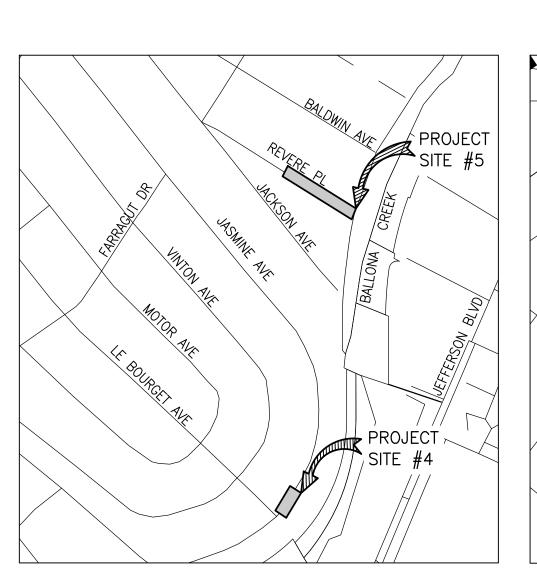
CULVER CITY CITYWIDE STORMWATER CAPTURE

SHT. NO.	DRAWING NO.	SHEET TITLE
1	T-1	TITLE SHEET
2	C-1	GENERAL NOTES
3	C-2	SITE 1 BERRYMAN AVENUE
4	C-3	SITE 2 SEGRELL WAY
5	C-4	SITE 3 PICKFORD WAY
6	C-5	SITE 4 JASMINE AVENUE
7	C-6	SITE 5 REVERE PLACE
8	C-7	SITE 6 WESLEY STREET
9	C-8	SITE 7 NORTHGATE STREET
10	C-9	SITE 8 GALVIN STREET
11	C-10	PERVIOUS PAVEMENT
12	C-11	BIORETENTION
13	C-12	DRYWELLS
14	C-13	SUBSURFACE INFILTRATION SYSTEM

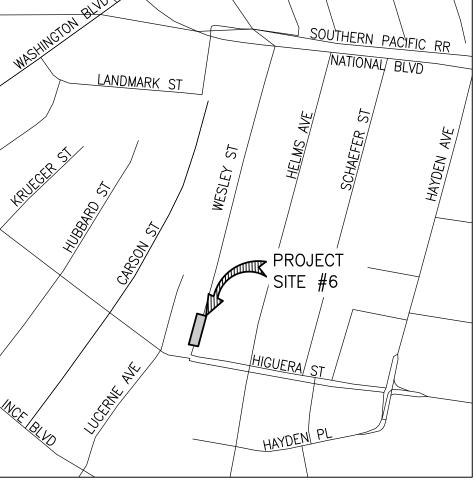
ABBREVIATIONS



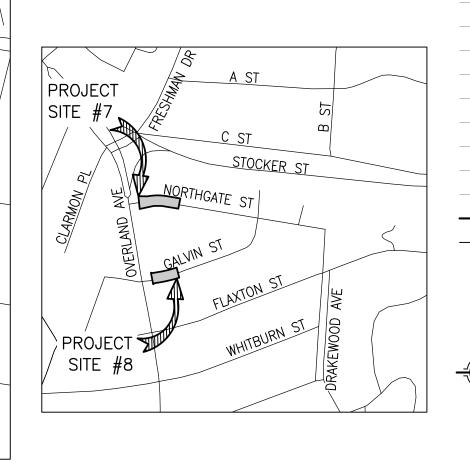
LOS ANGELES COUNTY FLOOD CONTROL LINEAR FEET MANHOLE ON CENTER PORTLAND CEMENT CONCRETE POUNDS PER CUBIC FEET POUNDS PER SQUARE INCH POLYVINYL CHLORIDE REINFORCED CONCRETE PIPE RIGHT-OF-WAY SOUTHERN CALIFORNIA STORM DRAIN SQUARE FEET STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION SANITARY SEWER STATION STANDARD TOP OF CURB TELECOMMUNICATION W.A.T.C.H WORK AREA TRAFFIC CONTROL HANDBOOK



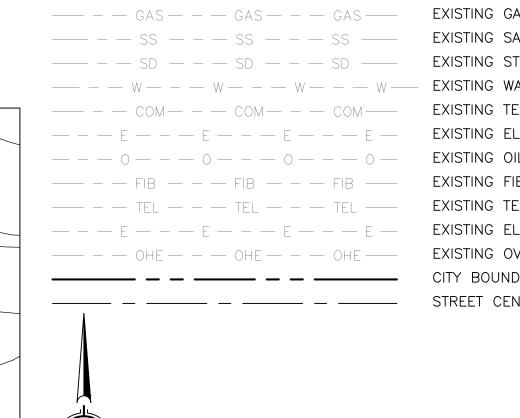
PROJECT



SLAUSON AVE



SITE #3



SYMBOLS

(23) CONTOUR DRIVEWAY → FIRE HYDRANT

GUY POLE

GUY WIRE MANHOLE OTHER TREE PALM TREE PARKING METER

■ PULL BOX

∨AULT

☆ STREET LIGHT

TRAFFIC SIGNAL

POWER POLE

© STREET CENTERLINE

TRAFFIC SIGNAL BOX

LEGEND			
GAS	GAS	— GAS ——	EXISTING GAS LINE
	SS	— SS ——	EXISTING SANITARY SEWER LINE
—— — SD —	SD	— SD ——	EXISTING STORM DRAIN LINE
	— W — — W	— — W —	EXISTING WATER LINE
	COM	— COM ——	EXISTING TELECOMMUNICATIONS LINE
— — E — — -	— E — — E —	E -	EXISTING ELECTRICAL LINE
	_ 0 0		EXISTING OIL LINE
—— — FIB —	FIB	— FIB ——	EXISTING FIBER
—— — TEL —	TEL ·	— TEL ——	EXISTING TELEPHONE LINE
— — E — — -	— E — — E —	E -	EXISTING ELECTRICAL LINE
—— — OHE —	OHE ·	— OHE ——	EXISTING OVERHEAD ELECTRICAL LINE
	· — — —		CITY BOUNDARY
			STREET CENTERLINE

CITY OF CULVER CITY PUBLIC WORKS DEPARTMENT

CULVER CITY CITYWIDE STORMWATER CAPTURE





		SCALE: I =500	SCALE: 1 =500			TOTIL
PLANS PREPARED UNDER THE SUPERVISION OF:	\wedge					
KATHRYN (KATIE) HARREL, P.E.					TITLE SHEET	
	/2				11122 31122 1	
					ADDDOVED DV VANNI DENITRI DE	CHEET
Project Number: PZ497	3				APPROVED BY: YANNI DEMITRI, P.E.	SHEET
						T-1
Drawing No.	NO.	REVISION	BY	APPR. DATE	PUBLIC WORKS DIRECTOR/CITY ENGINEER DATE	
					PUBLIC WORKS DIRECTOR/CITY ENGINEER DATE	Sheet 1 of 14 Sheet

LOCATION MAP

GENERAL NOTES:

- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS
- PRIOR TO COMMENCING CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD. IF THE FIELD CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- NOTES AND DETAILS ON THESE PLANS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE GIVEN. CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK.
- THE WORK SHOWN ON THESE PLANS REQUIRES THE PRIME CONTRACTOR TO POSSESS A VALID CALIFORNIA CLASS A CONTRACTOR'S LICENSE.

EXISTING & PROPOSED UTILITIES

- INFORMATION ON LOCATION, SIZES AND DEPTH OF THE EXISTING UTILITIES WAS TAKEN FROM EXISTING DRAWINGS AND DATA, AND IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PLANS AND SHALL VERIFY SITE CONDITIONS PRIOR TO THE ORDERING OF MATERIALS AND COMMENCING WORK.
- ANY UTILITY INVESTIGATION DONE BY EXPLORATORY EXCAVATION POTHOLING SHALL USE VACUUM EXTRACTION OR HAND EXCAVATION METHODS ONLY.
- BEFORE CONSTRUCTION IS STARTED, CONTRACTOR SHALL COORDINATE WITH THE OWNER OF EACH UTILITY AND DEFINE THE REQUIREMENTS AND METHODS TO ACCOMMODATE THE PROTECTION, TEMPORARY SUPPORT ADJUSTMENT, OR RELOCATION OF ANY UTILITIES AFFECTED BY THE PROPOSED WORK.
- IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO ADJUST TO FINISHED GRADE EXISTING SEWER AND STORM DRAIN MAINTENANCE HOLE COVERS AND ANY OTHER UTILITY BOX COVERS AND FURNISH AND INSTALL CONCRETE COLLARS AS REQUIRED TO MATCH PROPOSED PAVEMENT.
- 9. THE CONTRACTOR SHALL BE COGNIZANT OF OVERHEAD LINES AT ALL TIMES.

JOB SITE

- 10. ALL FIRE HYDRANTS, WATER CONTROL VALVES, AND MAINTENANCE HOLES SHALL BE KEPT FREE FROM OBSTRUCTIONS AND AVAILABLE FOR USE AT ALL TIMES.
- 11. IN CASE OF SUSPENSION OF WORK FROM ANY CAUSE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND SHALL PROPERLY STORE THEM IF NECESSARY AND SHALL ERECT TEMPORARY STRUCTURES WHERE NECESSARY. CITY WILL NOT BE HELD RESPONSIBLE FOR THE CARE OR PROTECTION OF ANY MATERIAL OR PARTS OF THE WORK PRIOR TO FINAL ACCEPTANCE, UNLESS OTHERWISE SPECIFIED.
- 12. THE CONTRACTOR SHALL MAINTAIN AND CLEAN, IF NECESSARY, ALL EXISTING ONSITE AND/OR ADJACENT STORM DRAIN INLETS AFFECTED BY CONSTRUCTION DURING THE COURSE OF CONSTRUCTION AND UNTIL THE WORK IS ACCEPTED BY THE CITY.
- 13. ALL CONSTRUCTION DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF AT APPROVED DISPOSAL SITE. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION AND DISPOSAL OF MATERIAL.

SURVEY & LAYOUT

- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL PROPERTY CORNER MARKERS. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REPLACING ANY SURVEY MONUMENTS THAT ARE DISTURBED DURING CONSTRUCTION. PROPERTY CORNER MARKERS AND SURVEY MONUMENTS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE RE-ESTABLISHED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF CALIFORNIA.
- 15. THE PROPOSED GRADE IS THE FINAL GRADE AND NOT THE ROUGH GRADE. THE CONTRACTOR SHALL SUBTRACT THE THICKNESS OF THE PAVED SECTION TO ARRIVE AT THE ROUGH GRADE ELEVATION.
- 16. CONSTRUCTION STAKING FOR IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE PERFORMED BY A PROFESSIONAL LAND SURVEYOR. POSSESSING A VALID STATE OF CALIFORNIA LAND SURVEYOR LICENSE.

PUBLIC HEALTH. SAFETY & WELFARE

17. CONTRACTOR SHALL COMPLY WILL ALL LOCAL SOUND CONTROL AND NOISE LEVEL RULES, REGULATIONS AND ORDINANCES, INCLUDING BUT NOT LIMITED TO ALL APPLICABLE PROVISIONS OF CHAPTER 9.07 OF THE CULVER CITY MUNICIPAL CODE.

MISCELLANEOUS

- 18. AT LEAST 72 HOURS SHALL ELAPSE FROM THE TIME CONCRETE IS PLACED BEFORE VEHICULAR TRAFFIC IS PERMITTED TO TRAVEL ON IT, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 19. IN AREAS SHOWN ON THESE PLANS TO BE CONSTRUCTED OR RECONSTRUCTED AND WHERE EXISTING PAVEMENT OR SUBGRADE IS FOUND TO BE UNSTABLE, THE CONTRACTOR SHALL REMOVE AND REPLACE THE TOP 3 FEET OF SUBGRADE WITH CRUSHED MISCELLANEOUS BASE (CMB) AND COMPACT TO 90% OF MAX. DRY DENSITY OBTAINABLE AS MEASURED BY ASTM D-1157. IF SHALLOW UTILITIES PREVENT REMOVAL OF 3 FEET OF SUBGRADE SOIL, AN APPROVED WOVEN GEOFABRIC OR GEOGRID SHALL BE USED TO PROVIDE STRENGTH TO THE SUBGRADE.
- 20. SAWING OF JOINTS SHALL BEGIN AS SOON AS THE CONCRETE HAS SUFFICIENTLY HARDENED TO PERMIT SAWING WITHOUT RAVELING, BUT NOT EXCEEDING TWELVE (12) HOURS AFTER PLACEMENT OF CONCRETE. PLACEMENT OF CONCRETE SHALL BE SCHEDULED TO BEGIN AND BE

- COMPLETED IN SUFFICIENT TIME TO ALLOW SAWING OF JOINTS AS PREVIOUSLY STATED.
- 21. CONCRETE SHALL HAVE A STRENGTH OF 4,000 PSI.
- 22. ALL FILL SOILS OR SOILS DISTURBED OR OVER-EXCAVATED DURING CONSTRUCTION SHALL BE COMPACTED TO 90% MAXIMUM DENSITY AS DETERMINED BY SOIL COMPACTION TEST D-1157.

DESIGN & CONSTRUCTION STANDARDS:

- 23. THE FOLLOWING STANDARD PLANS & SPECIFICATIONS ARE APPLICABLE TO THIS PROJECT:
- A. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SPPWC), 2021 (OR LATEST) EDITION AND SUPPLEMENTS.
- B. STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC), 2021 EDITION.
- C. LOS ANGELES COUNTY STANDARD PLANS REF. 3080-3, 2008 EDITION.

PUBLIC NOTIFICATION REQUIREMENTS:

PROJECT LIMITS ABOUT THE SCHEDULED WORK.

- 24. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING PUBLIC NOTICES PRIOR TO BEGINNING CONSTRUCTION ON THE PROJECT:
- A. UPON RECEIVING THE NOTICE TO PROCEED DATE, THE CONTRACTOR SHALL ISSUE A NOTICE BY U.S. MAIL, PREPARED OR APPROVED BY THE CITY, NOTIFYING RESIDENTS AND BUSINESSES WITHIN 500 FEET OF THE
- B. 2 WEEK PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL PREPARE AND DISTRIBUTE A NOTICE APPROVED BY THE CITY TO RESIDENTS AND BUSINESSES IMMEDIATELY ADJACENT TO THE PROJECT LIMITS.
- C. CONTRACTOR SHALL PREPARE AND INSTALL/PLACE A PROJECT SIGN ON ALUMINUM BACKING AND MOUNTED ON TWO (2) 4X4 WOODEN POSTS WITHIN THE PROJECT LIMITS. THE SIGN SHALL PROVIDE INFORMATION REGARDING THE PROJECT, CONSTRUCTION DATES AND TIMES, ALONG WITH GENERAL AND EMERGENCY CONTACT INFORMATION. LETTERS USED ON THE SIGN SHALL BE 4-6 INCHES HIGH.

GRADING NOTES:

- 25. NO WORK SHALL BE STARTED IN OR ABOUT A GRADING PROJECT WITHOUT FIRST NOTIFYING THE ENGINEER.
- 26. NO GRADING WORK, INCLUDING IMPORT AND EXPORT, SHALL BE DONE OUTSIDE OF CITY SPECIFIED CONSTRUCTION HOURS, EXCEPT IN EMERGENCIES. A HAUL ROUTE SHALL BE PREPARED BY THE CONTRACTOR SATISFACTORY TO THE PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION.
- 27. NO PERSON SHALL, WHEN HAULING ANY EARTH, SAND, GRAVEL, ROCK, STONE, DEBRIS, PAPER OR ANY OTHER SUBSTANCE OVER ANY PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE, ALLOW SUCH MATERIALS TO BLOW OR SPILL OVER AND UPON THE PUBLIC STREET, ALLEY OR OTHER PUBLIC PLACE OR ADJACENT PRIVATE PROPERTY.
- 28. THE LOADING OR DUMPING OF EXCESS SOIL SHALL BE APPROVED BY THE ENGINEER PRIOR TO STARTING EXCAVATION.
- 29. IF AT ANY STAGE OF WORK ON AN EXCAVATION OR FILL THE ENGINEER DETERMINES THAT FURTHER WORK AS AUTHORIZED BY AN EXISTING PERMIT IS LIKELY TO ENDANGER ANY PROPERTY OR PUBLIC WAY THE ENGINEER MAY REQUIRE. AS A CONDITION TO ALLOW THE WORK TO CONTINUE. THAT PLANS FOR SUCH WORK BE AMENDED TO INCLUDE ADEQUATE SAFETY PRECAUTIONS.
- 30. <u>INSPECTIONS OF EXCAVATION AND FILLS.</u> THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN THE GRADING OPERATION IS READY FOR EACH OF THE FOLLOWING INSPECTIONS:
- A. INITIAL MEETING/ INSPECTION: WHEN THE PERMITTEE IS READY TO BEGIN WORK, BUT BEFORE GRADING OR BRUSHING IS STARTED. A MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR AND THE INSPECTOR TO DISCUSS THE APPROVED PLANS, AND THE SEQUENCE OF THE GRADING OPERATION.
- B. FXCAVATION INSPECTION: AFTER THE EXCAVATION IS STARTED, BUT BEFORE THE VERTICAL HEIGHT DEPTH OF THE EXCAVATION EXCEEDS TEN FEET.
- C. FILL INSPECTION: AFTER THE FILL PLACEMENT IS STARTED, BUT BEFORE THE VERTICAL HEIGHT OF THE LIFT EXCEEDS TEN FEET.
- D. DRAINAGE DEVICE INSPECTION: AFTER FORMS AND PIPE ARE IN PLACE, BUT BEFORE ANY CONCRETE IS PLACED.
- E. FINAL: WHEN ALL WORK, INCLUDING INSTALLATION OF ALL DRAINAGE STRUCTURES AND OTHER PROTECTIVE DEVICES, HAS BEEN COMPLETED AND THE AS-GRADED PLAN AND REQUIRED REPORTS HAVE BEEN SUBMITTED.
- 31. THE CONTRACTOR SHALL OBTAIN A PERMIT FROM CALIFORNIA DIVISION OF INDUSTRIAL SAFETY FOR THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE FIVE FEET OR DEEPER. SHEETING, SHORING, AND BRACING FOR THE TRENCH EXCAVATION SHALL CONFORM TO THE REQUIREMENTS OF "CONSTRUCTION SAFETY ORDERS," TITLE 8, DIVISION OF INDUSTRIAL SAFETY, STATE OF CALIFORNIA.
- 32. A COPY OF THE APPROVED PLANS MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE AT ALL TIMES.
- 33. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THIS PLAN SET, TECHNICAL SPECIFICATIONS, PROVISIONS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC), AND ALL REFERENCES.
- 34. FILL PLACEMENT AREAS SHALL BE INSPECTED AND APPROVED BY THE CONSULTANT GEOLOGIST AND SOILS ENGINEER PRIOR TO PLACEMENT OF ANY FILL.
- 35. EXCAVATION SHALL BE DONE UNDER THE SUPERVISION OF A SOILS ENGINEER WHO SHALL CERTIFY THAT ALL FILL HAS BEEN PROPERLY PLACED AND WHO SHALL SUBMIT A FINAL COMPACTION REPORT

- FOR ALL FILLS OVER ONE FOOT DEEP.
- 36. THE EXISTING TOPOGRAPHY AS DELINEATED ON THESE DRAWINGS SHALL BE UTILIZED AS THE BASIS FOR ALL EARTHWORK COMPUTATIONS. SAID TOPOGRAPHY SHALL BE PRESUMED TO BE ACCEPTABLE TO ALL INTERESTED PARTIES UNLESS A DEVIATION IS FOUND PRIOR TO THE START OF GRADING IN ANY SPECIFIC AREAS. ANY DEVIATION SO DETERMINED SHALL BE PROMPTLY TRANSMITTED TO ALL INTERESTED PARTIES.
- 37. OVER-EXCAVATION AND/OR EXCESS BACKFILLING OR DUPLICATION OF GRADING ACTIVITIES IS NOT A BASIS FOR ADDITIONAL COMPENSATION. THIS ALSO APPLIES WHERE MATERIAL IS TO BE REMOVED AND REPLACED TO REDUCE MOISTURE CONTENT.

CULVER CITY GENERAL UTILITY NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) AND ANY AMENDMENTS THERETO, THE LATEST EDITION OF THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK STANDARD PLANS), OTHER CITY STANDARDS, AND TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR/CITY ENGINEER. OR HIS/HER DESIGNEE.
- TRAFFIC CONTROL SHALL BE PER W.A.T.C.H. AND TO THE SATISFACTION OF THE PUBLIC WORKS INSPECTOR.
- LANE CLOSURES ARE PERMITTED ONLY BETWEEN THE HOURS OF 9:00AM AND 3:00PM WEEKDAYS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER OR HIS/HER DESIGNEE AS PART OF THE CONDITIONS OF APPROVAL OR APPROVED TRÁFFIC CONTROL PLANS.
- CONTRACTOR SHALL CALL FOR INSPECTION FOR REPAVING AT 310-253-5611 AT LEAST 48-HOURS IN ADVANCE. FAILURE TO PROPERLY NOTIFY THE PUBLIC WORKS INSPECTOR IS CAUSE FOR REVOCATION OF PERMIT
- TO MINIMIZE INCONVENIENCE TO TRAFFIC AND THE PUBLIC IN GENERAL, THE CONTACTOR SHALL SCHEDULE THE CONCRETE PLACEMENT AND/OR ROADWAY PAVEMENT TO BE COMPLETED NO LATER THAN TWO (2) DAYS AFTER THE REMOVAL OPERATIONS, UNLESS APPROVED BY THE PUBLIC WORKS INSPECTOR. SAFE AND ADEQUATE PEDESTRIAN AND VEHICULAR MOVEMENT AT AND AROUND ALL CONSTRUCTION SITES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES. APPROVED BARRIERS AND SIGNS (TRAFFIC FLAGGING PERSONAL, IF NECESSARY). SHALL BE FURNISHED AND UTILIZED BY THE CONTRACTOR TO ENSURE PUBLIC SAFETY AT ALL TIMES.
- APPROVAL OF THIS PLAN BY THE CITY OF CULVER CITY DOES NOT CONSTITUTE A REPRESENTATION OF THE ACCURACY OF THE LOCATION OF THE EXISTENCE OF ANY UNDERGROUND UTILITY, PIPE OR STRUCTURE WITHIN THE LIMITS OF THE PROJECT.
- THE APPLICANT SHALL BE RESPONSIBLE FOR THE EXPENSE AND TO REPAIR OR REPLACE ANY DAMAGED TO THE PUBLIC RIGHT-OF-WAY, TO INCLUDE EXISTING TRAFFIC LOOPS, SIGNAL, LIGHTING, ELECTRICAL SYSTEMS, AND UNDERGROUND INSTALLATIONS (WHETHER OR NOT PHYSICALLY MARKED OR SHOWN ON THE CONTRACT PLANS). DAMAGED CAUSED BY THE CONSTRUCTION OF THE PROPOSED WORK OR PROJECT. SUCH REPAIRS OR REPLACEMENT SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER.
- ALL CONTRACTORS OR SUBCONTRACTORS THAT PERMITTEE ENGAGES FOR ANY OR ALL OF THE WORK TO BE COMPLETED BY THE PERMIT, SHALL HAVE A CITY BUSINESS LICENSE. LIABILITY INSURANCE WITH THE CITY NAMED AS ADDITIONALLY INSURED, AND WORKERS COMPENSATION INSURANCE. THE LIABILITY INSURANCE SHALL HAVE A MINIMUM COVERAGE OF ONE MILLION DOLLARS PER INCIDENT AND TWO MILLION DOLLARS AGGREGATE AND INCLUDE AUTOMOBILE LIABILITY OF ONE MILLION DOLLARS.
- THE CONTRACTOR SHALL NOT DISCHARGE OR PERMIT TO BE DISCHARGED TO ANY STREET, STORM DRAIN, OF ANY APPURTENANCE THEREOF, ANY NON-RAIN WATER OR OTHER LIQUID FORM THE PROJECT SITE OF FROM OPERATIONS PERTAINING TO THE PROJECT SITE, PER NPDES REGULATIONS AND CITY'S STORM WATER POLLUTION ORDINANCE SECTION 5.02.500 ET SEQ.
- 10. CATCH BASINS WITHIN 50 FEET OF WORK AREA SHALL BE PROTECTED WITH PERMEABLE FABRIC AND SANDBAGS PRIOR TO COMMENCING WORK AND MAINTAINED DURING DURATION OF OPERATIONS.
- 11. EXISTING UNDERGROUND LIGHTING, ELECTRICAL SYSTEMS AND UTILITY LINES DAMAGED BY THE CONTRACTOR'S OPERATION SHALL BE REPLACED OR RESTORED IN KIND OR BETTER AT THE PERMITEE'S EXPENSE.
- 12. STOCKPILING OF MATERIAL OR EQUIPMENT IN THE PUBLIC RIGHT OF WAY IS PROHIBITED UNLESS AUTHORIZED BY THE PUBLIC WORKS DIRECTOR/CITY ENGINEER OR HIS/HER DESIGNEE.
- 13. THE PROJECT WORK AREA SHALL BE KEPT CLEAN, SAFE, AND SANITARY CONDITION. AT THE END OF EACH WORK DAY, THE PROJECT WORK AREA SHALL BE SWEPT BY MANUAL OR MECHANICAL MEANS TO THE SATISFACTION OF THE PUBLIC WORKS DIRECTOR/CITY ENGINEER, OR HIS/HER DESIGNEE.
- 14. NO STAGING OF CONSTRUCTION MATERIALS OR CONSTRUCTION VEHICLES ALONG PUBLIC RIGHT OF WAY UNLESS AUTHORIZED BY THE PUBLIC WORKS DIRECTOR/CITY ENGINEER OR HIS/HER DISIGNEE.
- 15. CONSTRUCTION VEHICLES SHALL NOT BE PARKED OVER NIGHT OR DURING NON-OPERATIONAL HOURS ON PUBLIC RIGHT OF WAY.
- 16. CONTRACTOR SHALL CALL FOR INSPECTION AT 310-253-5600 AT LEAST 24 HOURS IN ADVANCE.
- 17. DIG ALERT SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF EXCAVATION.
- 18. ALL SIGNS/STREET LIGHTS EQUIPMENT DAMAGED MUST BE REPAIRED WITHIN 24
- 19. ALL EXISTING UTILITY BOXES SHALL BE ADJUSTED TO GRADE.
- 20. CONTRACTOR TO NOTIFY PUBLIC WORKS INSPECTOR 48-HOURS PRIOR TO COMMENCING WORK IN THE PUBLIC RIGHT-OR-WAY AT 310-253-5612

SITE 1 (BERRYMAN AVENUE)

BASIS OF BEARINGS

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P800" AND "WRHS' BEING NORTH 46-03'32" EAST, DISTANCE OF 33188.73 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON JANUARY 20TH, 2023, WAS USED AS THE BEARINGS FOR THIS SURVEY.

BENCHMARK

BENCHMARK: CULVER CITY QUAD BM: 5Y 12519; 2013 ADJ NAVD 88 ELEVATION =(23.793) FEET

LEAD & MAG NAIL IN N. CB 1FT W/O ECR @ N.W. COR SEPULVEDA BL & SLAUSON AVE.

SITE 2 (SEGRELL WAY)

BASIS OF BEARINGS

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P800" AND "WRHS' BEING NORTH 46-03'32" EAST, DISTANCE OF 33188.73 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON JANUARY 20TH. 2023. WAS USED AS THE BEARINGS FOR THIS SURVEY.

BENCHMARK

CULVER CITY QUAD BM: 5Y 12519; 2013 ADJ NAVD 88 ELEVATION =(23.793) FEET

LEAD & MAG NAIL IN N. CB 1FT W/O ECR @ N.W. COR SEPULVEDA BL & SLAUSON AVE.

SITE 3 (PICKFORD WAY)

BASIS OF BEARINGS

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P800" AND "WRHS" BEING NORTH 46-03'32" EAST, DISTANCE OF 33188.73 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON JANUARY 20TH, 2023, WAS USED AS THE BEARINGS FOR THIS SURVEY.

BENCHMARK

CULVER CITY QUAD BM: 5Y 10984; 2013 ADJ NAVD 88 ELEVATION =(52.135) FEET

DPW BM TAG IN E. CB 1FT N/O BCR @ N.E. COR JEFFERSON BL & OVERLAND AVE.

SITE 4 (JASMINE AVENUE)

BASIS OF BEARINGS

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P800" AND "WRHS" BEING NORTH 46-03'32" EAST, DISTANCE OF 33188.73 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON JANUARY 20TH, 2023, WAS USED AS THE BEARINGS FOR THIS SURVEY.

BENCHMARK

CULVER CITY QUAD BM: 5Y 10195; 2013 ADJ NAVD 88 ELEVATION =(67.628) FEET

RDBM TAG IN W. CB JEFFERSON BL 40FT W/O C/L & 29.5FT N/O C/L PROD RAINTREE CIRCLE.

SITE 5 (REVERE PLACE)

BASIS OF BEARINGS

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P800" AND "WRHS" BEING NORTH 46-03'32" EAST, DISTANCE OF 33188.73 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON JANUARY 20TH, 2023, WAS USED AS THE BEARINGS FOR THIS SURVEY.

BENCHMARK

CULVER CITY QUAD BM: 5Y 10983; 2013 ADJ NAVD 88 ELEVATION =(62.822) FEET

DPW TAG IN E. CB 3.3FT N/O BCR @ N.E. COR OVERLAND AVE & NORTHGATE ST.

SITE 6 (WESLEY STREET)

BASIS OF BEARINGS

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P800" AND "WRHS" BEING NORTH 46-03'32" EAST, DISTANCE OF 33188.73 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON JANUARY 20TH, 2023, WAS USED AS THE BEARINGS FOR THIS SURVEY.

BENCHMARK

CULVER CITY QUAD BM: 5Y 10987; 2013 ADJ

NAVD 88 ELEVATION =(83.375) FEET

LEAD & FLT HEAD SPK IN W. CB @ BCR S.W. COR JEFFERSON BL & HOLDREGE AVE. (N. END CB)

SITE 7 & 8 (NORTHGATE & GALVIN STREET)

BASIS OF BEARINGS

THE CCS83 GRID BEARING BETWEEN C.S.R.N. STATIONS "P800" AND "WRHS" BEING NORTH 46-03'32" EAST, DISTANCE OF 33188.73 AS DERIVED FROM THE POSITIONS FOR SAID STATIONS, IN SAID EPOCH, PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) EPOCH 2017.5, ON JANUARY 20TH, 2023, WAS USED AS THE BEARINGS FOR THIS SURVEY.

BENCHMARK

CULVER CITY QUAD BM: 5Y 1086; 2013 ADJ NAVD 88 ELEVATION =(81.261) FEET

L & SPK IN N.W. COR CB 30.8FT S/O BCR @ S.W. COR JEFFERSON BL & DUQUESNE AVE.

CITY OF CULVER CITY

PUBLIC WORKS DEPARTMENT

CULVER CITY CITYWIDE STORMWATER CAPTURE

GENERAL NOTES

APPROVED BY: JAVIER DELACRUZ, P.E.

SHEET C - 1

 $\sqrt{2}$ 3

SUITE 240 www.cwecorp.com

PREPARED BY

E. ORANGETHORPE AVE. FULLERTON, CA 92831 TEL (714) 526-7500

KATHRYN (KATIE) HARREL, P.E. Project Number: PZ497

Drawing No.

PLANS PREPARED UNDER THE SUPERVISION OF:

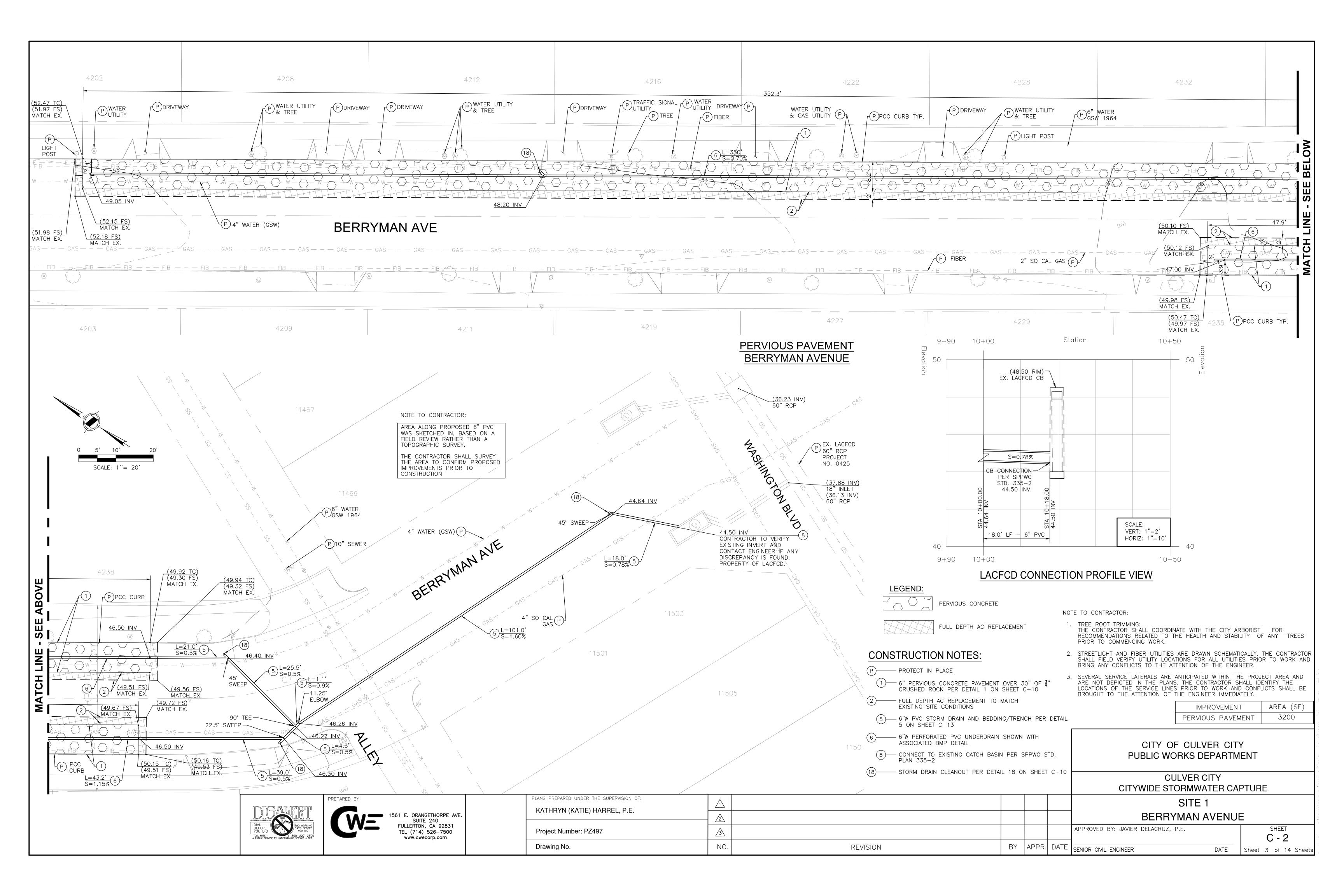
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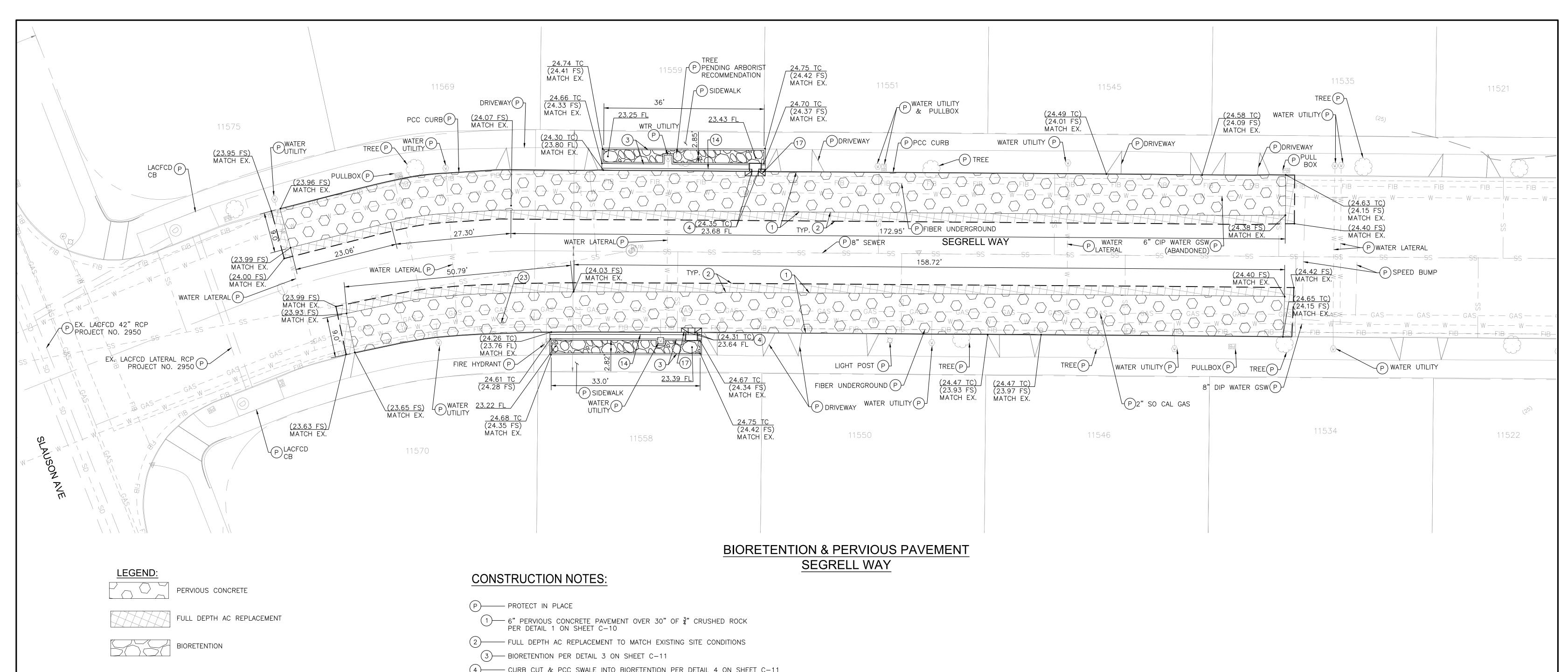
REVISION

BY APPR. DATE

SENIOR CIVIL ENGINEER

DATE Sheet 2 of 14 Sheets



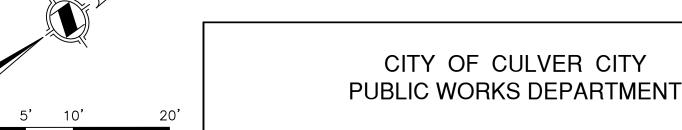


NOTE TO CONTRACTOR:

- 1. TREE ROOT TRIMMING: THE CONTRACTOR SHALL COORDINATE WITH THE CITY ARBORIST FOR RECOMMENDATIONS RELATED TO THE HEALTH AND STABILITY OF ANY TREES PRIOR TO COMMENCING WORK.
- 2. STREETLIGHT AND FIBER UTILITIES ARE DRAWN SCHEMATICALLY. THE CONTRACTOR SHALL FIELD VERIFY UTILITY LOCATIONS FOR ALL UTILITIES PRIOR TO WORK AND BRING ANY CONFLICTS TO THE ATTENTION OF THE ENGINEER.
- 3. SEVERAL SERVICE LATERALS ARE ANTICIPATED WITHIN THE PROJECT AREA AND ARE NOT DEPICTED IN THE PLANS. THE CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF THE SERVICE LINES PRIOR TO WORK AND CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

- 4) CURB CUT & PCC SWALE INTO BIORETENTION PER DETAIL 4 ON SHEET C-11
- (14)—— PCC CURB PER SPPWC STD. PLAN 120-3, TYPE A1-6
- (17)——— LOCAL DEPRESSION PER DETAIL 17 ON SHEET C-11
- (23)— ADJUST WATER VALVE TO GRADE

IMPROVEMENT	AREA (SF)
PERVIOUS PAVEMENT	3880
BIORETENTION	215

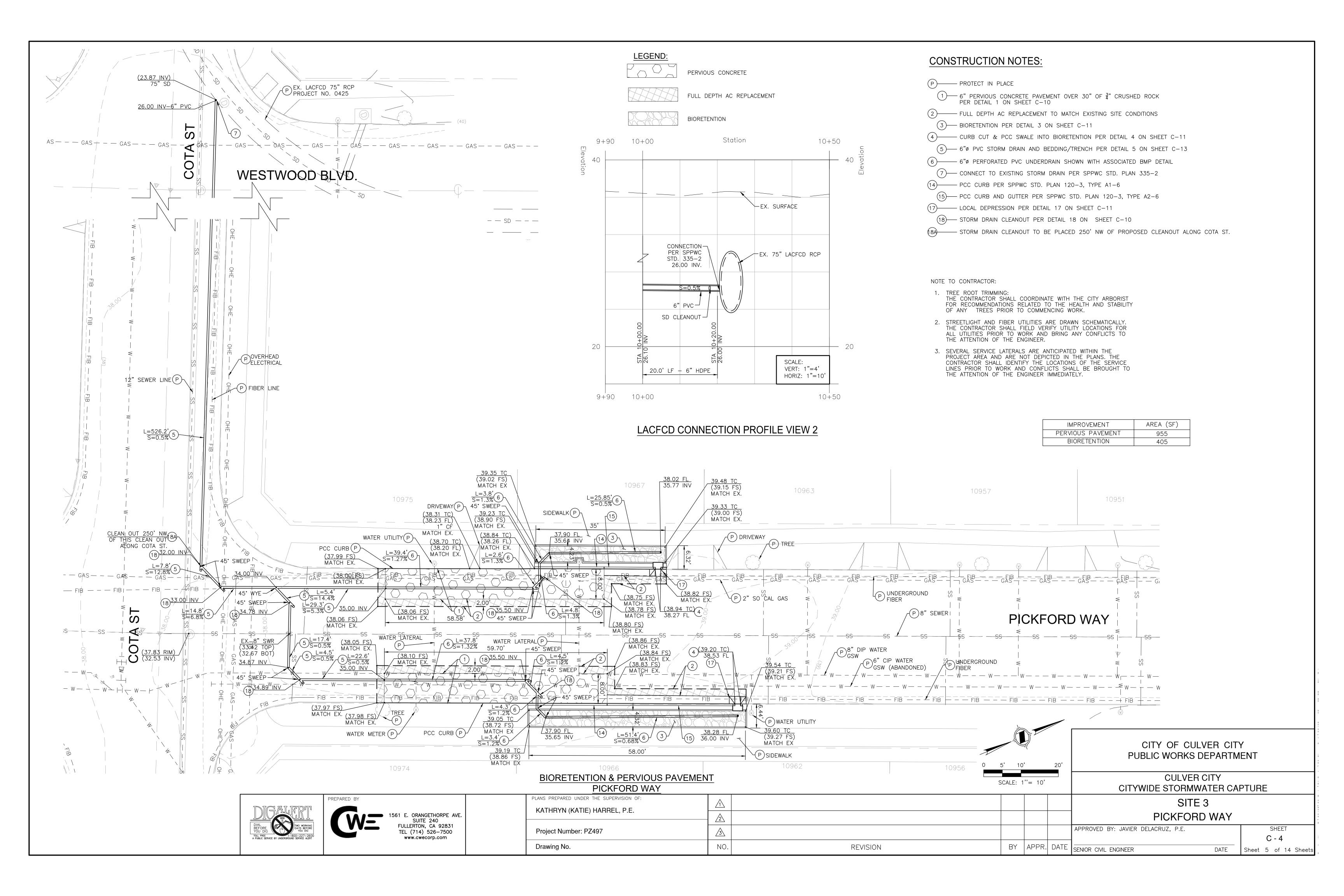


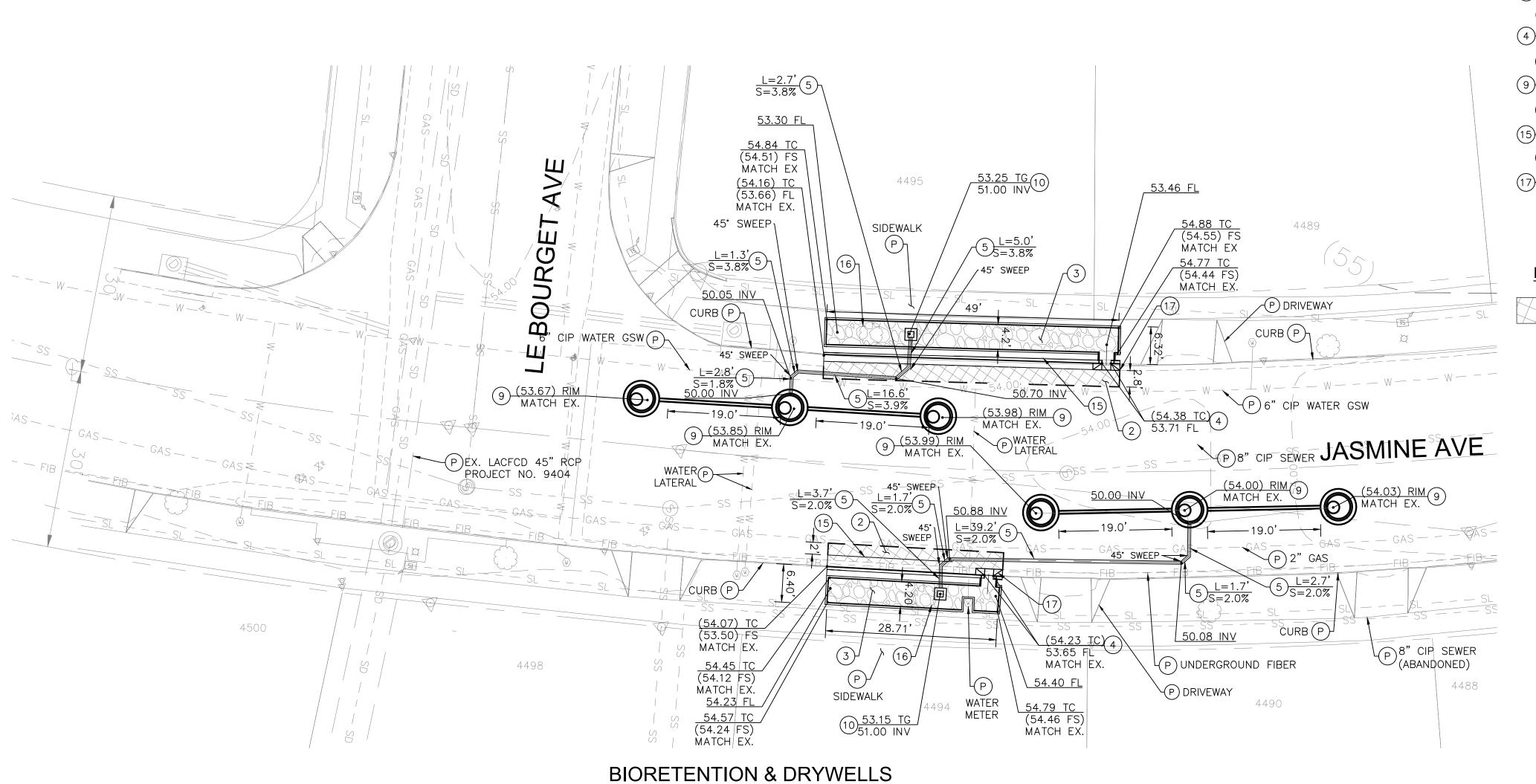
CULVER CITY





			SCALE: 1	"= 10"		CITYWIDE STORMWAT		PTURE
PLANS PREPARED UNDER THE SUPERVISION OF:						SITE 2		
KATHRYN (KATIE) HARREL, P.E.	<u> </u>					SEGRELL V	VAY	
Project Number: PZ497	<u> </u>					APPROVED BY: JAVIER DELACRUZ, P.E.		SHEET C - 3
Drawing No.	NO.	REVISION	BY	APPR.	DATE	SENIOR CIVIL ENGINEER	DATE	Sheet 4 of 14 Sheets





JASMINE AVEUNE

CONSTRUCTION NOTES:

- P PROTECT IN PLACE
- 2 FULL DEPTH AC REPLACEMENT TO MATCH EXISTING SITE CONDITIONS
- (3)—— BIORETENTION PER DETAIL 3 ON SHEET C-11
- 4)——— CURB CUT & PCC SWALE INTO BIORETENTION PER DETAIL 4 ON SHEET C-11
- (5)— 6"ø PVC STORM DRAIN AND BEDDING/TRENCH PER DETAIL 5 ON SHEET C-13
- 9) DRYWELL SYSTEM PER DETAIL 9 ON SHEET C-12
- 10-12" X 12" PRECAST CONCRETE CATCH BASIN WITH GRATE INLET
- (15)——— PCC CURB AND GUTTER PER SPPWC STD. PLAN 120-3, TYPE A2-6
- 16- REMOVE EXISTING TREE
- 17)——— LOCAL DEPRESSION PER DETAIL 17 ON SHEET C-11

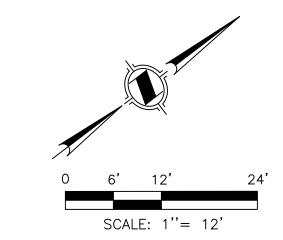
LEGEND:

FULL DEPTH AC REPLACEMENT

NOTE TO CONTRACTOR:

- THE CONTRACTOR SHALL COORDINATE WITH THE CITY ARBORIST FOR RECOMMENDATIONS RELATED TO THE HEALTH AND STABILITY OF ANY TREES PRIOR TO COMMENCING WORK.
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- 3. SEVERAL SERVICE LATERALS ARE ANTICIPATED WITHIN THE PROJECT AREA AND ARE NOT DEPICTED IN THE PLANS. THE CONTRACTOR SHALL IDENTIFY THE LOCATIONS OF THE SERVICE LINES PRIOR TO WORK AND CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

IMPROVEMENT	AREA (SF)/COUNT
DRYWELLS	4
BIORETENTION	355



CITY OF CULVER CITY PUBLIC WORKS DEPARTMENT

CULVER CITY CITYWIDE STORMWATER CAPTURE

SITE 4

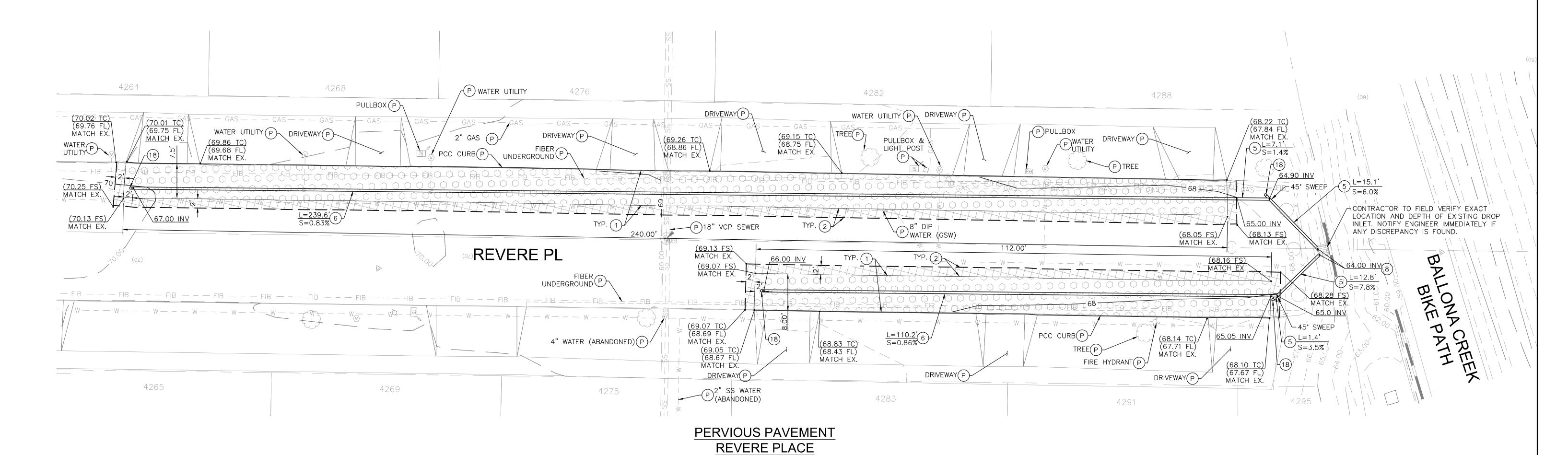
JASMINE AVEUNE VIER DELACRUZ, P.E.

> C - 5 DATE | Sheet 6 of 14 Sheets

SHEET

PREPARED BY 1561 E. ORANGETHORPE AVE. SUITE 240 FULLERTON, CA 92831 TEL (714) 526–7500 www.cwecorp.com

I	PLANS PREPARED UNDER THE SUPERVISION OF:	Λ					
l	KATHRYN (KATIE) HARREL, P.E.						
l	177111111 (17711E) 1171111EE, 1 1E.						
Ī		72					
l	Project Number: PZ497	3					APPROVED BY: JAVIER
l	•	75					
١	Drawing No.	NO.	REVISION	BY	APPR.		
١	Diawing 140.	'\\\	IVENDION			DAIL	SENIOR CIVIL ENGINEER



NOTE TO CONTRACTOR:

1. TREE ROOT TRIMMING: THE CONTRACTOR SHALL COORDINATE WITH THE CITY ARBORIST FOR RECOMMENDATIONS RELATED TO THE HEALTH AND STABILITY OF ANY TREES PRIOR TO COMMENCING WORK.

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LEGEND:

PERVIOUS CONCRETE

FULL DEPTH AC REPLACEMENT

CONSTRUCTION NOTES:

P PROTECT IN PLACE

1 6" PERVIOUS CONCRETE PAVEMENT OVER 30" OF 3" CRUSHED ROCK PER DETAIL 1 ON SHEET C-10

2 FULL DEPTH AC REPLACEMENT TO MATCH EXISTING SITE CONDITIONS

5 6"ø PVC STORM DRAIN AND BEDDING/TRENCH PER DETAIL 5 ON SHEET C-13

(6)——6"Ø PERFORATED PVC UNDERDRAIN SHOWN WITH ASSOCIATED BMP DETAIL (8)—CONNECT TO EXISTING CATCH BASIN PER SPPWC STD. PLAN 335-2

(18)——STORM DRAIN CLEANOUT PER DETAIL 18 ON SHEET C-14

AREA (SF) **IMPROVEMENT** PERVIOUS PAVEMENT 2720

CITY OF CULVER CITY

PUBLIC WORKS DEPARTMENT

CULVER CITY

SITE 5

DATE

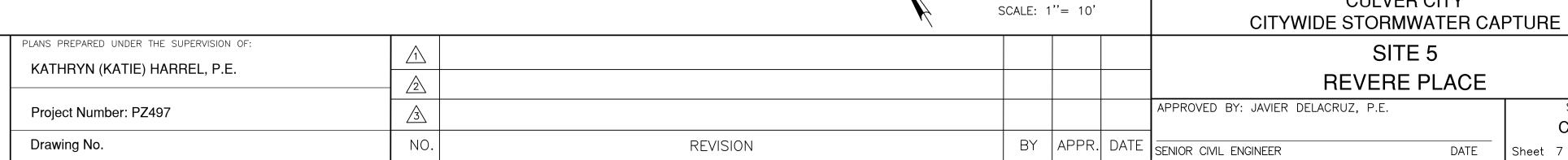
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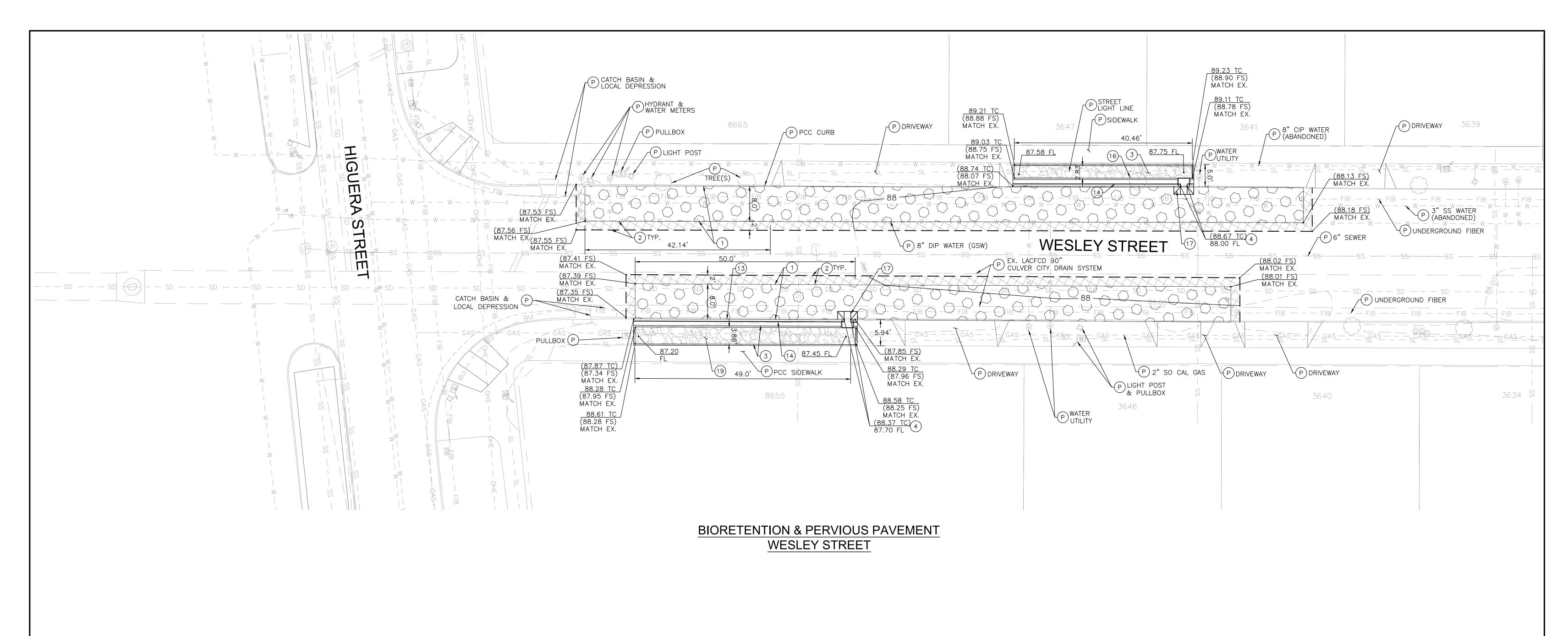
C - 6

Sheet 7 of 14 Sheets









CONSTRUCTION NOTES:

- P PROTECT IN PLACE
- 1)—6" PERVIOUS CONCRETE PAVEMENT OVER 30" OF 34" CRUSHED ROCK PER DETAIL 1 ON SHEET C-10
- 2 FULL DEPTH AC REPLACEMENT TO MATCH EXISTING SITE CONDITIONS 3 BIORETENTION PER DETAIL 3 ON SHEET C-11
- 4 CURB CUT & PCC SWALE INTO BIORETENTION PER DETAIL 4 ON SHEET C-11
- 14)—— PCC CURB PER SPPWC STD. PLAN 120-3, TYPE A1-6
- 16——— REMOVE EXISTING TREE
- 17 LOCAL DEPRESSION PER DETAIL 17 ON SHEET C-11
- (19)—— REMOVE EXISTING BRICK PAVER IN PATH OF PROPOSED BIORETENTION

PERVIOUS CONCRETE



FULL DEPTH AC REPLACEMENT

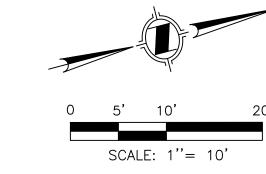


BIORETENTION

NOTE TO CONTRACTOR:

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IMPROVEMENT	AREA (SF)
PERVIOUS PAVEMENT	2375
BIORETENTION	345



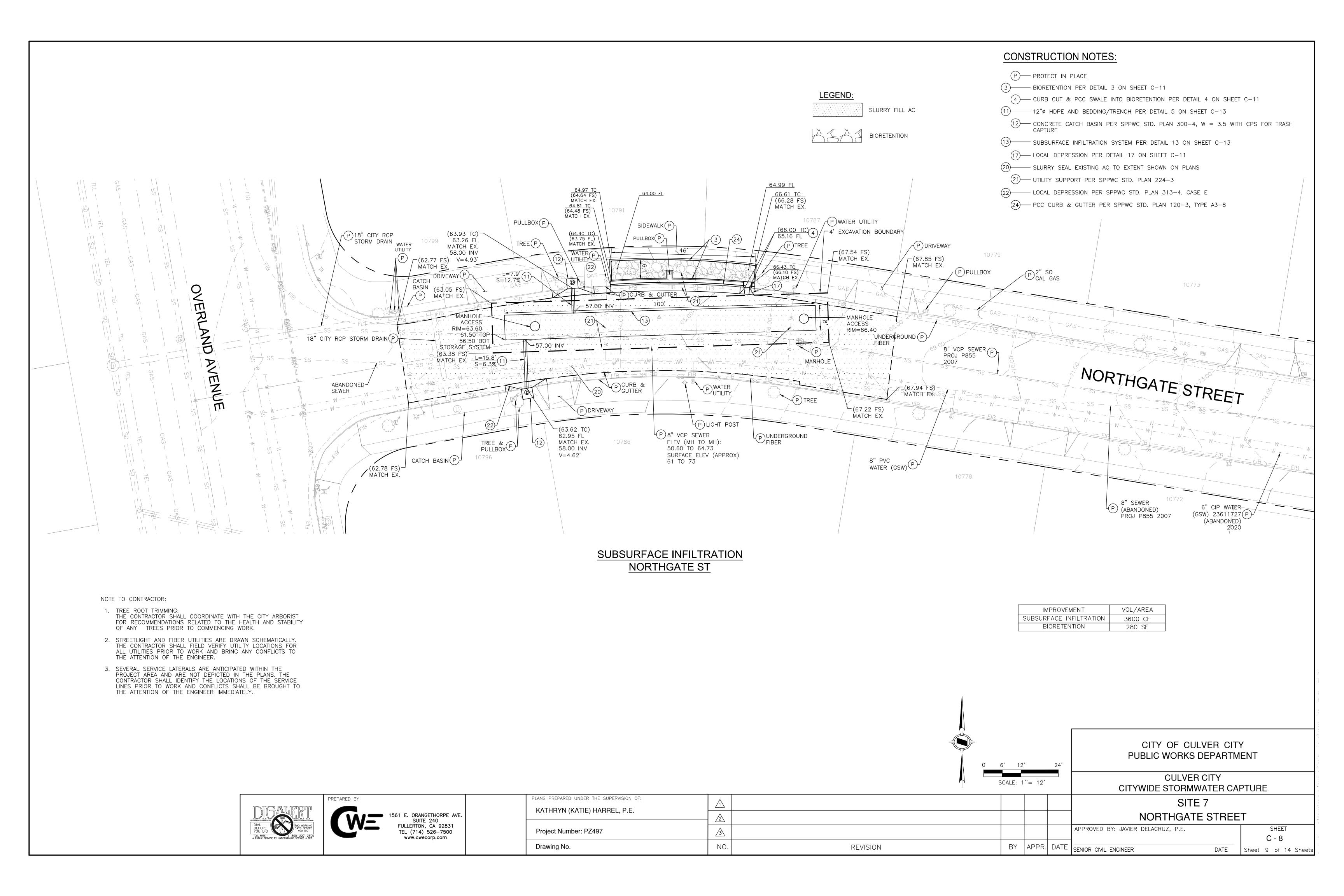
CITY OF CULVER CITY PUBLIC WORKS DEPARTMENT

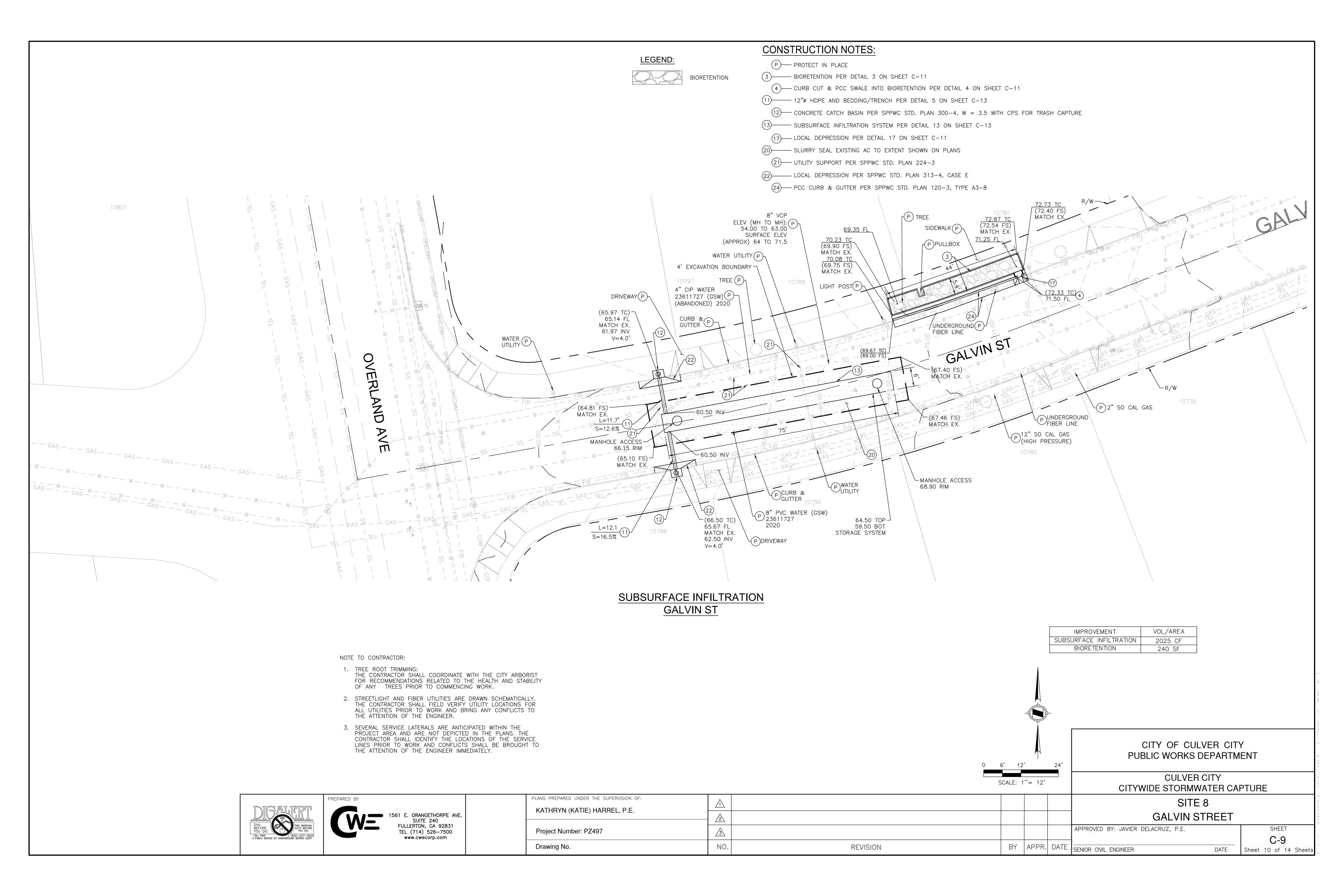
CULVER CITY

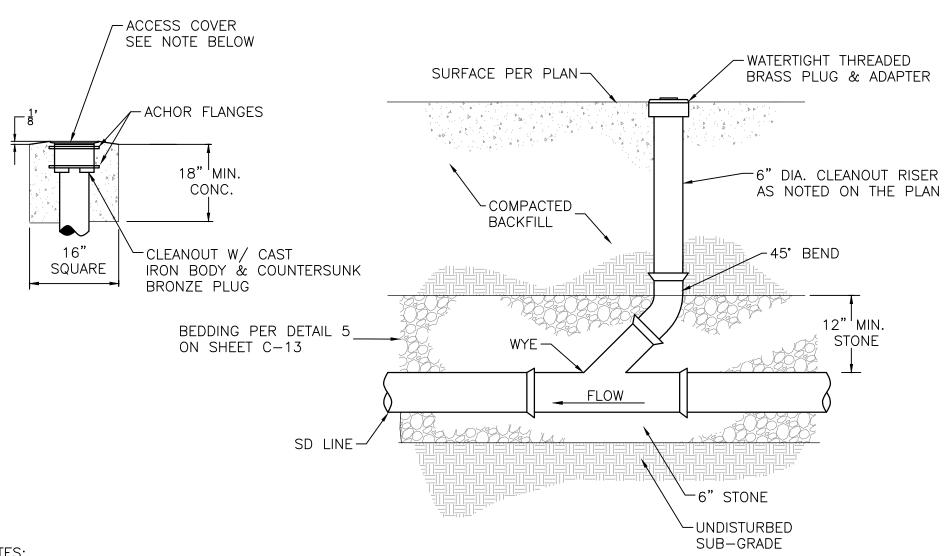
CITYWIDE STORMWATER CAPTURE



						OTT I WIDE STOTIIVI WATER OF	AI TOIL
PLANS PREPARED UNDER THE SUPERVISION OF:	\wedge					SITE 6	
KATHRYN (KATIE) HARREL, P.E.	<u>^</u> 2\					WESLEY STREET	
Project Number: PZ497	<u></u>					APPROVED BY: JAVIER DELACRUZ, P.E.	SHEET
Drawing No.	NO.	REVISION	BY	APPR.	DATE	SENIOR CIVIL ENGINEER DATE	C - 7 Sheet 8 of 14 Sheets

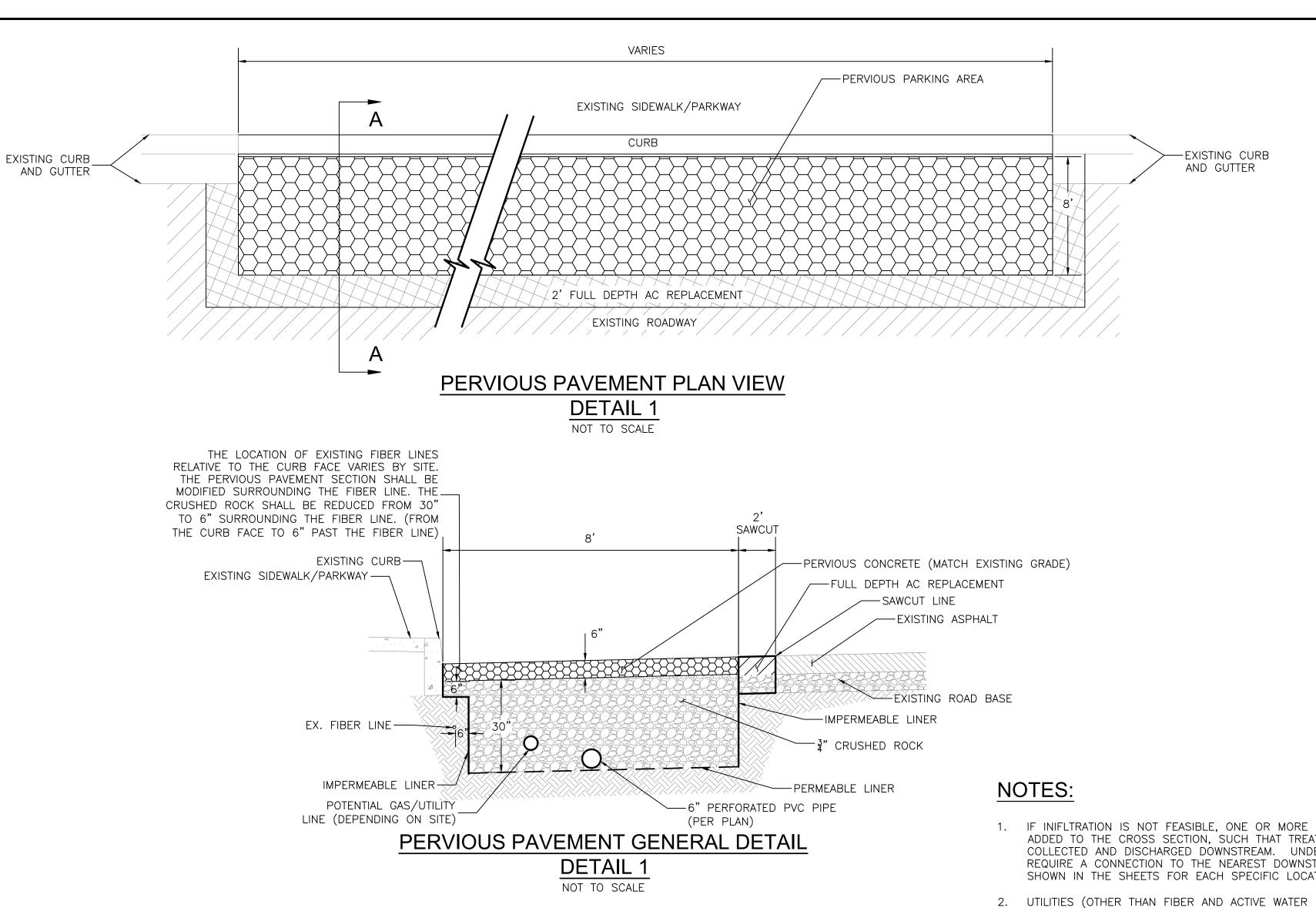




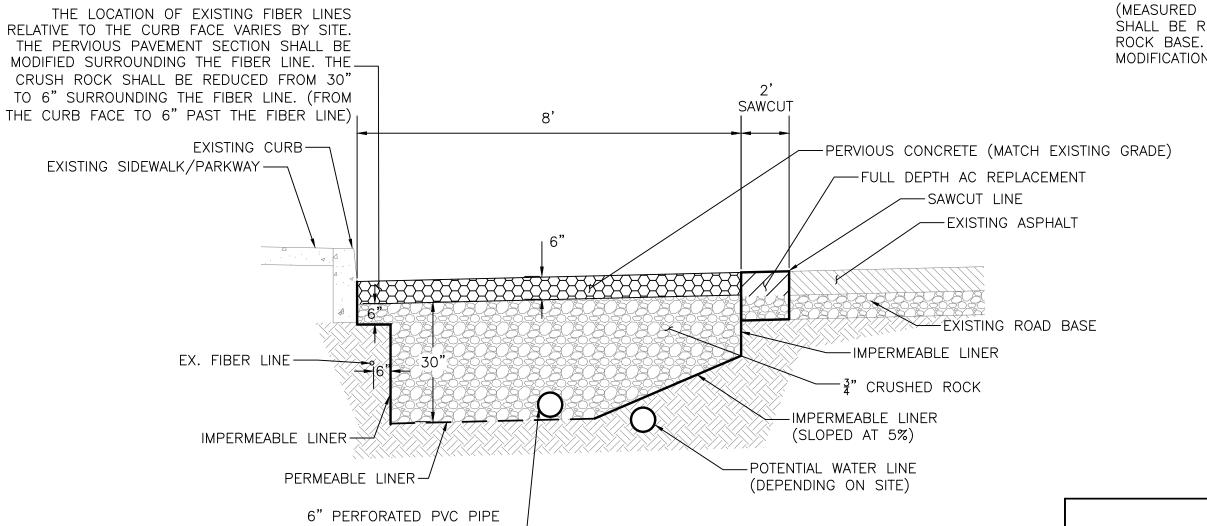


- 1. WATTS SERIES CO-300-MF EPOXY COATED CAST IRON ACCESS HOUSING WITH TWO FIXED ANCHOR FLANGES, EXTRA HEAVY DUTY DUCTILE ACCESS COVER AND 6-1/2" CLEAR BOTTOM ACCESS OR AGENCY APPROVED EQUAL (MUST BE TRAFFIC RATED). 2. CONTRACTOR TO FIELD VERIFY ALL EXISTING INVERT ELEVATION & NOTIFY ENGINEER OR OWNER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
- 3. CONTRACTOR SHALL FIELD VERIFY PROPOSED/ EXISTING UTILITY CROSSING & NOTIFY ENGINEER OR OWNER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.

SD CLEANOUT DETAIL 18 NOT TO SCALE



- 1. IF INIFLTRATION IS NOT FEASIBLE, ONE OR MORE UNDERDRAIN MAY BE ADDED TO THE CROSS SECTION, SUCH THAT TREATED RUNOFF CAN BE COLLECTED AND DISCHARGED DOWNSTREAM. UNDERDRAINS WILL REQUIRE A CONNECTION TO THE NEAREST DOWNSTREAM CATCH BASIN, SHOWN IN THE SHEETS FOR EACH SPECIFIC LOCATION.
- 2. UTILITIES (OTHER THAN FIBER AND ACTIVE WATER LINES) MAY BE LOCATED WITHIN THE PERVIOUS PAVEMENT ROCK BASE, AS DEPICTED IN THE GENERAL DETAIL ABOVE. UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED IN THE PLANS.
- 3. IF AN ACTIVE WATER LINE WILL BE LOCATED WITHIN THE ROCK BASE, THEN THE ROCK BASE MUST BE MODIFIED AS DEPICTED HEREON. AN IMPERMEABLE LINER MUST BE PLACED 1' AWAY FROM THE WATER LINE (MEASURED PERPENDICULAR TO THE WATER LINE) AND THE ROCK BASE SHALL BE REDUCED, SUCH THAT THE WATER LINE IS NOT WITHIN THE ROCK BASE. ABANDONED WATER LINES DO NOT REQUIRE THE MODIFICATIONS DESCRIBED IN THIS NOTE.



(PER PLAN) PERVIOUS PAVEMENT DETAIL WITH WATER LINE **DETAIL 1** NOT TO SCALE

CITY OF CULVER CITY PUBLIC WORKS DEPARTMENT

CULVER CITY CITYWIDE STORMWATER CAPTURE

SHEET

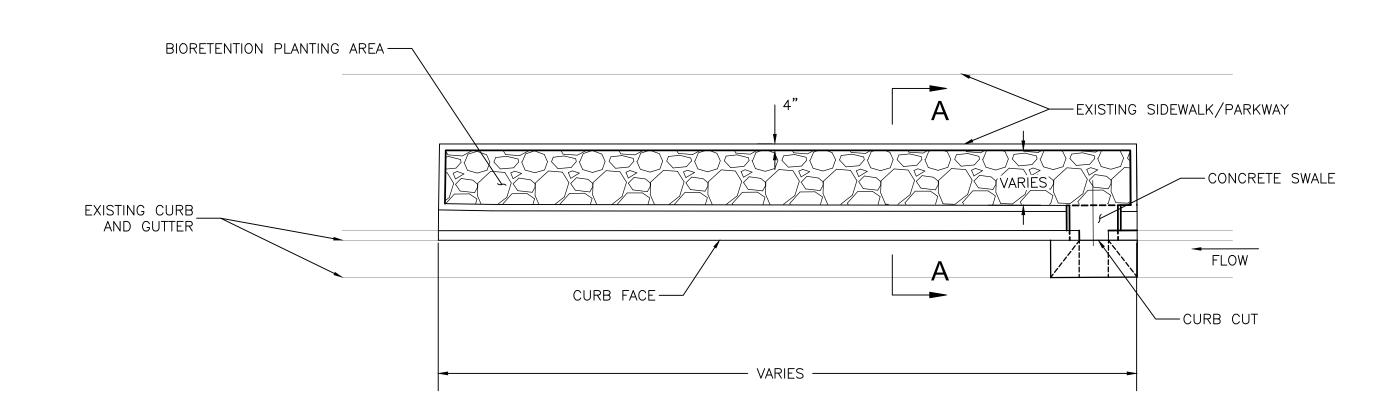
Sheet 11 of 14 Sheets

C-10

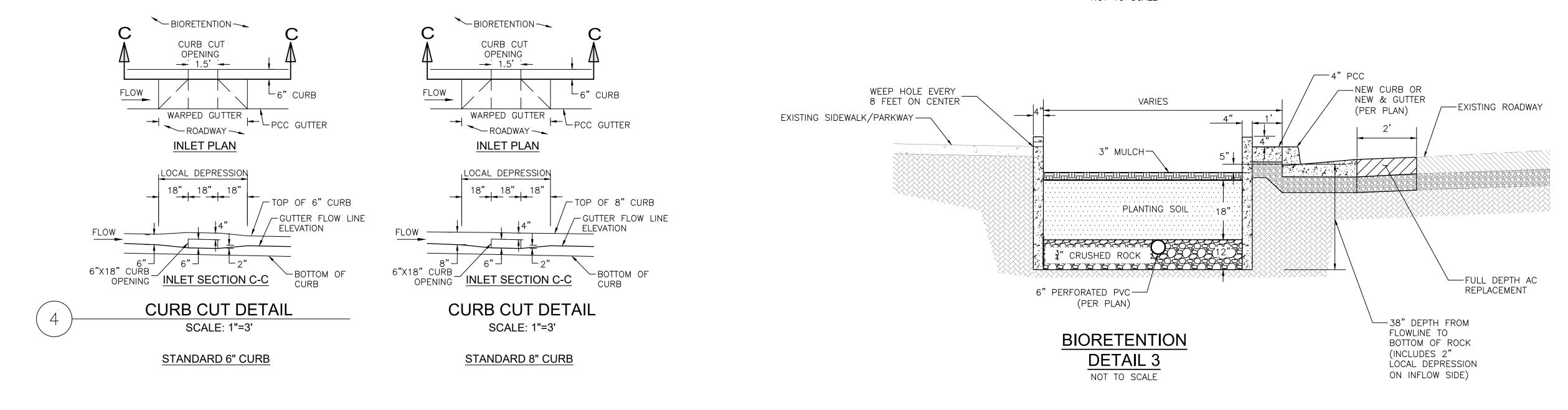




PLANS PREPARED UNDER THE SUPERVISION OF: KATHRYN (KATIE) HARREL, P.E.	\triangle					PERVIOUS PAVEME	=NIT
RATHRIN (RATIL) HARRILL, F.L.	2					T ETTVIOUS I AVEIVIL	
Project Number: PZ497	<u>3</u>					APPROVED BY: JAVIER DELACRUZ, P.E.	
Drawing No.	NO.	REVISION	BY	APPR.	DATE	SENIOR CIVIL ENGINEER DATE	_ Shee



PLAN VIEW NOT TO SCALE



NO.

NOTES:

PLANS PREPARED UNDER THE SUPERVISION OF:

KATHRYN (KATIE) HARREL, P.E.

Project Number: PZ497

Drawing No.

- 1. IF INFILTRATION IS NOT FEASIBLE, ONE OR MORE UNDERDRAIN MAY BE ADDED TO THE CROSS SECTION, SUCH THAT TREATED RUNOFF CAN BE COLLECTED AND DISCHARGED DOWNSTREAM. UNDERDRAINS WILL REQUIRE A CONNECTION TO THE NEAREST DOWNSTREAM CATCH BASIN, AS SHOWN IN THE SHEETS FOR EACH SPECIFIC LOCATION.
- 2. UTILITIES (OTHER THAN FIBER AND ACTIVE WATER LINE) MAY BE LOCATED WITHIN THE BIORETENTION SECTION. UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED IN THE PLANS.

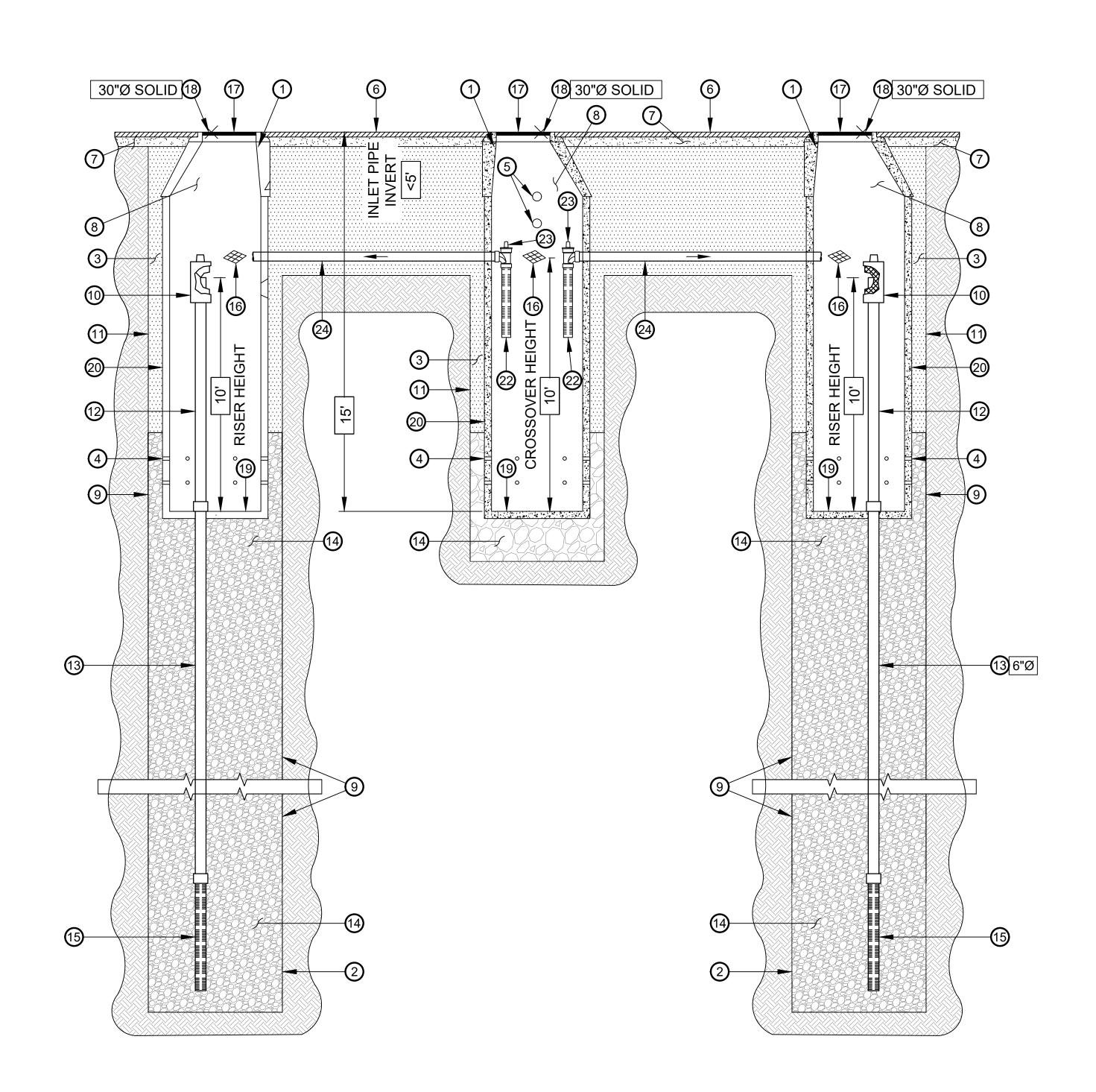
	CULVER CITY CITYWIDE STORMWATER CAPTURE								
				BIORETENTION					
				APPROVED BY: JAVIER DELACRUZ, P.E.	Name: 2:\22465\06				
REVISION	BY	APPR.	DATE	SENIOR CIVIL ENGINEER DATE	SHEET C-11 Sheet 12 of 14 Sheets				

CITY OF CULVER CITY

PUBLIC WORKS DEPARTMENT

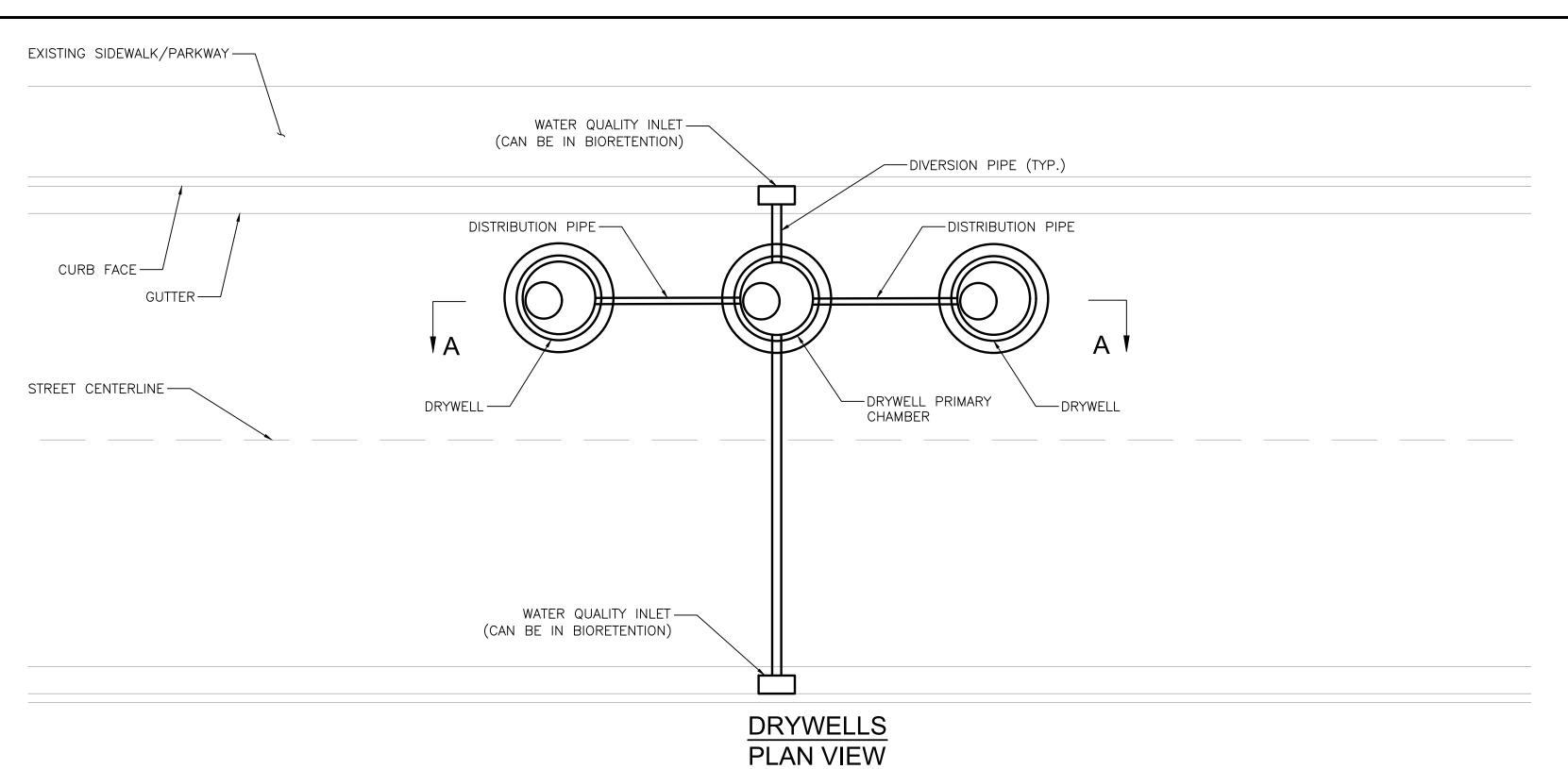
DIAL
BEFORE
YOU DIG
TOLL FREE
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT





NOTES:

1. A MINIMUM OF 10 FEET OF SEPARATION BETWEEN THE INFILTRATION SYSTEM INVERT AND GROUNDWATER WILL BE MAINTAINED. GROUNDWATER WAS ENCOUNTERED 30 FEET BELOW THE SURFACE ON JASMINE PLACE (REFER TO GEOTECHNICAL REPORT)



NOT TO SCALE

○ ITEM NUMBERS

- 1. **MANHOLE CONE** MODIFIED FLAT BOTTOM.
- 2. MIN. 6' Ø DRILLED SHAFT.
- 3. STABILIZED BACKFILL TWO-SACK SLURRY MIX.
- 4. 6 PERFORATIONS MINIMUM PER FOOT, 2 ROWS MINIMUM.
- 5. INLET PIPE/OUTLET PIPE (BY OTHERS). SEE SEPARATE PLAN FOR INVERT ELEVATIONS.
- **6. GRADED BASIN OR PAVING** (BY OTHERS).
- 7. COMPACTED BASE MATERIAL, IF REQUIRED (BY OTHERS).
- 8. FREEBOARD DEPTH VARIES WITH INLET PIPE ELEVATION. INCREASE SETTLING CHAMBER DEPTH AS NEEDED TO MAINTAIN ALL INLET PIPE ELEVATIONS ABOVE RISER
- 9. NON-WOVEN GEOTEXTILE SLEEVE MIRAFI 140 NL. MIN. 6 FT Ø. HELD APPROX. 10 FEET OFF THE BOTTOM OF EXCAVATION.
- 10. PUREFLO® DEBRIS SHIELD ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL 0.265" MAX. SWO FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. FUSION BONDED EPOXY COATED.
- 11. MIN. 6' Ø DRILLED SHAFT.
- 12. RISER PIPE SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE SEAL.
- 13. DRAINAGE PIPE ADS HIGHWAY GRADE OR SCH. 40 PVC WITH TRI-A COUPLER. SUSPEND PIPE DURING BACKFILL OPERATIONS. DIAMETER AS NOTED.
- 14. ROCK WASHED, SIZED BETWEEN 3/8" AND 1-1/2".
- 15. FLOFAST® DRAINAGE SCREEN SCH. 40 PVC 0.120" SLOTTED WELL SCREEN WITH MIN. 32 SLOTS PER ROW/FT. OVERALL LENGTH VARIES, UP TO 120" WITH TRI-B COUPLER.
- 16. ABSORBENT HYDROPHOBIC PETROCHEMICAL SPONGE. MIN. 128 OZ. CAPACITY. TYPICAL, 2 PER CHAMBER.
- 17. FABRIC SEAL U.V. RESISTANT GEOTEXTILE TO BE REMOVED BY CUSTOMER AT PROJECT COMPLETION. GRATED ONLY.
- 18. BOLTED RING & GRATE/COVER DIAMETER & TYPE AS SHOWN. CLEAN CAST IRON WITH WORDING "STORMWATER ONLY" IN RAISED LETTERS. BOLTED IN 2 LOCATIONS AND SECURED TO CONE WITH MORTAR. RIM ELEVATION ±0.02' OF PLANS.

- **19. BASE SEAL** CONCRETE SLURRY.
- 20. PRE-CAST LINER 4000 PSI CONCRETE 48" ID. X 54" ID. CENTER IN HOLE AND ALIGN SECTIONS TO MAXIMIZE BEARING SURFACE.
- 21. NOT USED.
- 22. INTAKE SCREEN 6"Ø SCH. 40 PVC 0.120" MODIFIED SLOTTED WELL SCREEN WITH MIN. 32 SLOTS PER ROW/FT. 60" OVERALL LENGTH WITH TRI-C END CAP.
- 23. VENTED ANTI-SIPHON INTAKE.
- **24. CONNECTOR PIPE** 6" Ø SCH. 40 PVC.

MODIFIED MAXWELL PLUS DRAINAGE SYSTEM OR APPROVED EQUAL

NOT TO SCALE

CITY OF CULVER CITY PUBLIC WORKS DEPARTMENT

CULVER CITY

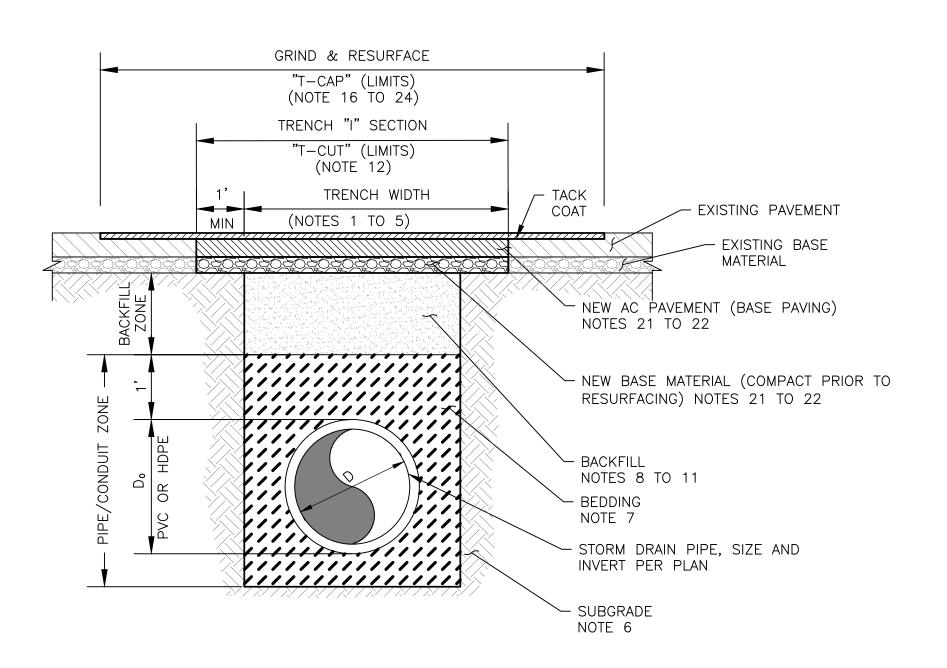
CITYWIDE STORMWATER CAPTURE





PLANS PREPARED UNDER THE SUPERVISION OF:	
KATHRYN (KATIE) HARREL, P.E.	
Project Number: PZ497	

KATHRYN (KATIE) HARREL, P.E.						DRYWELLS		
TATTITUM (TATTE) HARTILE, F.E.	/2					DITTVVLLLS		
Project Number: PZ497	3					APPROVED BY: JAVIER DELACRUZ, P.E.	SHEET	
Drawing No.	NO.	REVISION	BY	APPR.	DATE	SENIOR CIVIL ENGINEER DATE	C-12 Sheet 13 of 14 Sheets	



T-TRENCH AND AC PAVING RESTORATION NOT TO SCALE

NOTES:

ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) "GREENBOOK".

LIMITS OF REMOVALS, TRENCH WIDTH

- 1. ALL PAVEMENT REMOVED SHALL HAVE STRAIGHT EDGES. CUTS SHALL BE MADE TO A MINIMUM DEPTH OF ONE AND A HALF (1-1/2) INCHES. ALL CUTS SHALL BE NEAT, STRAIGHT, VERTICAL CUTS WITH NO BROKEN EDGES.
- 2. ALL LONGITUDINAL PAVEMENT CUTS SHALL BE UNINTERRUPTED APPROXIMATELY PARALLEL TO THE TRENCH (MAX. 1:6 LONGITUDINAL VARIANCE).
- 3. IF A SAW CUT IN PAVEMENT FALLS WITHIN 1 FOOT OF AN EXISTING CURB, GUTTER, OR EDGE OF PAVEMENT, THE ADDITIONAL PAVEMENT SHALL BE REMOVED AND RECONSTRUCTED.
- 4. WHEN SAW CUTTING PAVEMENT, THE MAXIMUM OVERRUN ALLOWED FOR ANY SAW CUT BEYOND THE BOUNDARY REMOVAL LIMITS OF EXISTING PAVEMENT SHALL BE 2 INCHES.
- 5. TRENCH WIDTH SHALL BE MINIMUM 24 INCHES, UNLESS SLURRY BACKFILL AND BEDDING IS USED, IN WHICH CASE MINIMUM SHALL BE 4 INCHES. MINIMUM 3 INCH SEPARATION SHALL BE MAINTAINED BETWEEN ALL CONDUITS, PIPES, AND TRENCH WALLS. IF SLURRY BEDDING MATERIAL IS USED, 1 INCH IS ACCEPTABLE IN A SINGLE LAYER INSTALLATION, OTHERWISE 2 INCH SEPARATION IS REQUIRED. UNDERCUTTING TRENCH WALLS TO ACQUIRE CLEARANCES IS NOT PERMITTED.

BEDDING:

6. BEDDING MATERIAL SHALL BE PLACED ON FIRM AND UNYIELDING SUBGRADE PER GREENBOOK SECTION 306. SOFT, SPONGY, UNSTABLE, UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED.
7. BEDDING SHALL CONFORM TO GREENBOOK REQUIREMENTS AND OTHER APPLICABLE STANDARDS.

BACKFILL

- 8. EXCAVATIONS SHALL BE BACKFILLED WITH AN APPROVED SLURRY MIX, CLSM, CMB, OR CAB. NATIVE SOIL MAY ONLY BE USED WITH CITY ENGINEER'S APPROVAL. CMB, CAB, SOIL SHALL BE COMPACTED TO 90% RELATIVE DENSITY. CMB, CAB SHALL BE WELL GRADED AND HANDLED IN A MANNER TO PREVENT SEGREGATION BY PARTICLE SIZE. SOIL TESTING MAY BE REQUIRED TO BE PROVIDED TO THE FIELD INSPECTOR ON A CASE—BY—CASE BASIS.
- 9. BACKFILL SLURRY MATERIAL SHALL BE PROPERLY CONSOLIDATED. SLURRY MATERIAL FOR TRENCHES DEEPER THAN 5 FEET AND/OR NARROWER THAN 12 INCHES MUST BE CONSOLIDATED WITH
- 10. BACKFILL MATERIAL SHALL BE MADE SMOOTH AND LEVEL BEFORE PLACING BASE AND PAVEMENT.

 11. JETTING IS NOT AN APPROVED DENSIFICATION METHOD.

TRENCH "T" SECTION ("T-CUT"):

- 12. AFTER THE EXCAVATION HAS BEEN BACKFILLED, THE EXISTING PAVEMENT SHALL BE REMOVED TO A LINE AT LEAST 12—INCHES BACK OF THE FIRM BANKS OF THE TRENCH AND THIS AREA ADJACENT TO THE TRENCH SHALL BE COMPACTED TO 95% RELATIVE DENSITY ("T—CUT"). EXISTING CMB OR CAB BASE MATERIAL IN THIS AREA DOES NOT NEED TO BE REMOVED. "T—CUT" IS NOT REQUIRED IF PROPER SLURRY BACKFILL IS USED, UNLESS UNDERMINING OF ADJACENT PAVEMENT IS PRESENT. IF SLURRY TRENCH WIDTH IS LESS THAN 12 INCHES, EXISTING PAVEMENT SHALL BE REMOVED TO PROVIDE AT LEAST A 12 INCH WIDE OPENING FOR PROPER COMPACTION OF THE BASE MATERIAL.
- 13. NEW BASE MATERIAL OF CMB, OR CAB, SHALL MATCH THE EXISTING BASE THICKNESS, OR 4—INCHES, WHICHEVER IS GREATER. COMPACT TO 95% RELATIVE DENSITY. THIS REQUIREMENT SHALL ALSO APPLY OVER SLURRY BACKFILLS UNLESS OTHERWISE SPECIFIED IN THE PERMIT.
- 14. NEW ASPHALT CONCRETE SECTION SHALL MATCH EXISTING PAVEMENT THICKNESS PLUS AN ADDITIONAL INCH, OR FULL DEPTH AC PLUS AN ADDITIONAL INCH.
- 15. ASPHALT CONCRETE PAVING WILL OCCUR NO SOONER THAN 42 HOURS AFTER SLURRY BACKFILL OF TRENCH.

GRIND AND RESURFACE ("T-CAP"):

- WITHIN 30 CALENDAR DAYS AFTER BACKFILLING, ASPHALT CONCRETE SHALL BE COLD MILLED AND RESURFACED AS FOLLOWS:
- 16. EXISTING ASPHALT CONCRETE SHALL BE GROUND DOWN ONE AND ONE HALF (1-1/2) INCHES, OR ONE HALF THE EXISTING PAVEMENT THICKNESS, WHICHEVER IS LESS, TO THE "T-CAP" LIMITS.
- 17. WHERE POSSIBLE, "T-CAP" LIMITS SHALL BE FROM DETAIL 1, "EXAMPLES OF GRIND AND RESURFACE "T-CAP" LIMITS". "T-CAP" IS NOT REQUIRED FOR SERVICE CONNECTIONS IN STREETS THAT HAVE NOT BEEN RESURFACED WITHIN THE PAST 25 YEARS AND DO NOT IMPACT BIKE LANES.
- 18. "T-CAP" LIMITS SHALL EXTEND AT LEAST 2 FT BEYOND THE TRENCH "T-CUT" LIMITS. MINIMUM "T-CAP" DIMENSIONS SHALL BE 5 FT X 5 FT.
- 19. "T-CUT" AND CORRESPONDING 3T-CAP' (AS APPLICABLE) IS REQUIRED FOR ALL EXCAVATIONS WITH A SURFACE AREA OF 2 SQ. FT OR GREATER.
- 20. WHERE LIMITS OF "T-CUT"S, "T-CAP"S, POT HOLES OR CORED HOLES ARE WITHIN 4FT OF EACH OTHER, THE PAVEMENT SURFACE RESTORATION SHALL BE COMBINED, BLENDED AND SQUARED USING "T-CAP"S TO ENCOMPASS ALL AREAS IN BETWEEN AS SHOWN IN THE DETAIL. "T-CAP" LIMITS FOR POT HOLES AND CORE HOLES SHALL EXTEND A MINIMUM OF 1-FOOT ALL AROUND BEYOND THE
- 21. IMPACTED BIKE LANES "T—CAP" LIMITS SHALL FULLY ENCOMPASS ANY BIKE LANE IMPACTED BY THE TRENCH, AND SHALL HAVE A LENGTH THAT EXTENDS AT LEAST 2 FEET BEYOND THE ASPHALT REMOVAL LIMITS IN THE DIRECTION OF BIKE TRAFFIC.
- 22. WHEN THE "T—CAP" LIMIT IS WITHIN 2 FEET OR LESS FROM A CURB OR GUTTER, THE "T—CAP" LIMIT SHALL EXTEND TO THE CURB OR GUTTER.
- 23. PAVEMENT SHALL BE LEVEL WITH ADJACENT ROADWAY ELEVATIONS AND SHALL PROVIDE A SMOOTH SURFACE PER GREENBOOK SECTION 302-5 AND SUBJECT TO ACCEPTANCE BY THE CITY PUBLIC WORKS INSPECTOR.
- 24. "T-CAP" AND PERMANENT BASE PAVING MAY BE PERFORMED ON THE SAME DAY WHEN FEASIBLE.

<u>IDENTIFICATION:</u>

EACH RESURFACING SHALL BE IDENTIFIED WITH A METAL IDENTIFICATION TAG IDENTIFYING THE OWNER, AND YEAR OF CONSTRUCTION. IF THE RESURFACING IS MORE THAN 50 FEET IN LENGTH, PLACE THE TAG NEAR EACH END OF THE RESURFACING AND AT INTERVALS NOT TO EXCEED 50 FEET.

SURFACE RESTORATION:

SURFACE RESTORATION SHALL MATCH EXISTING/PROPOSED CONDITIONS WHEN NOT IN PAVED AREA.

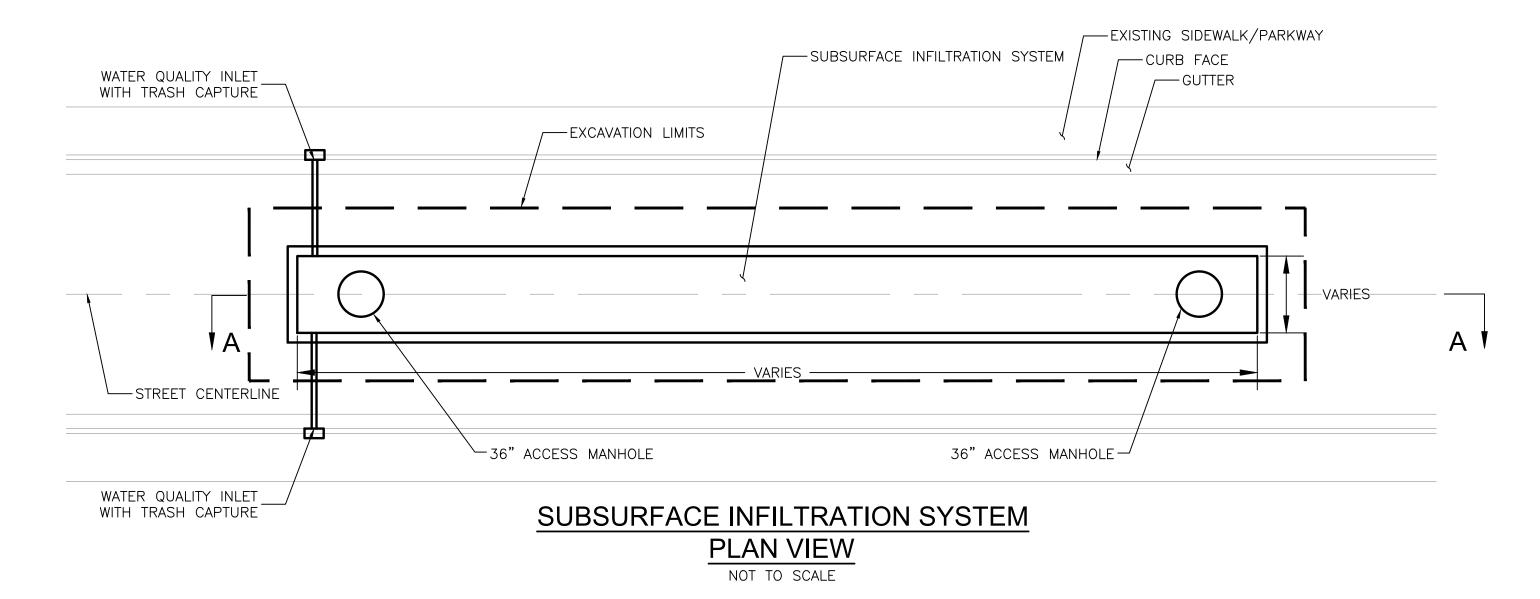
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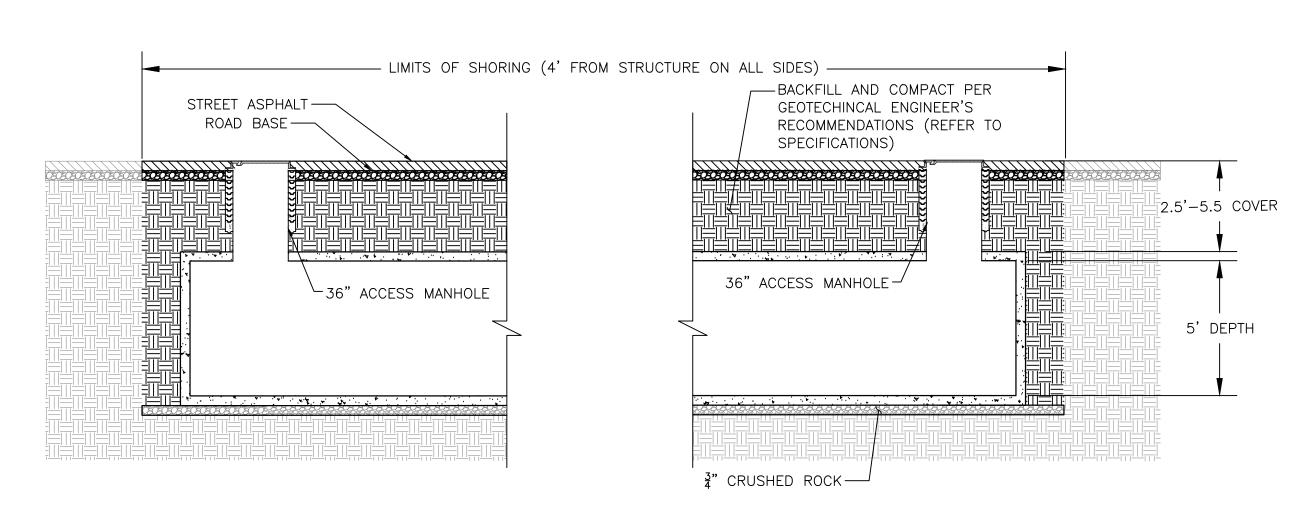
KATHRYN (KATIE) HARREL, P.E.

NO.

Project Number: PZ497

Drawing No.





SUBSURFACE INFILTRATION SYSTEM DETAIL 13 NOT TO SCALE

NOTES:

REVISION

- 1. THE SURFACE OVER THE INFILTRATION SYSTEM SHALL BE RESTORED TO MATCH EXISTING CONDITIONS, WHICH MAY INCLUDE PORTIONS OF THE STREET, SIDEWALK, CURB AND GUTTER, ETC.
- 2. THE SPECIFICATIONS INCLUDE A PERFORMANCE SPECIFICATION FOR THE SUBSURFACE INFILTRATION SYSTEM. THE CONTRACTOR SHALL SUBMIT SHOP AND WORKING DRAWINGS FOR REVIEW AND APPROVAL BY THE ENGINEER, WHICH SHALL INCLUDE ADDITIONAL DETAILS PERTAINING TO THE STRUCTURAL CONCRETE, PIPE CONNECTIONS, ETC.

BY APPR. DATE

CULVER CITY
CITYWIDE STORMWATER CAPTURE

SUBSURFACE INFILTRATION SYSTEM

APPROVED BY: JAVIER DELACRUZ, P.E.

SENIOR CIVIL ENGINEER

SYMBOL 90/59877. 3 and 10/5987 14 Sheets 14 of 14 Sheets 15 of 14 Sheets 1

CITY OF CULVER CITY





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