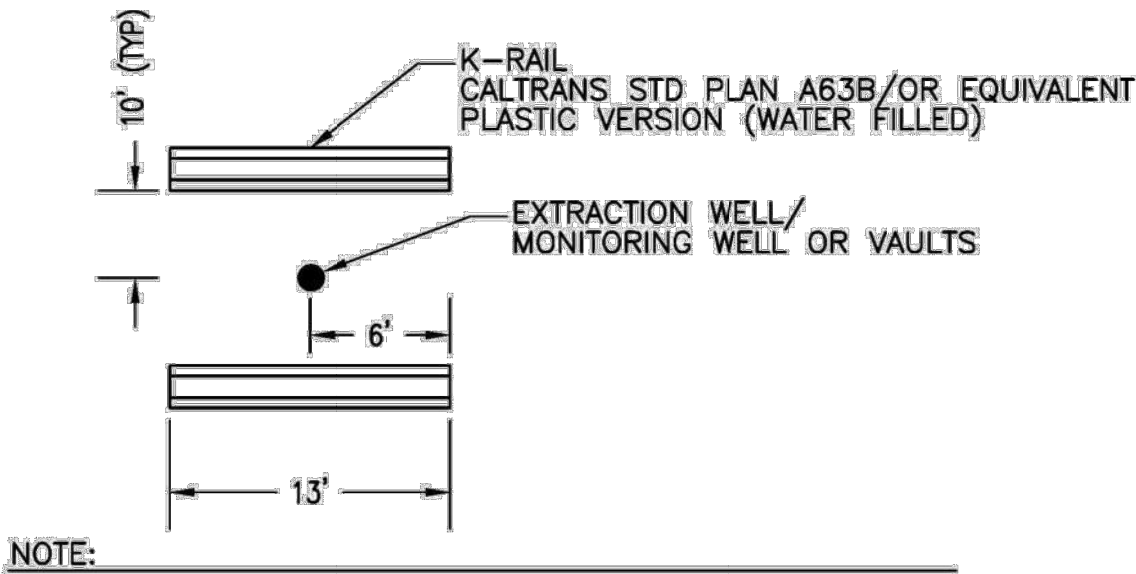


DEPARTMENT OF NAVY (DON) FACILITY NOTES

1. GRADING AND STORM DRAIN INSTALLATION ACTIVITIES WILL BE TAKING PLACE WITHIN A PORTION OF THE "INSTALLATION RESTORATION PROGRAM (IRP SITE 24) EASEMENTS , WHICH INCLUDE DEPARTMENT OF THE NAVY (DON) FACILITIES INCLUDING ELEVEN (11) NESTED MONITORING WELLS 24MW05A-B, 24MW08, 09DGMW75, AND 18PS06, TWELVE (12) EXTRACTION WELLS 24SGU-18, 24SGU-19, 24SGU-20, 24 SGU-21, 24SGU-22, 24SGU-23, 24SGU-24, 24SGU-25, 24SGU-26,24EX-13A, 24EX-13B, AND 24EX-13C WITH FORTY EIGHT (48) ASSOCIATED HAND BOXES (FOUR 4 ER EACH EXTRACTION WELL), ONE (1) CHECK VALVE VAULT, A LARGE VAULT, TWO (2) SMALL PULL BOXES, A BLIND FLANGE VAULT, AND A CONVEYANCE SYSTEM TRENCH CONTAINING PIPING, 480-VOLT CONDUIT, COOMUNICATION CONDUIT, AND A COPPER GROUND. THE ABOVE NAVY FACILITIES ARE DEPICTED ON EACH SHEET OF THIS PLAN SET HAVING CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL PROVIDE DON PERSONNEL AND ITS CONTRACTORS FULL ACCESS TO THE CONSTRUCTION SITE AT ALL TIMES.
3. THE CONTRACTOR SHALL NOT PERFORM WORK AT ANY AND ALL DON FACILITIES LOCATED BOTH WITHIN AND OUTSIDE THE IRP 24 EASEMENT (MONITORING WELLS, EXTRACTION WELLS, HAND BOXES, VAULTS, THE CONVEYANCE TRENCH, ETC.) WITHOUT THE CITY'S CONSTRUCTION MANAGER (JOE KIRKPATRICK, (949) 724-6320) AND INSPECTOR (TIM ANDERSON, (949) 724-6329 PRESENT AND ON-SITE AT ALL TIMES.
4. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL CLEARLY ENSURE THAT THE EASEMENT AND LINES ARE VISIBLE TO ALL CONSTRUCTION PERSONNEL. THE IRP 24 EASEMENT IS FOURTEEN FEET (14 ') WIDE OVER THE CONVEYANCE SYSTEM TRENCH (SEVEN FEET (7') FROM BOTH SIDES OF THE CENTERLINE OF THE TRENCH) AND A TWENTYFIVE FOOT (25') RADIUS ORIGINATING FROM THE CENTER POINT OF EACH OF THE EXTRACTION WELL VAULTS. THE CONTRACTOR SHALL PROHIBIT CROSSING OF THE CONVEYANCE SYSTEM TRENCHES AT ALL LOCATIONS BEYOND THE CROSSINGS APPROVED BY DON. THE CROSSINGS SHALL BE PROTECTED BY STEEL PLATES TO PROTECT THE CONVEYANCE SYSTEM FROM DAMAGE BY VEHICLES AND EQUIPMENT. ALL CROSSING LOCATIONS SHALL BE CLEARLY MARKED BY APPROPRIATE SIGNAGE. ALL MARKINGS AND SIGNAGE ARE SUBJECT TO REVIEW OR PERIODIC INSPECTION AND APPROVAL BY THE DON.
5. THE CONTRACTOR SHALL PHYSICALLY MARK AND PROTECT ALL EXISTING MONITORING AND EXTRACTION WELLS, HAND BOXES, AND VAULTS AT A MINIMUM 10-FOOT RADIUS INPLACEBY K-RAIL WITH FLAGGING, AND/ OR FENCING. THESE DON FACILITIES SHALL ALSO BE PROTECTED FROM THE INTRUSION OF SILT, SOIL, AND OR DEBRIS. SEE MONITORING WELL / EXTRACTION WELL PROTECTION DETAILS A-F DRAWING NO C2-103A
6. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION/ COMPACTION WORK OVER THE TOP OF THE CONVEYANCE TRENCH, PLUS ONE FOOT (1 '-0") ON EITHER SIDE OF THE TRENCH (EQUATING TO APPROXIMATELY 5.5 FEET IN WIDTH) BY HAND AND TO NO MORE THAN 90% RELATIVE COMPACTION. IN ADDITION, THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN FOUR FEET (4'-0") OF ANY DON FACILITY (MONITORING WELLS, EXTRACTION WELLS, HAND BOXES, VAULTS, THE CONVEYANCE TRENCH, ETC.) LOCATED BOTH WITHIN AND OUTSIDE THE IRP SITE 24 EASEMENT BY HAND. AT UTILITY CROSSINGS, THE CONTRACTOR SHALL PERFORM WORK OVER THE TOP AND SURROUNDING CONDUIT BY HAND, AND AT MINIMUM DISTANCE OF TWO FEET (2'-0") FROM THE CONDUIT. THE CONTRACTOR MUST CONDUCT A PREINSTALLATION CONFERENCE. IN ACCORDANCE WITH DIVISION 01 SPECIFICATION SECTION 01310, A MINIMUM OF 20 WORKING DAYS PRIOR TO ANY SCHEDULED UNDERGROUND WORK CROSSING THE DON TRENCH. CONTRACTOR SHALL PROVIDE COORDINATION DRAWINGS FOR DON REVIEW/APPROVAL AT THE PRE-INSTALLATION CONFERENCE.
7. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18 INCHES (18") OF COVER OVER THE TOP OF THE EXISTING 480V AND COMMUNICATIONS LINES. IF THE DRAWINGS INDICATE OR INFER LESS THAN THE MINIMUM 18" OF COVER, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE CONSTRUCTION MANAGER.
8. FOR NEW WATERLINE OVERCROSSINGS OF THE EXISTING 480V LINE, THE CONTRACTOR SHALL MAINTAIN A MINIMUM 12 INCH (12") SEPARATION. IF THE DRAWINGS INDICATE OR INFER LESS THAN THE MINIMUM 12" SEPARATION, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE CONSTRUCTION MANAGER.
9. FOR ALL NEW UTILITY UNDER-CROSSINGS, THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 12 INCHES (12") BELOW THE BOTTOM OF THE EXISTING EXTRACTION SYSTEM TRENCH. THE CONTRACTOR MUST CONDUCT A PRE-INSTALLATION CONFERENCE, IN ACCORDANCE WITH PROJECT SPECIFICATION A MINIMUM OF 20 WORKING DAYS PRIOR TO ANY SCHEDULED UNDERGROUND WORK CROSSING THE DON TRENCH. CONTRACTOR TO PROVIDE COORDINATION DRAWINGS FOR DON REVIEW/APPROVAL AT THE PRE-INSTALLATION CONFERENCE.
10. FOR NEW ELECTRICAL OR COMMUNICATION LINE CROSSINGS OF THE EXISTING 480V LINE, THE CONTRACTOR SHALL COMPLY WITH MINIMUM SEPARATIONS AS PER PREVAILING STATE AND LOCAL CODES AND ORDINANCES. IF THE DRAWINGS INDICATE OR INFER SEPARATIONS OTHER THAN ALLOWED BY SUCH CODES AND ORDINANCES, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE CONSTRUCTION MANAGER.
11. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REPAIR OF ANY DON FACILITIES DAMAGED IN THE COURSE OF RUNWAY DEMOLITION ACTIVITIES. SUCH REPAIR WORK WILL BE DONE TO THE SATISFACTION AND APPROVAL OF CONSTRUCTION MANAGER AND THE DON.
12. LARGE EQUIPMENT SHALL NOT CROSS THE CONVEYANCE SYSTEM TRENCH EXCEPT FOR AT THE LOCATIONS DESIGNATED AS DESCRIBED IN NOTE 4 ABOVE.
13. THE CONTRACTOR SHALL REPLACE ANY DISRUPTED UNDERGROUND WARNING TAPE WITHIN THE CONVEYANCE SYSTEM TRENCH.
14. CONTRACTOR SHALL CONFORM TO THE CONDITIONS IN THE DON PROJECT ENVIRONMENTAL REVIEW FORM (PERF) AND WORK IN EASEMENT AREA (WIEA).
15. CONTRACTOR SHALL FOLLOW REVISED PROTOCOL PLAN FOR UNKNOWN HAZARDOUS MATERIALS AND NON-RECYCLABLE MATERIALS PREPARED BY ENGEO INC. DATED OCTOBER 3, 2014, PROJECT NO 8506.0GP.000. THIS PLAN INCLUDES A REQUIREMENT THAT THE CONTRACTOR PROVIDE A SITE-SPECIFIC HEALTH AND SAFETY PLAN.



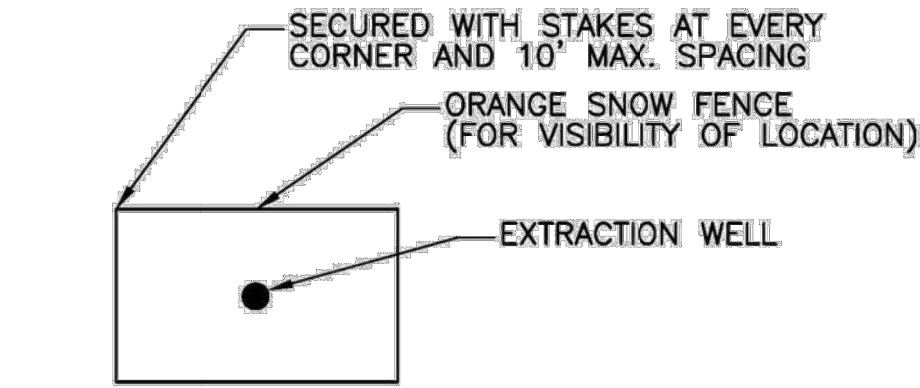
DETAIL A
NOT TO SCALE



NOTE:
1. CONTRACTOR SHALL PLACE WARNING TAPE AROUND THE WELL/ OPTIONAL ORANGE SNOW FENCE PER THE DIRECTION ENVIRONMENTAL COORDINATOR

DETAIL D
MONITORING WELL/IRP EXTRACTION WELL PROTECTION (OUTSIDE IMMEDIATE WORK AREA)

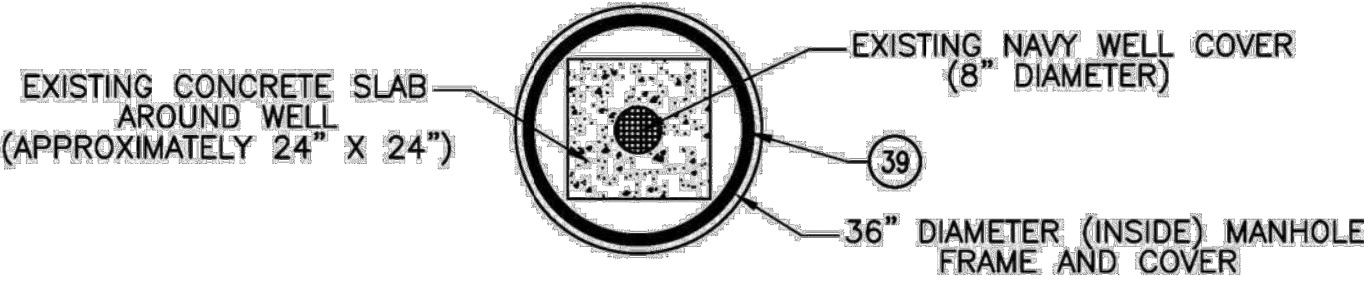
NOT TO SCALE



NOTE:
1. CONTRACTOR SHALL INSTALL A VISIBLE BARRIER ORANGE SNOW FENCE AROUND THE WELL OR GROUP OF WELLS FOR VISUAL LOCATION

DETAIL B
MONITORING WELL/IRP EXTRACTION WELL PROTECTION (INSIDE IMMEDIATE WORK AREA)

NOT TO SCALE



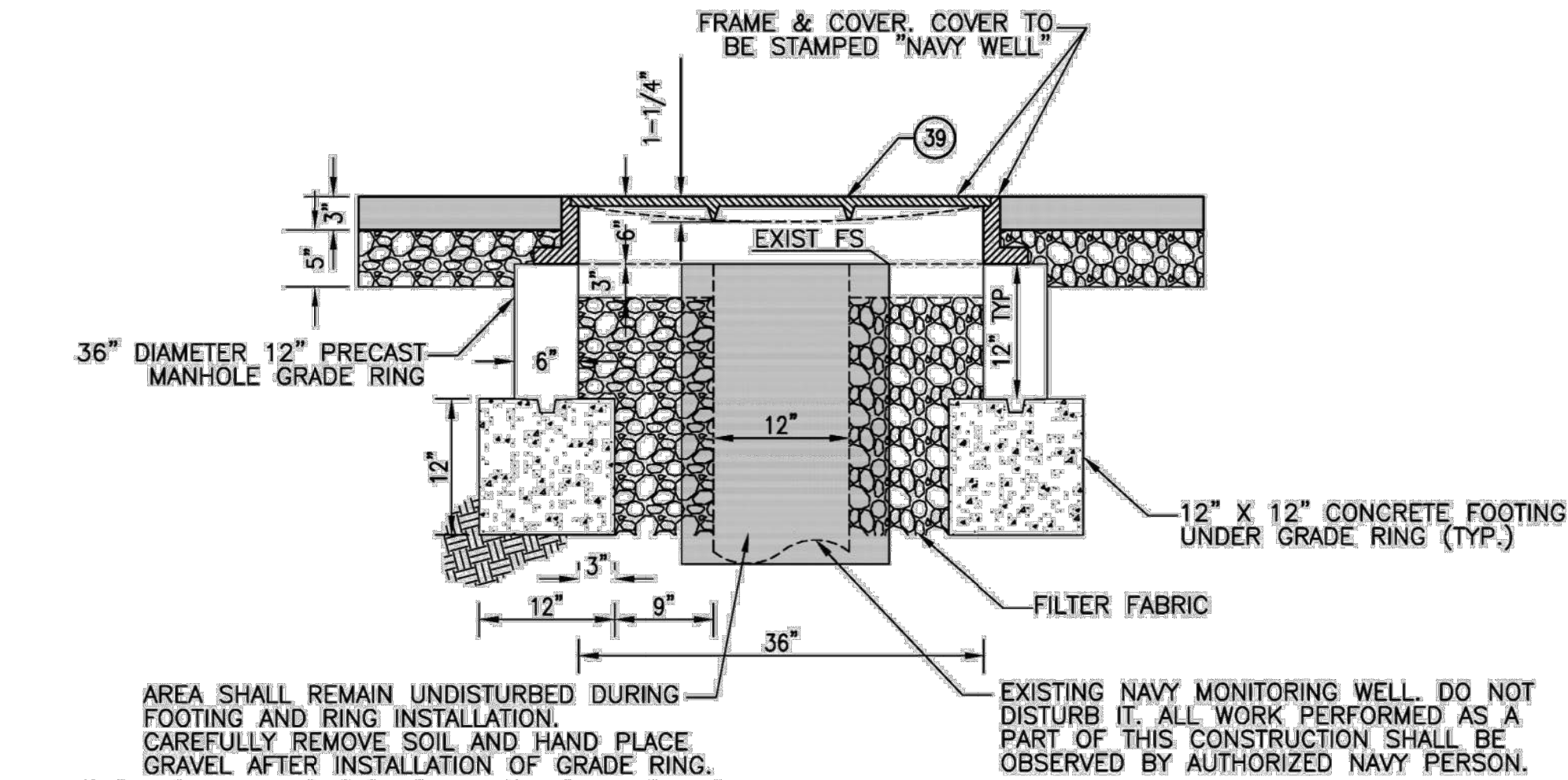
ALL WORK TO INSTALL THE MANHOLE GRADE RING AND RING AND COVER WILL BE PERFORMED OUTSIDE THE EXISTING CONCRETE PAD AROUND THE WELL COVER. THE EXISTING WELL AND COVER SHALL NOT BE TOUCHED OR DISTURBED IN ANY WAY. ALL WORK TO INSTALL THE MANHOLE RING AND COVER SHALL BE DONE BY HAND.

CONSTRUCTION NOTES

39- CONSTRUCT MONITORING WELL PROTECTIVE COVER SEE DETAILS C AND D ON DWG C1-105

DETAIL E
MONITORING WELL PROTECTIVE COVER

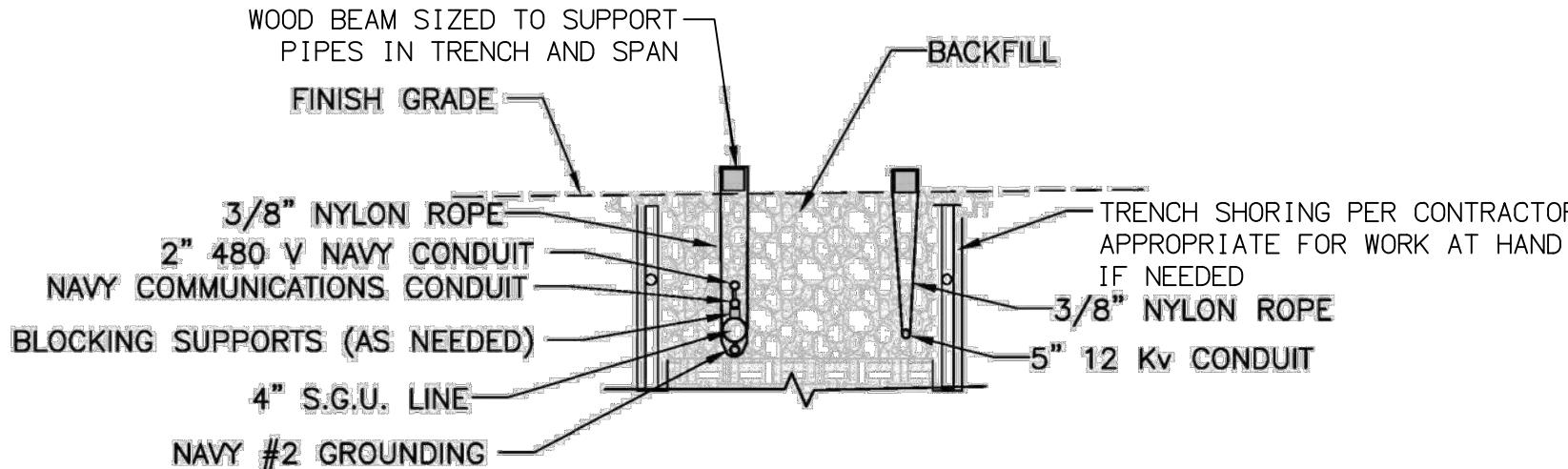
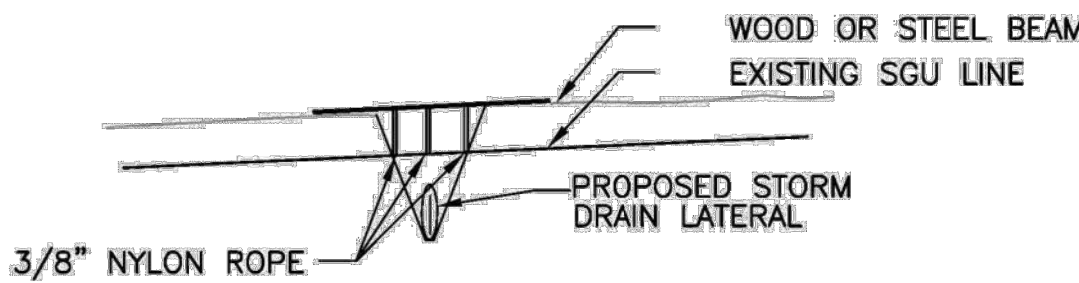
NOT TO SCALE



PRECISE GRADING CONSTRUCTION NOTES
39- CONSTRUCT MONITORING WELL PROTECTIVE COVER SEE DETAILS C AND D ON DWG C1-105

DETAIL C
MONITORING WELL PROTECTIVE COVER

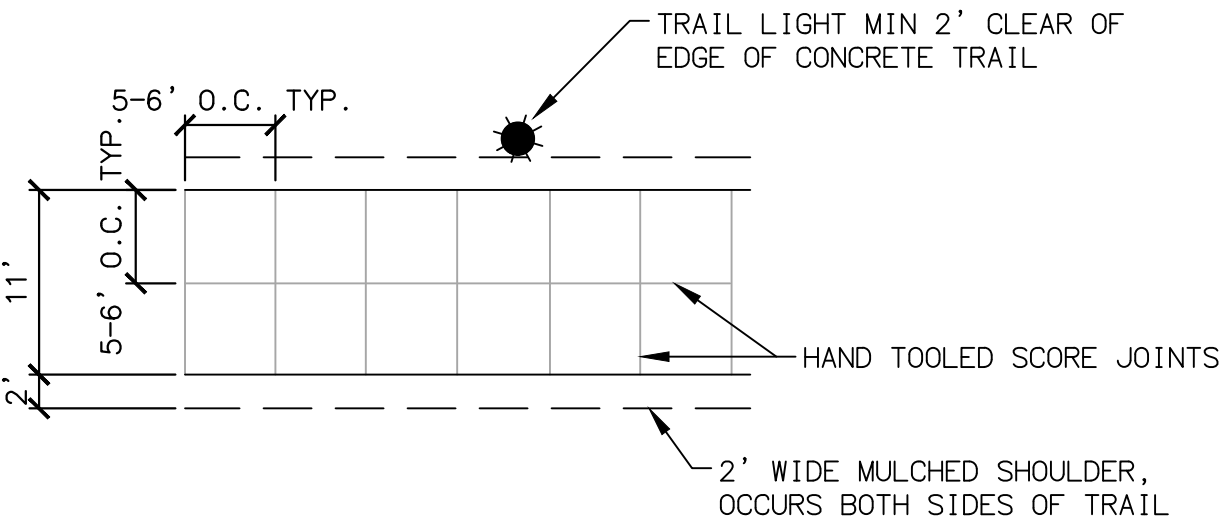
NOT TO SCALE



DETAIL F
PIPE AND CONDUIT SUPPORT AT UTILITY CROSSING

NOT TO SCALE

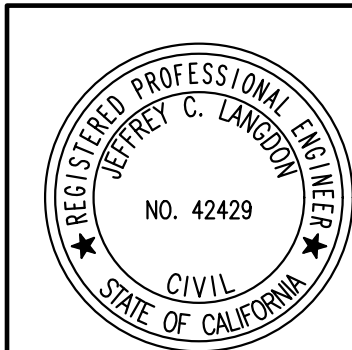
ALL CONCRETE TRAILS SCORE JOINTS NEED TO BE TOOLED; NOT SAW CUT



CLASS I PRIMARY TRAIL

TYPICAL TRAIL SCORING DETAIL

NOT TO SCALE



7						
6						
5						
4						
3						
2						
1						
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE	

DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

JEFFREY C. LANGDON R.C.E. 42429 DATE

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
NAVY NOTES AND DETAILS
FROM SKYHAWK TO 3800' EASTER,Y

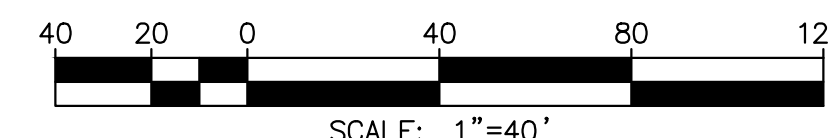
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.
00760917-EMC
PERMIT NO.
00766614-MCE

PROJECT NO.
20.059
SHEET
4A
OF 28

DEMOLITION NOTES

- | | |
|-----------|--------------------|
| C | CAP PIPE END |
| P | PROTECT IN PLACE |
| R | REMOVE AND DISPOSE |
| RL | RELOCATE |
| RS | REMOVE AND SALVAGE |
| S | SALVAGE |
-
- | | |
|---|---|
|  | SAWCUT AND REMOVE
EX AC PAVEMENT |
|  | SAWCUT AND REMOVE
EX CONCRETE PAVEMENT |



DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

JEFFREY C. LANGDON R.C.E. 42429 DA

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PROJECT NO.
20.059

SHEET
5

OF **28**

- ☐ CAP PIPE END
- ☐ PROTECT IN PLACE
- ☐ REMOVE AND DISPOSE
- ☐ RELOCATE
- ☐ REMOVE AND SALVAGE
- ☐ SALVAGE

SAWCUT AND REMOVE
EX AC PAVEMENT

SAWCUT AND REMOVE
EX CONC PAVEMENT



MATCHLINE STA 90+50 - SEE 6A

COUNTY OF ORANGE

CITY OF IRVINE

EX MARINE WAY

NOTE:
CONTRACTOR TO MAINTAIN/ALLOW
OR PROVIDE ACCESS TO EXISTING
PROPERTY OWNERS ALONG THE
FRONTAGE ON MARINE WAY.



7					
6					
5					
4					
3					
2					
1					
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE

DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

PLAN PREPARED BY:

PROACTIVE
ENGINEERING CONSULTANTS

27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

JEFFREY C. LANGDON R.C.E. 42429

**CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
DEMOLITION PLAN
FROM STA 81+30 TO STA 99+50**

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

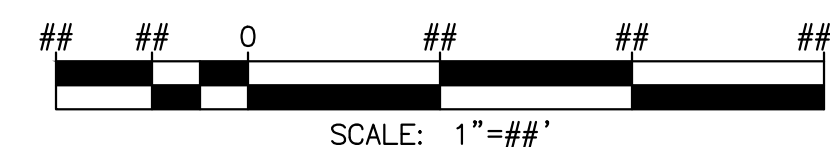
PLAN CHECK NO.	00760917-EMC
PERMIT NO.	00766614-MCE

PROJECT NO.	20.059
SHEET	6
OF	28

- ☐ CAP PIPE END
- ☐ PROTECT IN PLACE
- ☐ REMOVE AND DISPOSE
- ☒ RELOCATE
- ☐ REMOVE AND SALVAGE
- ☐ SALVAGE

SAWCUT AND REMOVE
EX AC PAVEMENT

SAWCUT AND REMOVE
EX CONC PAVEMENT



NOTE:
CONTRACTOR TO MAINTAIN/ALLOW
OR PROVIDE ACCESS TO EXISTING
PROPERTY OWNERS ALONG THE
FRONTAGE ON MARINE WAY.



7					
6					
5					
4					
3					
2					
1					
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE

DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

PLAN PREPARED BY:

PROACTIVE
ENGINEERING CONSULTANTS

27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

JEFFREY C. LANGDON R.C.E. 42429 D

**CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
DEMOLITION PLAN
FROM STA 99+50 TO 11+05.40**

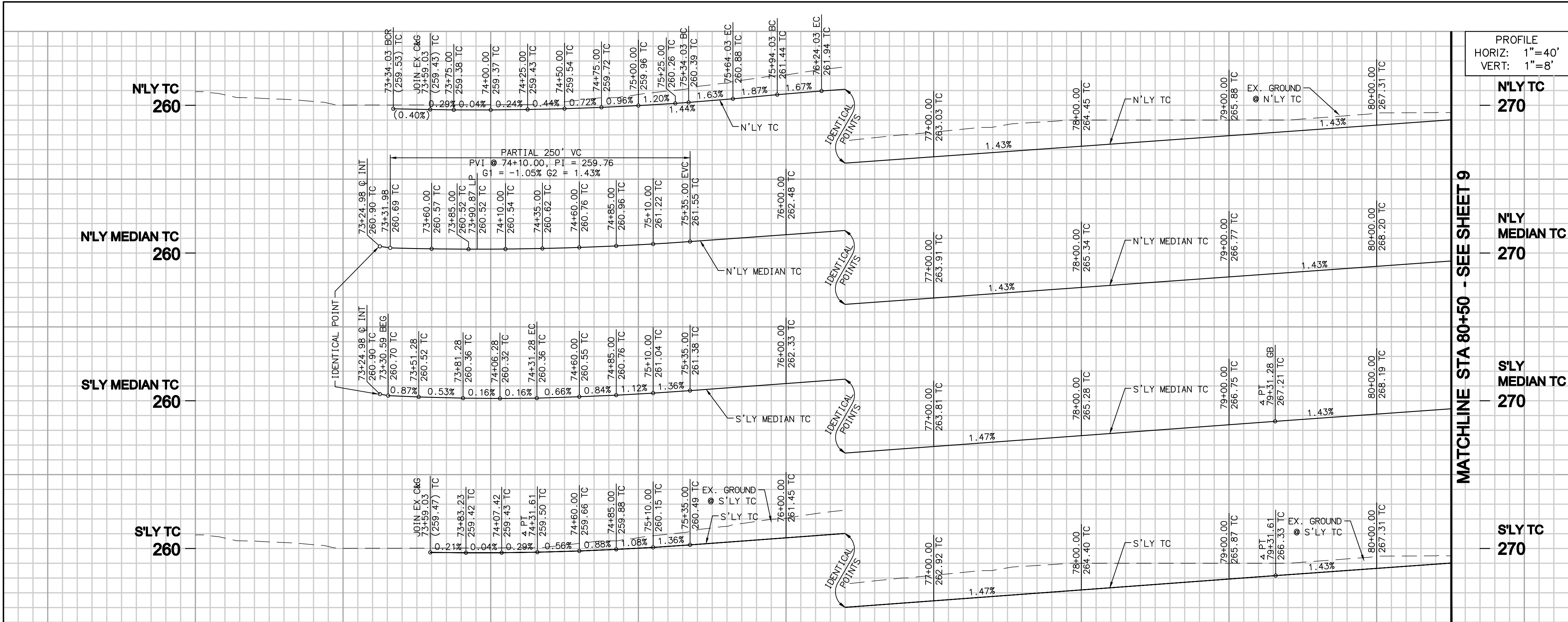
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.
00760917-EMC
PERMIT NO.
00766614-MCE

PROJECT NO.
20.059

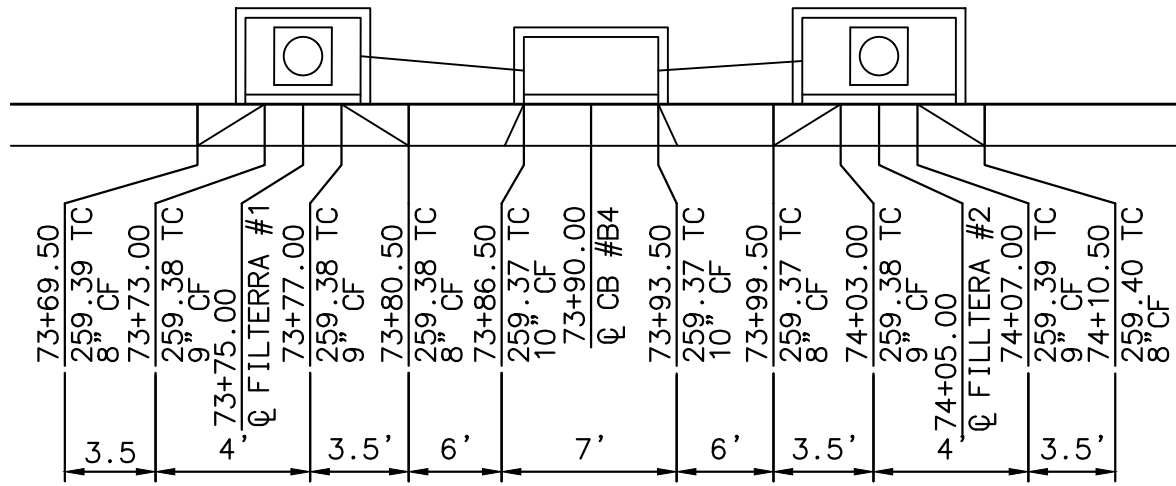
SHEET
7

OF **28**

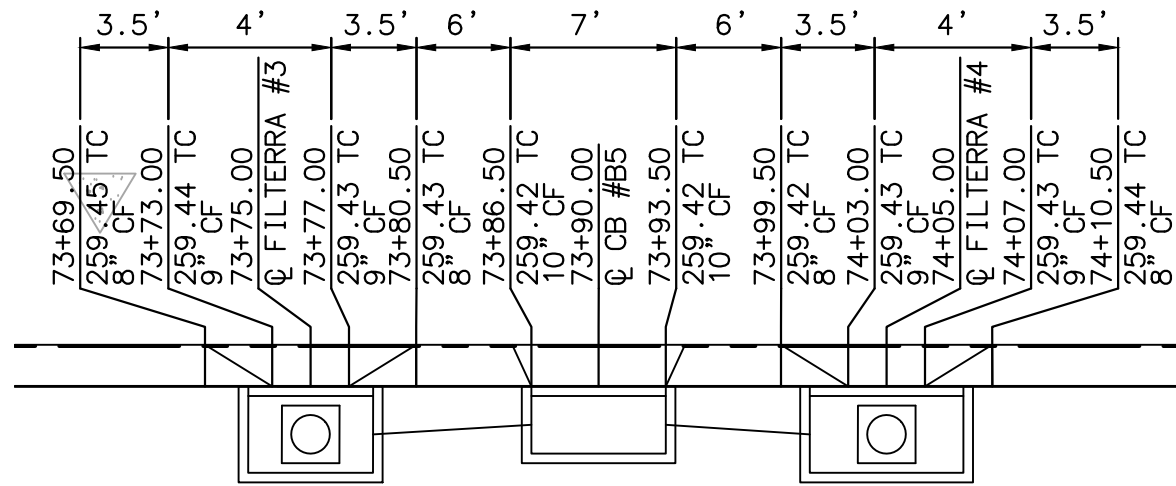


PROFILE
HORIZ: 1"=40'
VERT: 1"=8'

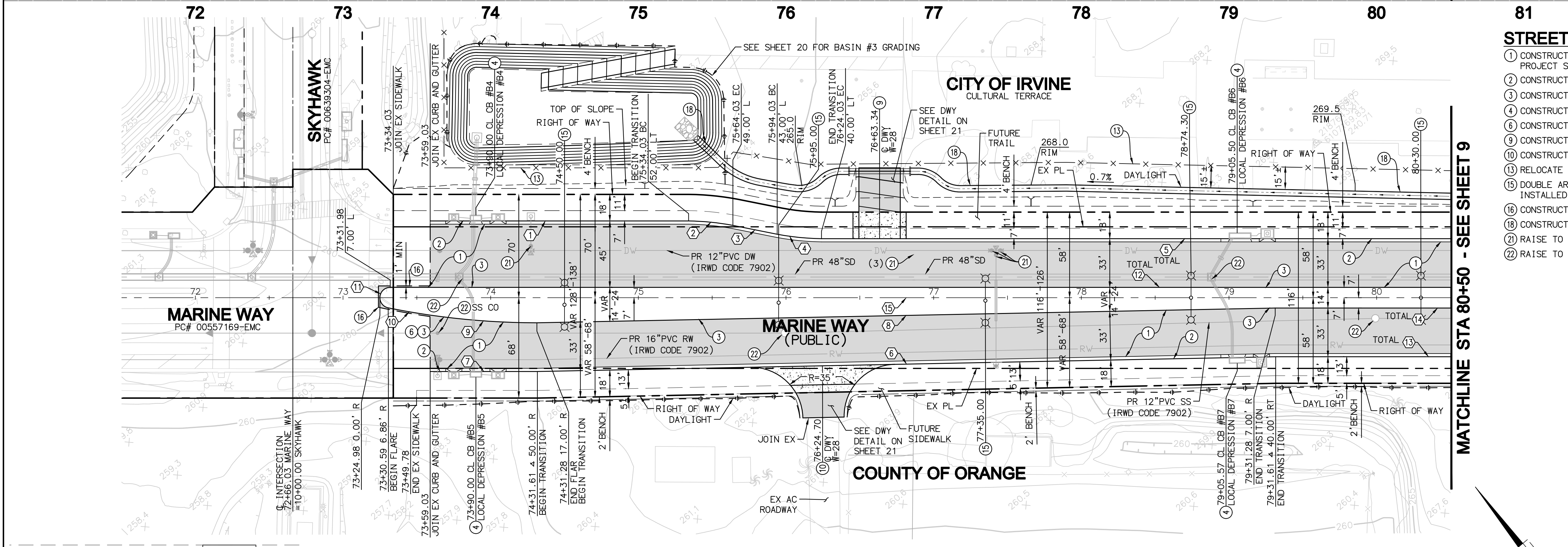
CENTERLINE PROFILE DATA			
PVI STA	PVI ELEV	GRADE	VC LENGTH
71+10.00	262.40	-1.05%	
74+10.00	259.25	-1.48%	250'
85+50.00	275.54	-1.00%	200'



LOCAL DEPRESSION #B4
SCALE: 1"=10'



LOCAL DEPRESSION #B5
SCALE: 1"=10'

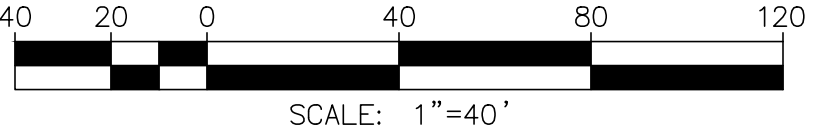


STREET CONSTRUCTION NOTES

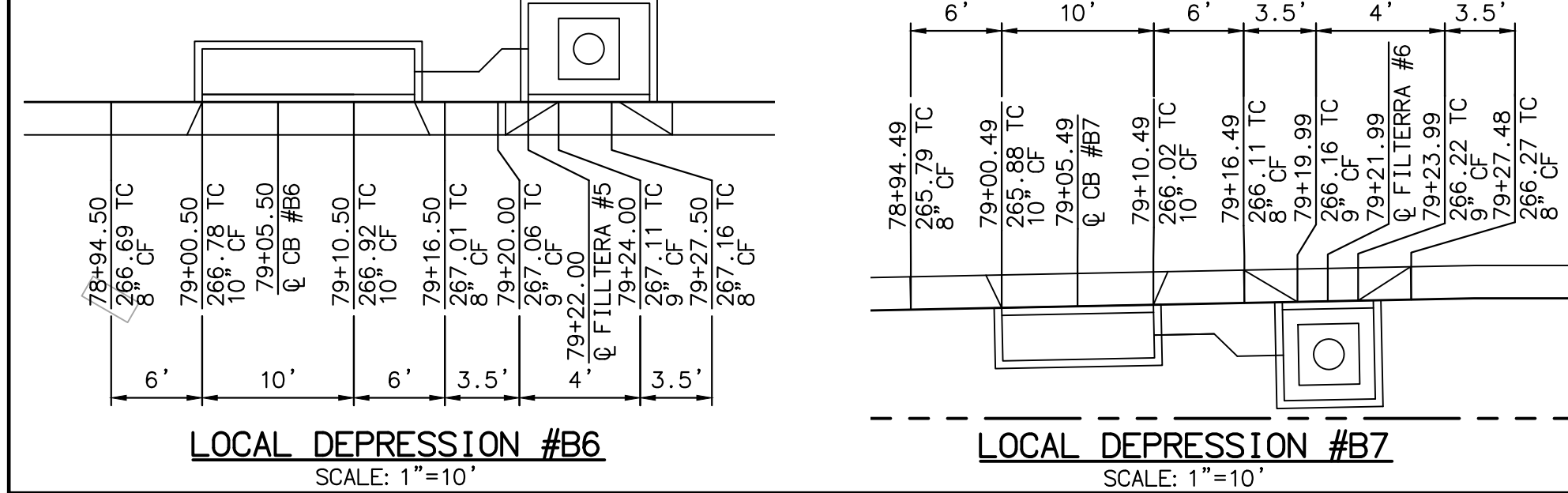
- CONSTRUCT 2" ARM OVER 4.5" AC OVER 19.5" CMB STRUCTURAL SECTION TO BE VERIFIED BY PROJECT SOILS ENGINEER DURING GRADING AND WITH APPROVAL OF THE CITY ENGINEER
- CONSTRUCT CONCRETE CURB AND GUTTER PER CITY OF IRVINE STD. PLAN NO. 200, TYPE A-2
- CONSTRUCT CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, TYPE B-8
- CONSTRUCT LOCAL DEPRESSION PER CITY OF IRVINE STD. PLAN NO. 303
- CONSTRUCT PARABOLIC MEDIAN CURB FLARE PER CITY OF IRVINE STD. PLAN NO. 108
- CONSTRUCT DRIVEWAY TYPE I PER CITY OF IRVINE STD. PLAN NO. 204 (WIDTH PER PLAN) X=4'
- CONSTRUCT DRIVEWAY TYPE II PER CITY OF IRVINE STD. PLAN NO. 205 (WIDTH PER PLAN)
- RELOCATE EXISTING TEMPORARY FENCE PER PLAN WITH GRAVEL BAGS ON LEG SUPPORTS
- DOUBLE ARM STREET LIGHT PER CITY OF IRVINE STD. PLAN 215 AND DETAIL SHEET 2, TO BE INSTALLED BY SEE
- CONSTRUCT FULL DEPTH AC TO PATCH PER CITY OF IRVINE STD. PLAN NO. 203 ALTERNATIVE A
- CONSTRUCT 4' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3
- RAISE TO GRADE EXISTING WATER VALVE CAN
- RAISE TO MANHOLE TO GRADE

LINE/CURVE DATA TABLE

NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	N49°51'20"W	---	175.00'	---
2	10°04'07"	171.79'	30.19'	15.13'
3	N38°32'44"W	---	30.59'	---
4	10°04'07"	171.79'	30.19'	15.13'
5	N49°51'20"W	---	775.08'	---
6	N51°00'05"W	---	500.10'	---
7	N49°51'20"W	---	72.58'	---
8	N51°00'05"W	---	500.10'	---
9	08°09'54"	508.75'	72.50'	36.31'
10	03°15'04"	508.75'	28.87'	14.44'
11	168°32'30"	7.00'	20.59'	69.77'
TOTAL			1067.13'	---
TOTAL			467.50'	---
TOTAL			467.83'	---
TOTAL			1133.08'	---



SEE SHEET 13 FOR SD IMPROVEMENTS



NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

DRAWN BY: SR DATE 4/18
DESIGNED BY: JCL DATE 4/18
CHECKED BY: JCL DATE 4/18

JEFFREY C. LANGDON R.C.E. 42429 DATE

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STREET PLAN AND PROFILE
FROM STA 73+24.98 TO 80+50.00

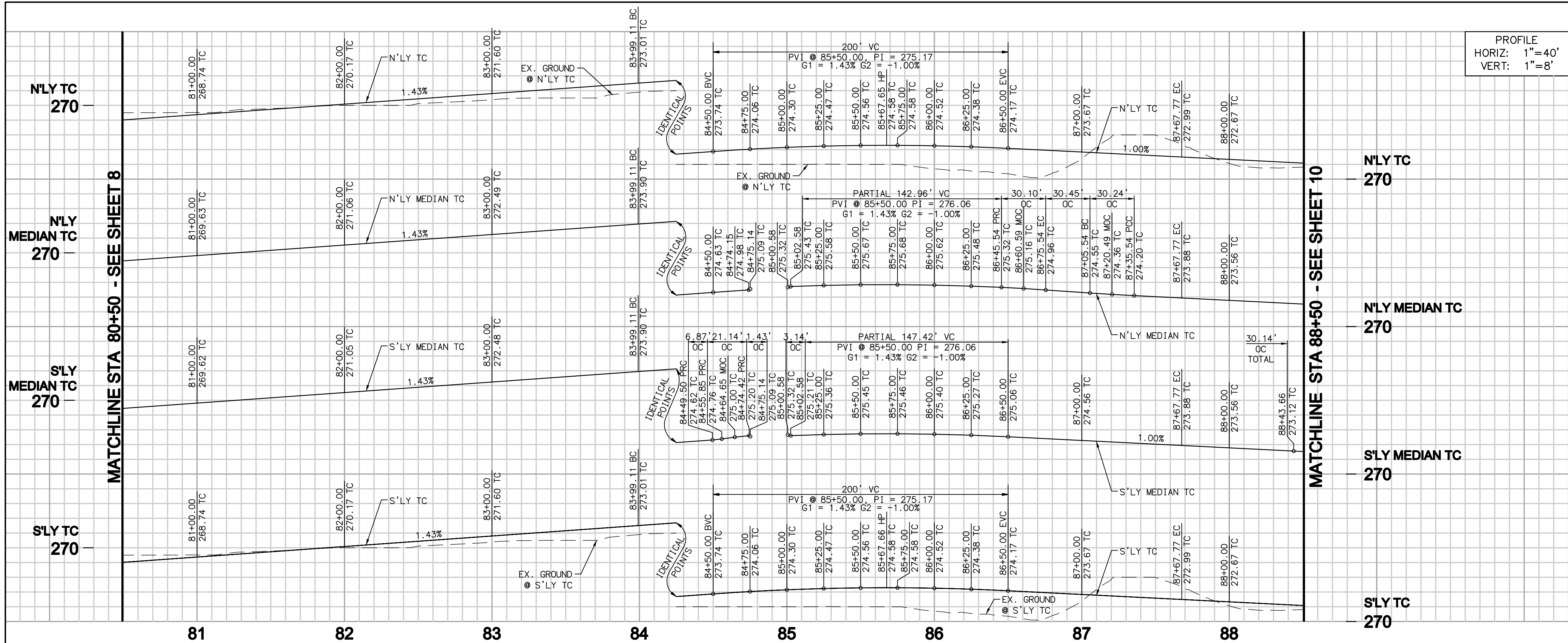
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.
00760917-EMC

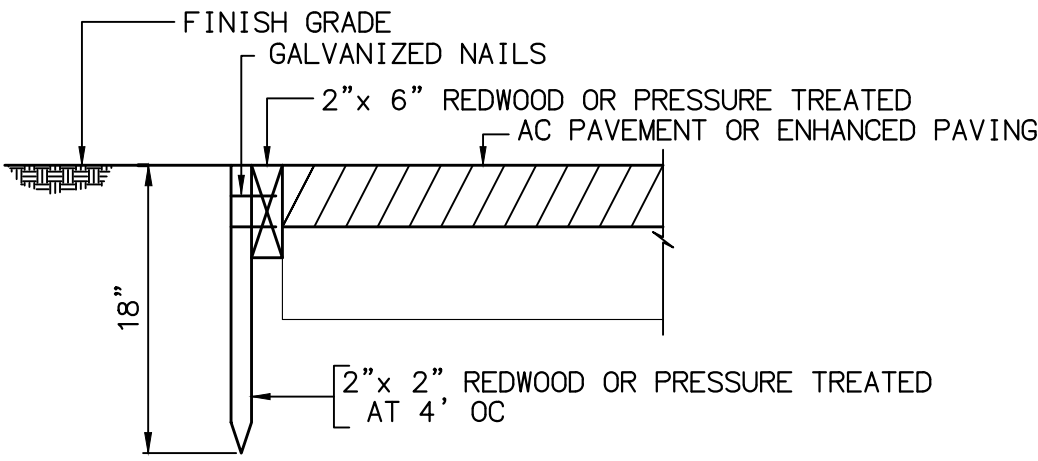
PERMIT NO.
00766614-MCE

PROJECT NO.
20.059

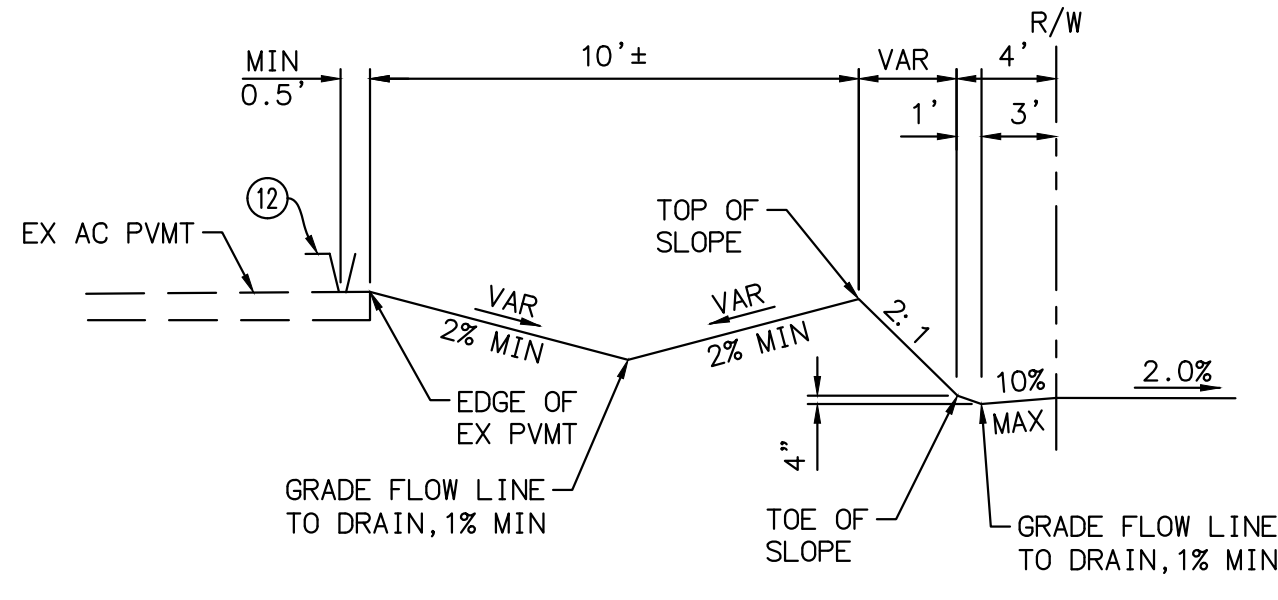
SHEET
8
OF **28**



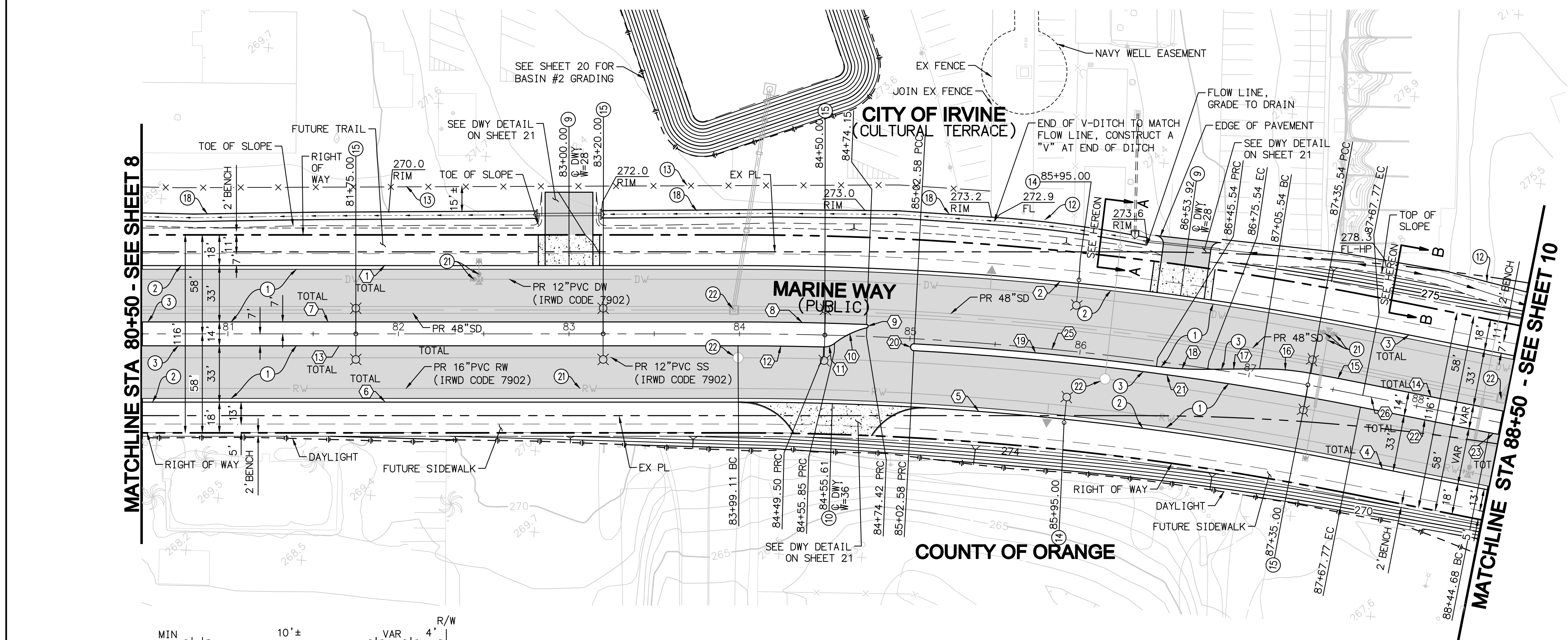
CENTERLINE PROFILE DATA			
PVI STA	PVI ELEV	GRADE	VC LENGTH
74+10.00	259.25	1.48%	250'
85+50.00	275.54	-1.00%	200'
96+00.00	265.04	1.00%	200'



5 WOOD HEADER DETAIL
NOT TO SCALE



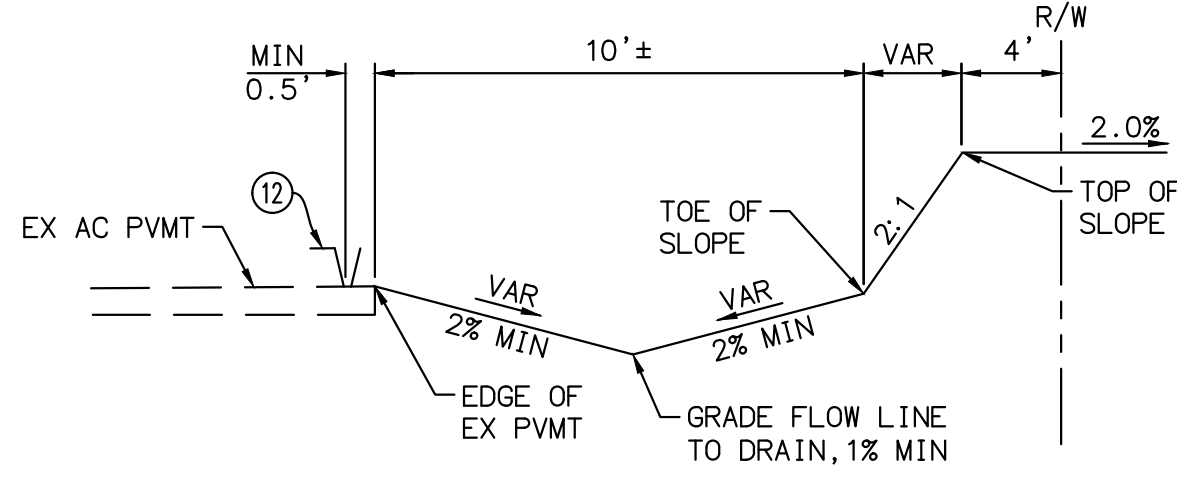
SECTION BB
NTS



STREET CONSTRUCTION NOTES

- CONSTRUCT 2" ARHM OVER 4.5" AC OVER 19.5" CMB STRUCTURAL SECTION TO BE VERIFIED BY PROJECT SOILS ENGINEER DURING GRADING AND WITH APPROVAL OF THE CITY ENGINEER
- CONSTRUCT CONCRETE CURB AND GUTTER PER CITY OF IRVINE STD. PLAN NO. 200, TYPE A-2
- CONSTRUCT CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, TYPE B-8
- CONSTRUCT DRIVEWAY TYPE I PER CITY OF IRVINE STD. PLAN NO. 204 (WIDTH PER PLAN) X=4'
- CONSTRUCT DRIVEWAY TYPE II PER CITY OF IRVINE STD. PLAN NO. 205 (WIDTH PER PLAN)
- CONSTRUCT 8" AC CURB D1-8 PER SPWC STD. PLAN 120-2 (SEE SHEET 23)
- RELOCATE EXISTING TEMPORARY FENCE PER PLAN WITH GRAVEL BAGS ON LEG SUPPORTS
- SINGLE ARM STREET LIGHT PER CITY OF IRVINE STD. PLAN 215 AND DETAIL SHEET 2, TO BE INSTALLED BY SCE
- DOUBLE ARM STREET LIGHT PER CITY OF IRVINE STD. PLAN 215 AND DETAIL SHEET 2, TO BE INSTALLED BY SCE
- CONSTRUCT 4' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3
- RAISE TO GRADE EXISTING WATER VALVE CAN
- RAISE TO MANHOLE TO GRADE

LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
TOTAL	1 N49°51'20"W	---	775.08'	---
	2 11°14'08"	1920.00'	376.51'	188.86'
TOTAL	3 N38°37'12"W	---	540.70'	---
	4 N38°37'12"W	---	540.70'	---
	5 11°14'08"	1840.00'	360.82'	180.99'
TOTAL	6 N49°51'20"W	---	467.50'	---
	7 N49°51'20"W	---	1067.13'	---
	8 02°17'13"	1887.00'	75.32'	37.66'
	9 164°07'03"	1.00'	2.86'	7.17'
	10 24°13'25"	50.00'	21.14'	10.73'
	11 39°21'17"	10.00'	6.87'	3.58'
	12 01°32'08"	1873.00'	50.20'	25.10'
TOTAL	13 N49°51'20"W	---	467.83'	---
	14 N38°37'12"W	---	359.55'	---
	15 00°58'56"	1887.00'	32.35'	16.17'
	16 10°26'38"	165.89'	30.24'	15.16'
	17 N50°25'32"W	---	30.45'	---
	18 08°38'36"	199.56'	30.10'	15.08'
	19 04°21'24"	1877.00'	142.72'	71.40'
	20 180°00'00"	2.00'	6.28'	---
TOTAL	21 08°04'55"	1873.00'	264.20'	132.32'
	22 N38°37'12"W	---	76.92'	---
TOTAL	23 09°28'25"	182.27'	30.14'	15.10'
	24 N49°51'20"W	---	1306.11'	---
TOTAL	25 11°14'08"	1880.00'	368.66'	184.92'
	26 N38°37'12"W	---	540.70'	---



SECTION AA
NTS



NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

DRAWN BY: SR DATE 4/18
DESIGNED BY: JCL DATE 4/18
CHECKED BY: JCL DATE 4/18

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

JEFFREY C. LANGDON R.C.E. 42429 DATE

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STREET PLAN AND PROFILE
FROM STA 80+50.00 TO 88+50.00

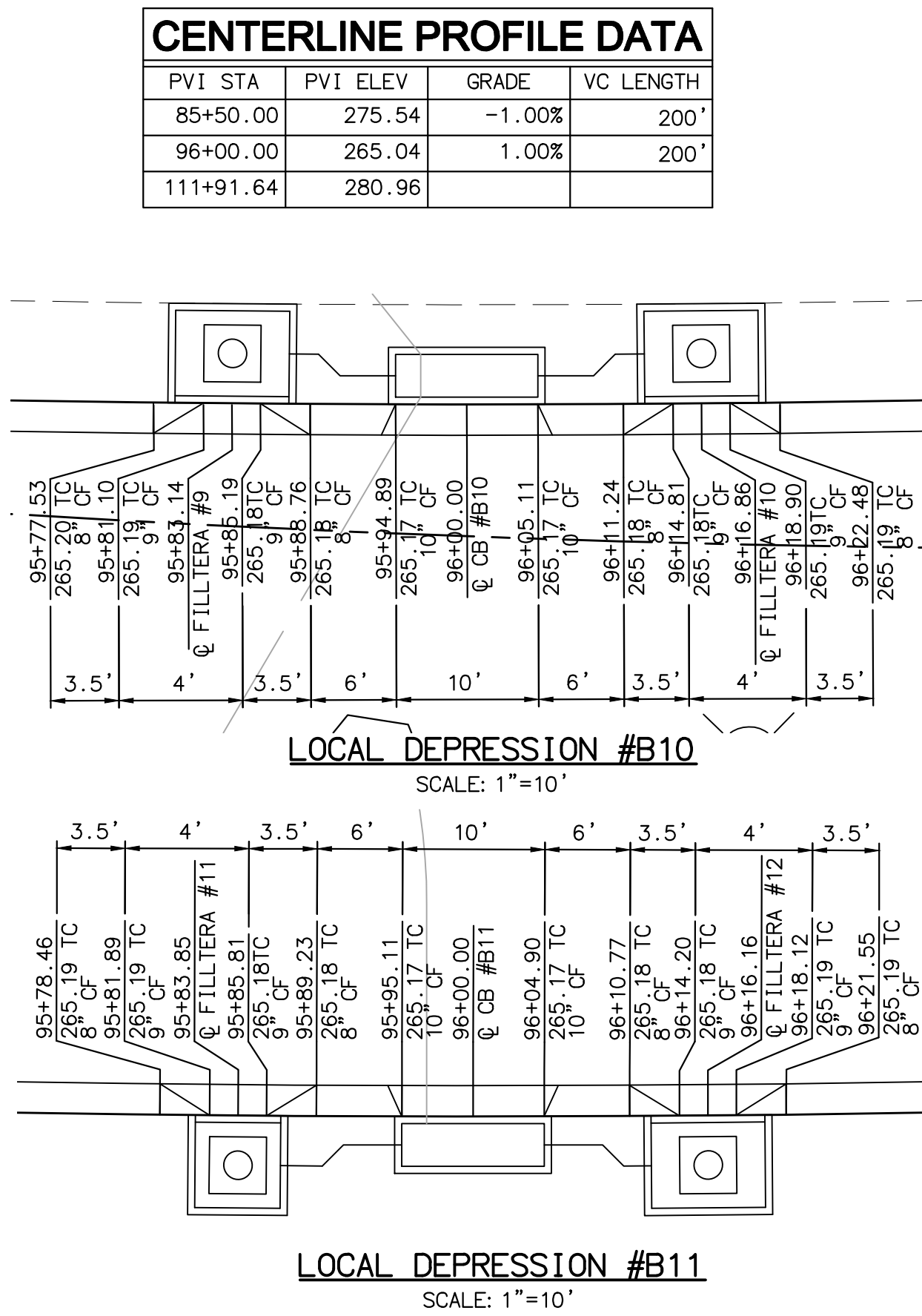
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.
00760917-EMC

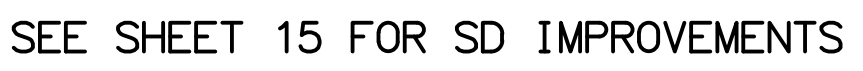
PERMIT NO.
00766614-MCE

PROJECT NO.
20.059

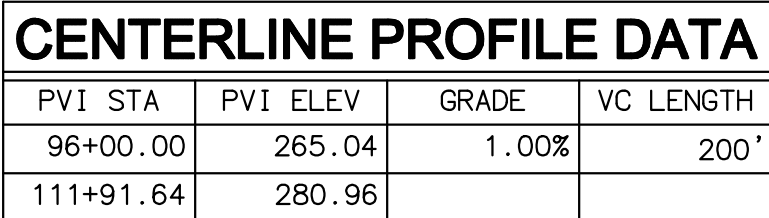
SHEET
9
OF **28**



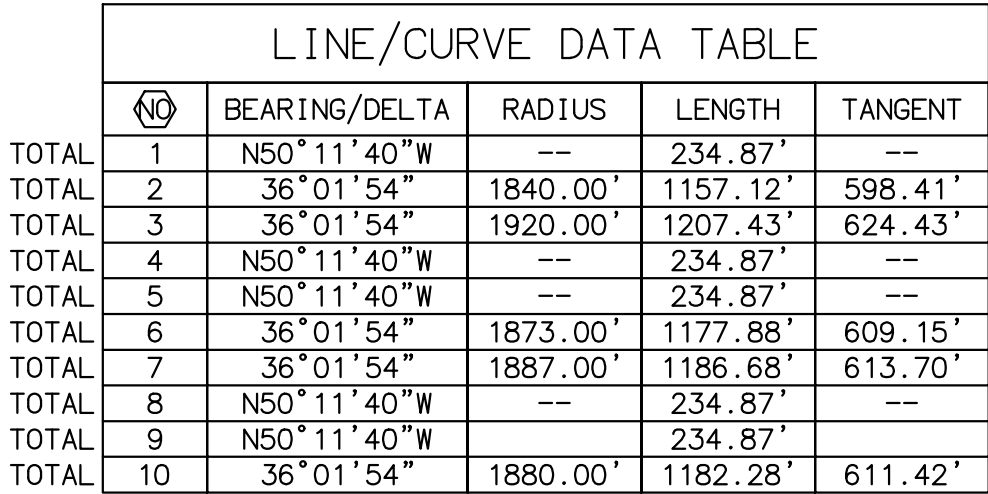
- | LINE/CURVE DATA TABLE | | | | | |
|-----------------------|----|----------------|----------|---------|---------|
| | NO | BEARING/DELTA | RADIUS | LENGTH | TANGENT |
| TOTAL | 1 | N38° 37' 12" W | --- | 540.70' | --- |
| | 2 | 11° 34' 28" | 1880.00' | 379.78' | 190.54' |
| | 3 | 11° 34' 28" | 1840.00' | 371.70' | 186.49' |
| TOTAL | 4 | N38° 37' 12" W | --- | 67.98' | --- |
| | 5 | 90° 00' 00" | 35.00' | 54.98' | 35.00' |
| | 6 | 90° 00' 00" | 35.00' | 54.98' | 35.00' |
| TOTAL | 7 | N38° 37' 12" W | --- | 348.72' | --- |
| | 8 | N38° 37' 12" W | --- | 357.93' | --- |
| | 9 | 79° 16' 51" | 35.00' | 48.43' | 29.00' |
| TOTAL | 10 | 100° 43' 09" | 35.00' | 61.53' | 42.25' |
| | 11 | N38° 37' 12" W | --- | 64.71' | --- |
| | 12 | 11° 34' 28" | 1827.00' | 387.86' | 194.59' |
| TOTAL | 13 | 11° 34' 28" | 1920.00' | 381.20' | 191.25' |
| | 14 | N38° 37' 12" W | --- | 75.16' | --- |
| | 15 | 180° 00' 00" | 2.00' | 6.28' | --- |
| TOTAL | 16 | N38° 37' 12" W | --- | 75.16' | --- |
| | 17 | 03° 35' 24" | 1883.00' | 117.98' | 59.01' |
| | 18 | 10° 23' 18" | 166.41' | 30.17' | 15.13' |
| TOTAL | 19 | N53° 12' 21" W | --- | 30.38' | --- |
| | 20 | 08° 35' 16" | 200.42' | 30.04' | 15.05' |
| | 21 | 05° 14' 30" | 1873.00' | 171.35' | 85.73' |
| TOTAL | 22 | 09° 28' 25" | 182.27' | 30.14' | 15.10' |
| | 23 | N48° 04' 57" W | --- | 30.41' | --- |
| | 24 | 09° 28' 41" | 182.19' | 30.14' | 15.10' |
| TOTAL | 25 | N38° 37' 12" W | --- | 192.64' | --- |
| | 26 | 180° 00' 00" | 2.00' | 6.28' | --- |
| | 27 | N38° 37' 12" W | --- | 359.55' | --- |



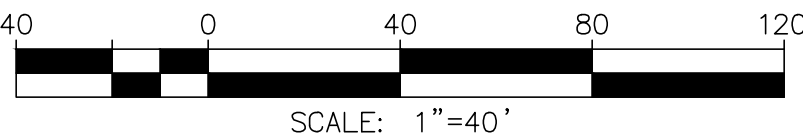
CONSTRUCTION PLANS FOR THE IMPROVEMENT OF MARINE WAY STREET PLAN AND PROFILE FROM STA 88+50.00 TO 96+50.00	PROJECT NO. 20.059
CITY OF IRVINE PUBLIC WORKS DEPARTMENT	SHEET 10 OF 28



- ① CONSTRUCT 2" ARHM OVER 4.5" AC OVER 19.5" CMB STRUCTURAL SECTION TO BE VERIFIED BY PROJECT SOILS ENGINEER DURING GRADING AND WITH APPROVAL OF THE CITY ENGINEER
- ② CONSTRUCT CONCRETE CURB AND GUTTER PER CITY OF IRVINE STD. PLAN NO. 200, TYPE A-2
- ③ CONSTRUCT CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, TYPE B-8
- ④ CONSTRUCT DRIVEWAY TYPE I PER CITY OF IRVINE STD. PLAN NO. 204 (WIDTH PER PLAN) X=4'
- ⑤ DOUBLE ARM STREET LIGHT PER CITY OF IRVINE STD. PLAN 215 AND DETAIL SHEET 2, TO BE INSTALLED BY SCE
- ⑥ CONSTRUCT 3' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3
- ⑦ RAISE TO GRADE EXISTING WATER VALVE CAN
- ⑧ RAISE TO MANHOLE TO GRADE



SEE SHEET 16 FOR SD IMPROVEMENTS



PLAN CHECK NO.
00760917-EMC

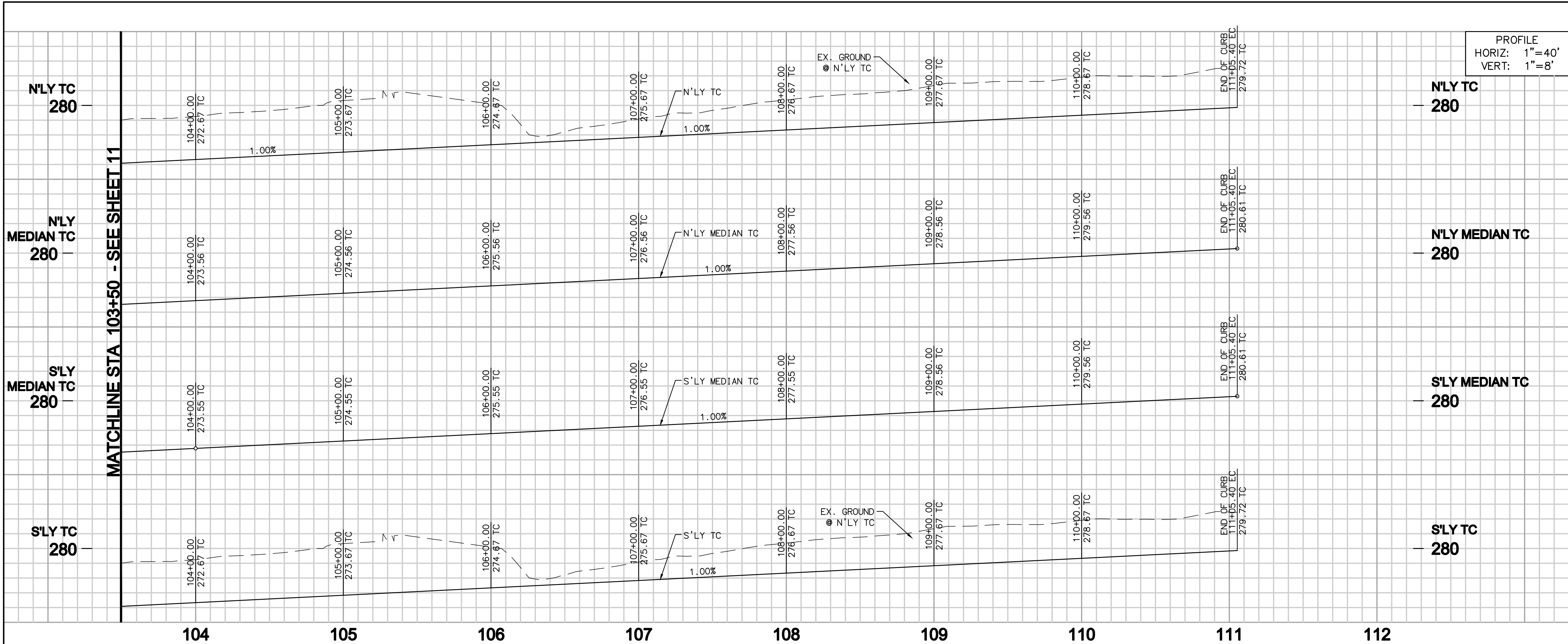
PERMIT NO.
00766614-MCE

PROJECT NO.
20.059

SHEET
11
OF **28**

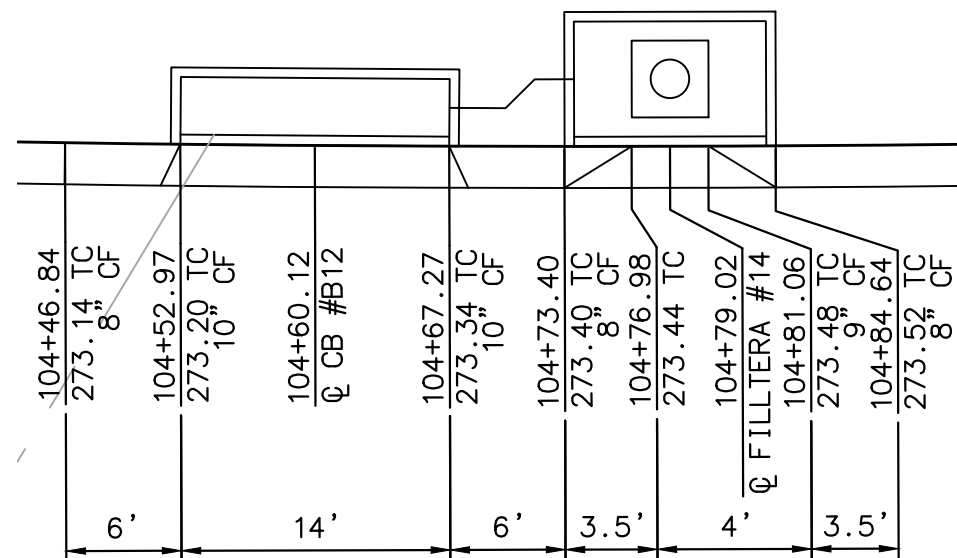
**CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STREET PLAN AND PROFILE
FROM STA 96+50.00 TO 103+50.00**

**CITY OF IRVINE
PUBLIC WORKS DEPARTMENT**

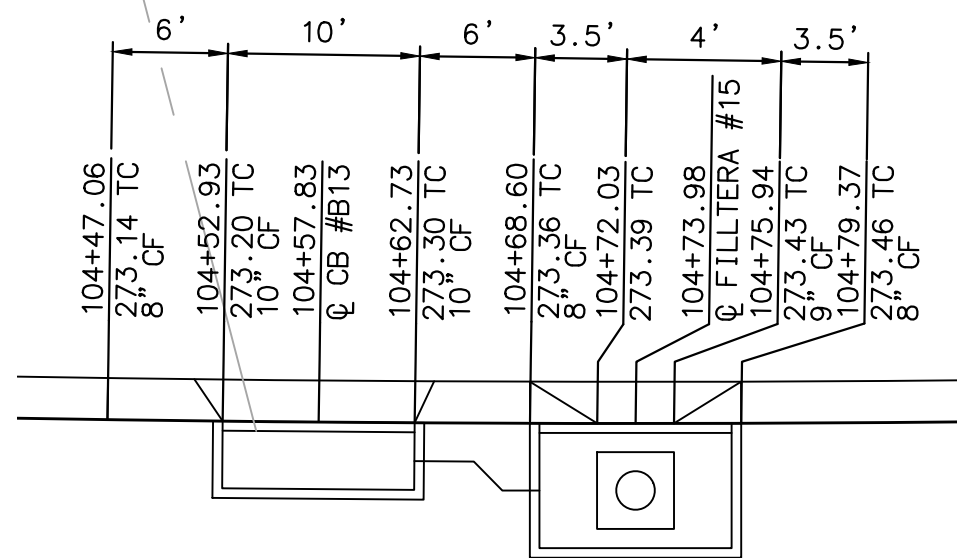


CENTERLINE PROFILE DATA

PVI STA	PVI ELEV	GRADE	VC LENGTH
96+00.00	265.04	1.00%	200'
114+00.00	283.04		



LOCAL DEPRESSION #B12
SCALE: 1"=10'



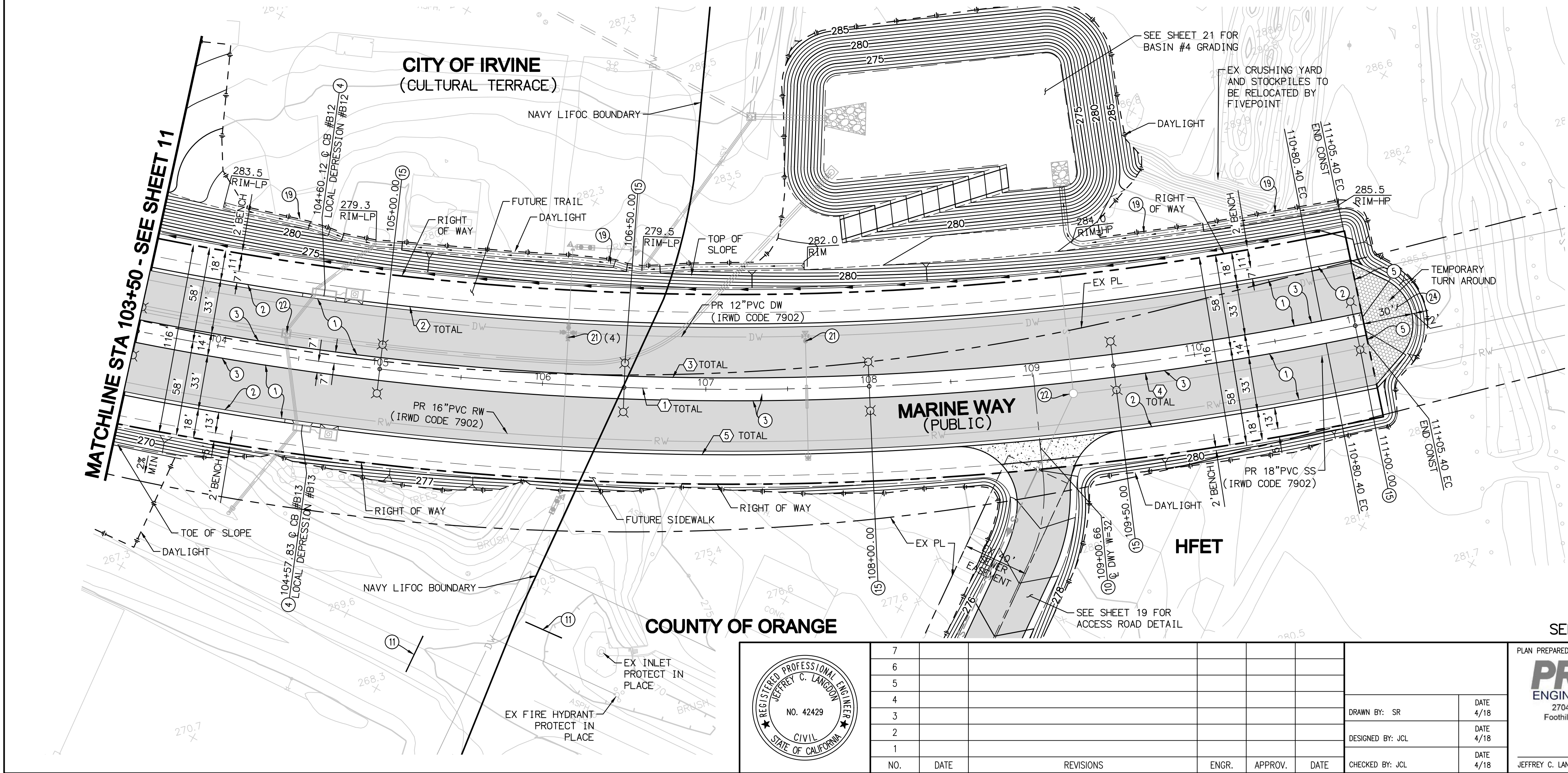
LOCAL DEPRESSION #B13
SCALE: 1"=10'

STREET CONSTRUCTION NOTES

- CONSTRUCT 2" ARHM OVER 4.5" AC OVER 19.5" CMB STRUCTURAL SECTION TO BE VERIFIED BY PROJECT SOILS ENGINEER DURING GRADING AND WITH APPROVAL OF THE CITY ENGINEER
- CONSTRUCT CONCRETE CURB AND GUTTER PER CITY OF IRVINE STD. PLAN NO. 200, TYPE A-2
- CONSTRUCT CONCRETE CURB PER CITY OF IRVINE STD. PLAN NO. 200, TYPE B-8
- CONSTRUCT LOCAL DEPRESSION PER CITY OF IRVINE STD. PLAN NO. 303
- INSTALL WOOD HEADER PER DETAIL ON SHEET 9
- CONSTRUCT DRIVEWAY TYPE 11 PER CITY OF IRVINE STD. PLAN NO. 205 (WIDTH PER PLAN)
- CONSTRUCT DEAD END SIGNING PER CITY OF IRVINE STD. PLAN NO. 400 & 401
- DOUBLE ARM STREET LIGHT PER CITY OF IRVINE STD. PLAN 215 AND DETAIL SHEET 2, TO BE INSTALLED BY SCE
- CONSTRUCT 3' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3
- RAISE TO GRADE EXISTING WATER VALVE CAN
- RAISE TO MANHOLE TO GRADE
- INSTALL 8" CMB OVER COMPACTED NATIVE PER SOIL ENGINEER

LINE/CURVE DATA TABLE

NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	36°01'54"	1880.00'	1182.28'	611.42'
2	36°01'54"	1840.00'	1157.12'	598.41'
3	36°01'54"	1873.00'	1177.88'	609.15'
4	36°01'54"	1887.00'	1186.68'	613.70'
5	36°01'54"	1920.00'	1207.43'	624.43'



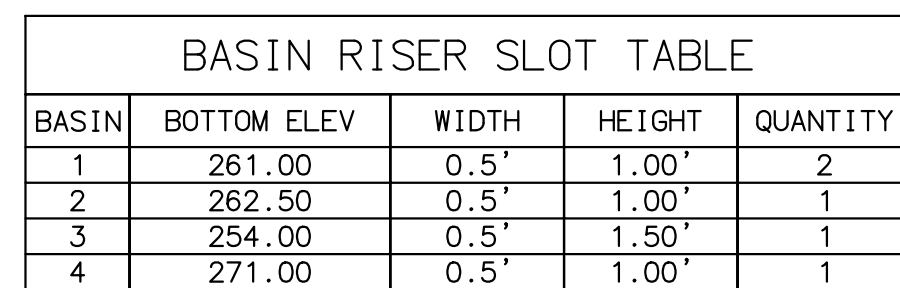
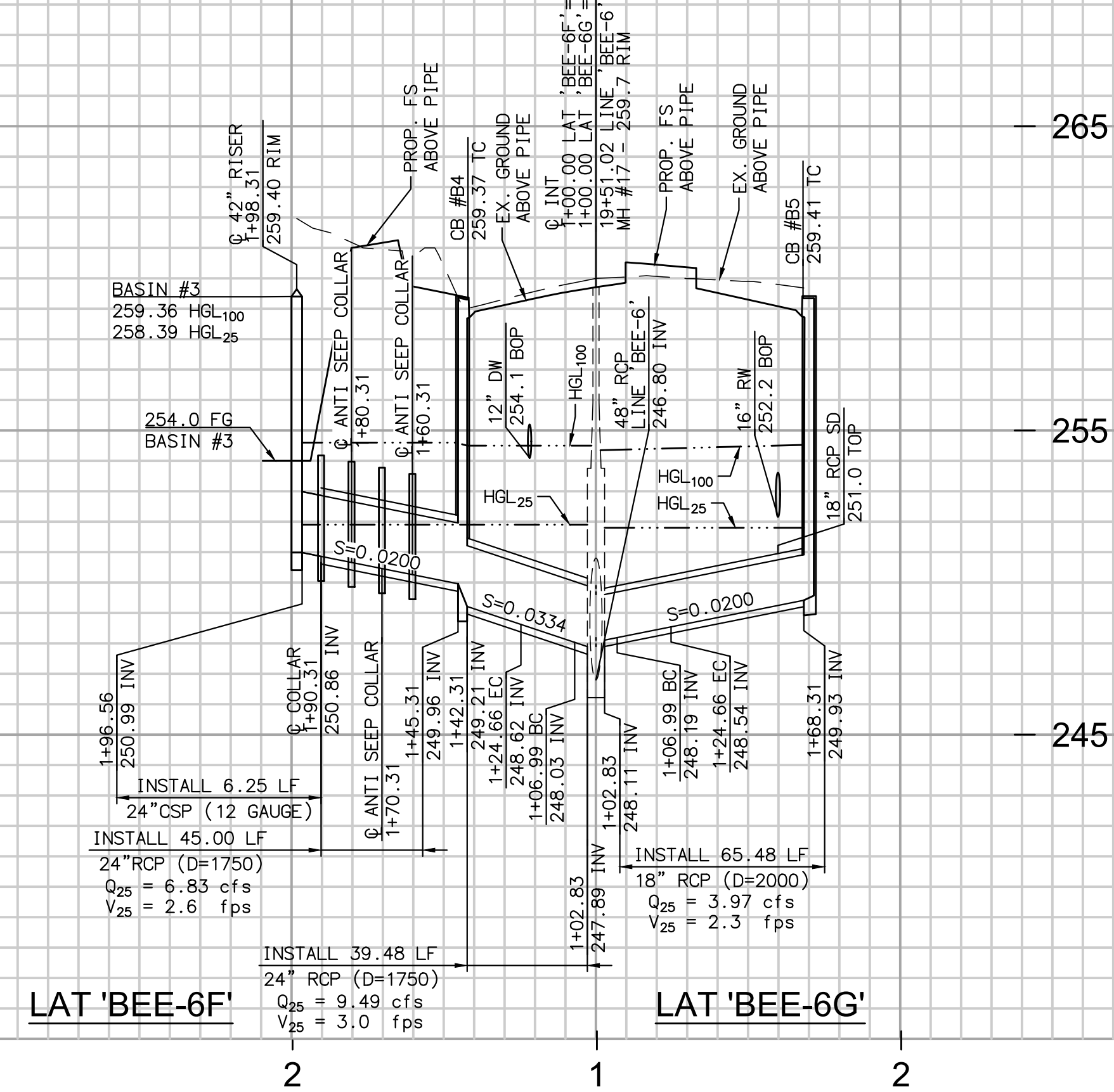
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27842 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

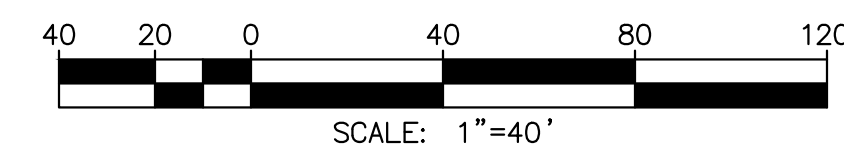
JEFFREY C. LANGDON R.C.E. 42429 DATE

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STREET PLAN AND PROFILE
FROM STA 103+50.00 TO 111+50.00
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT



- (40) INSTALL 48" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
- (44) INSTALL 24" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
- (45) INSTALL 18" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
- (46) CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STD. 301 (L & H PER PLAN)
- (48) CONSTRUCT JUNCTION STRUCTURE NO. II PER CITY OF IRVINE STD. 307 and 307A
- (51) INSTALL 6'L x 4' W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
- (52) INSTALL 6.5'L x 4' W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
- (53) INSTALL 8'L x 4' W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
- (57) CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STD. 310
- (59) CONSTRUCT BASIN RISER PER DETAIL SHEET 13
- (61) INSTALL 4" (SCH 40) PVC PIPE @ 28 MIN
- (65) CONSTRUCT ANTI SEEP COLLAR PER OGPW STD PLAN 1333 (SAME AS SLOPE ANCHOR)
- (73) INSTALL 24" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318

LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	N49° 51' 20" W	--	1035.08'	--
2	N 85° 08' 40" E	--	6.99'	--
3	45° 00' 00"	22.50'	17.67'	9.32'
4	N 0° 08' 40" E	--	17.65'	--
5	N 42° 43' 14" E	--	53.00'	--
6	N 04° 51' 20" W	--	6.99'	--
7	45° 00' 00"	22.50'	17.67'	9.32'
8	N 0° 08' 40" E	--	43.65'	--



59 BASIN RISER DETAIL
NOT TO SCALE

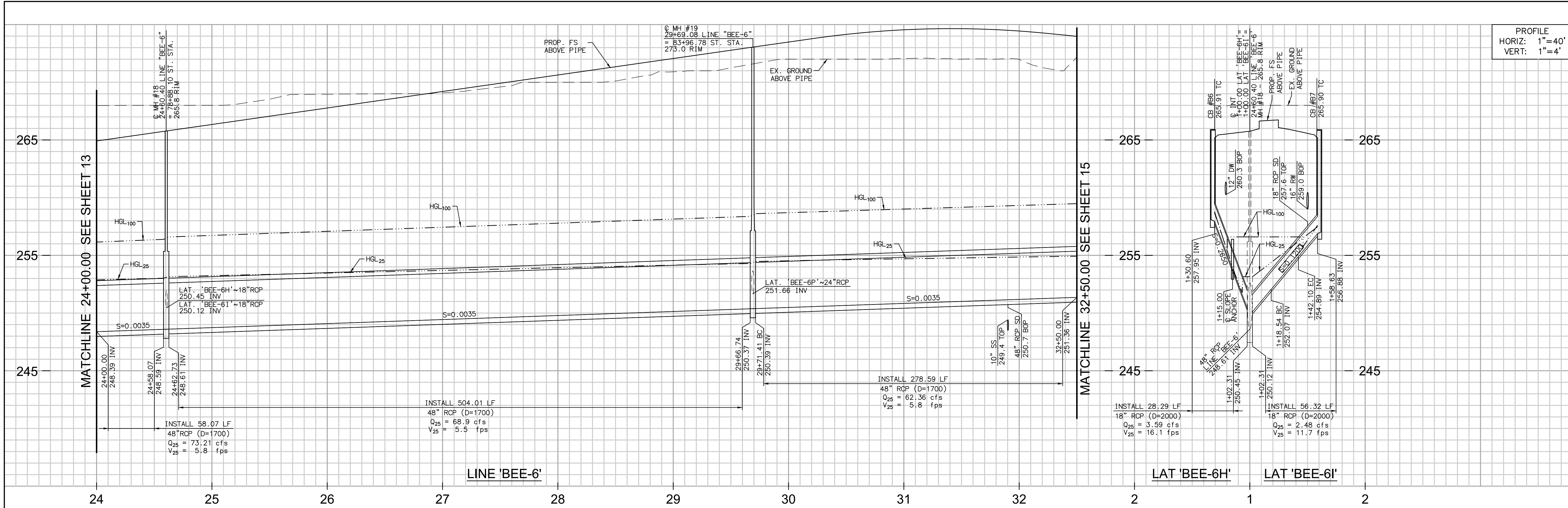
		PLAN PREPARED BY:	
			
DRAWN BY: SR		DATE 4/18	27042 Towne Centre Drive, Suite 110 Foothill Ranch, CA 92610 (949) 716-7460
DESIGNED BY: JCL		DATE 4/18	
CHECKED BY: JCL		DATE 4/18	
		JEFFREY C. LANGDON	R.C.E. 42429 DATE

**CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STORM DRAIN PLAN AND PROFILE
LINE 'BEE-6' FROM STA 19+36.33 TO 24+00.00
LATERALS 'BEE-6F' & 'BEE-6G'**

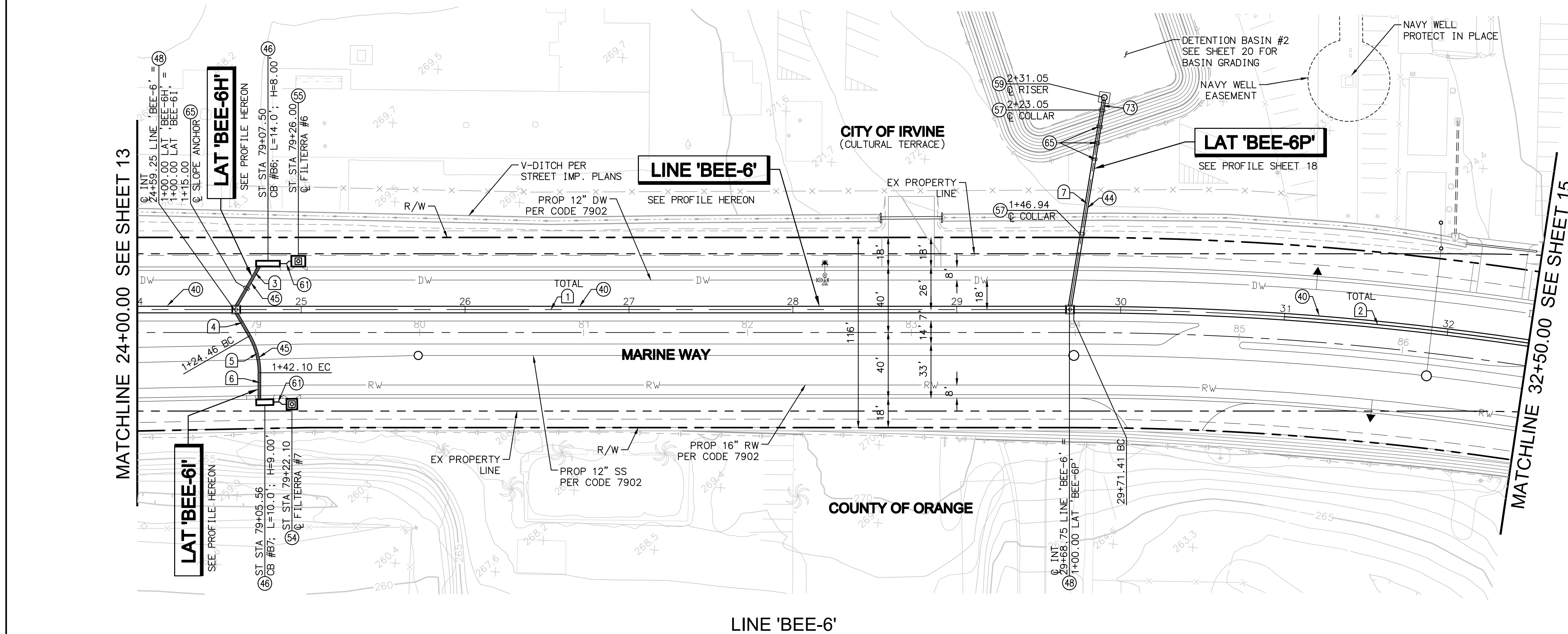
PLAN CHECK NO.	0760917-EMC
PERMIT NO.	0766614-MCE

PROJECT NO.
20.059

SHEET
13
OF **28**

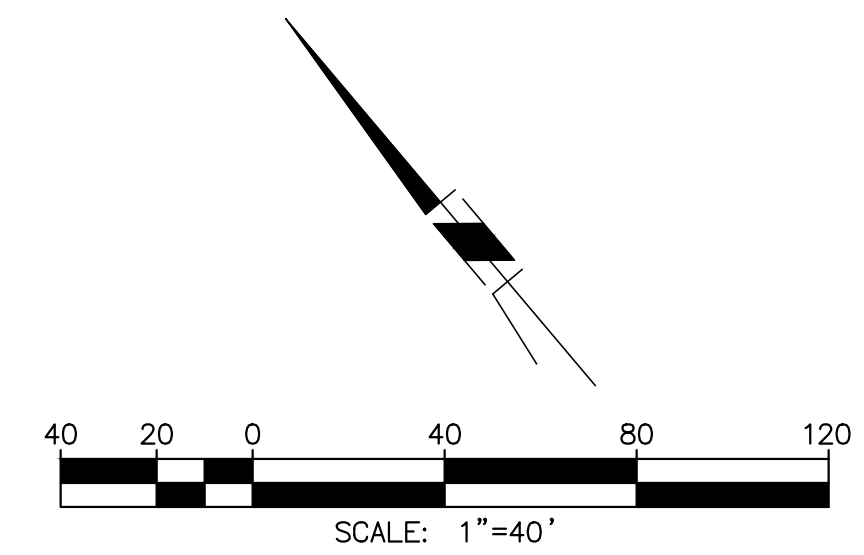


PROFILE
HORIZ: 1"=40'
VERT: 1"=4'



- STORM DRAIN CONSTRUCTION NOTES**
- (40) INSTALL 48" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
 - (44) INSTALL 24" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
 - (45) INSTALL 18" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
 - (46) CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STD. 301 (L & H PER PLAN)
 - (48) CONSTRUCT JUNCTION STRUCTURE NO. 11 PER CITY OF IRVINE STD. 307 and 307A
 - (54) INSTALL 6' L X 6' W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
 - (55) INSTALL 8' L X 6' W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
 - (57) CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STD. 310
 - (59) CONSTRUCT BASIN RISER PER DETAIL SHEET 13
 - (61) INSTALL 4" (SCH 40) PVC PIPE @ 2% MIN
 - (65) CONSTRUCT ANTI SEEP COLLAR PER OCPW STD PLAN 1333 (SAME AS SLOPE ANCHOR)
 - (73) INSTALL 24" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318

LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	N49°51'20"W	---	1035.08'	---
2	11°14'08"	1894.00'	371.41'	186.30'
3	N70°08'40"E	---	30.60'	---
4	N10°08'40"E	---	18.54'	---
5	30°00'00"	45.00'	23.56'	12.06'
6	N40°08'40"E	---	16.53'	---
7	N 49°28'38" E	---	131.05'	---



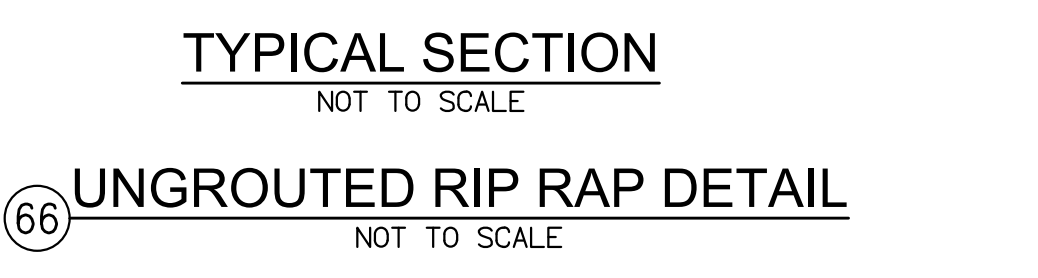
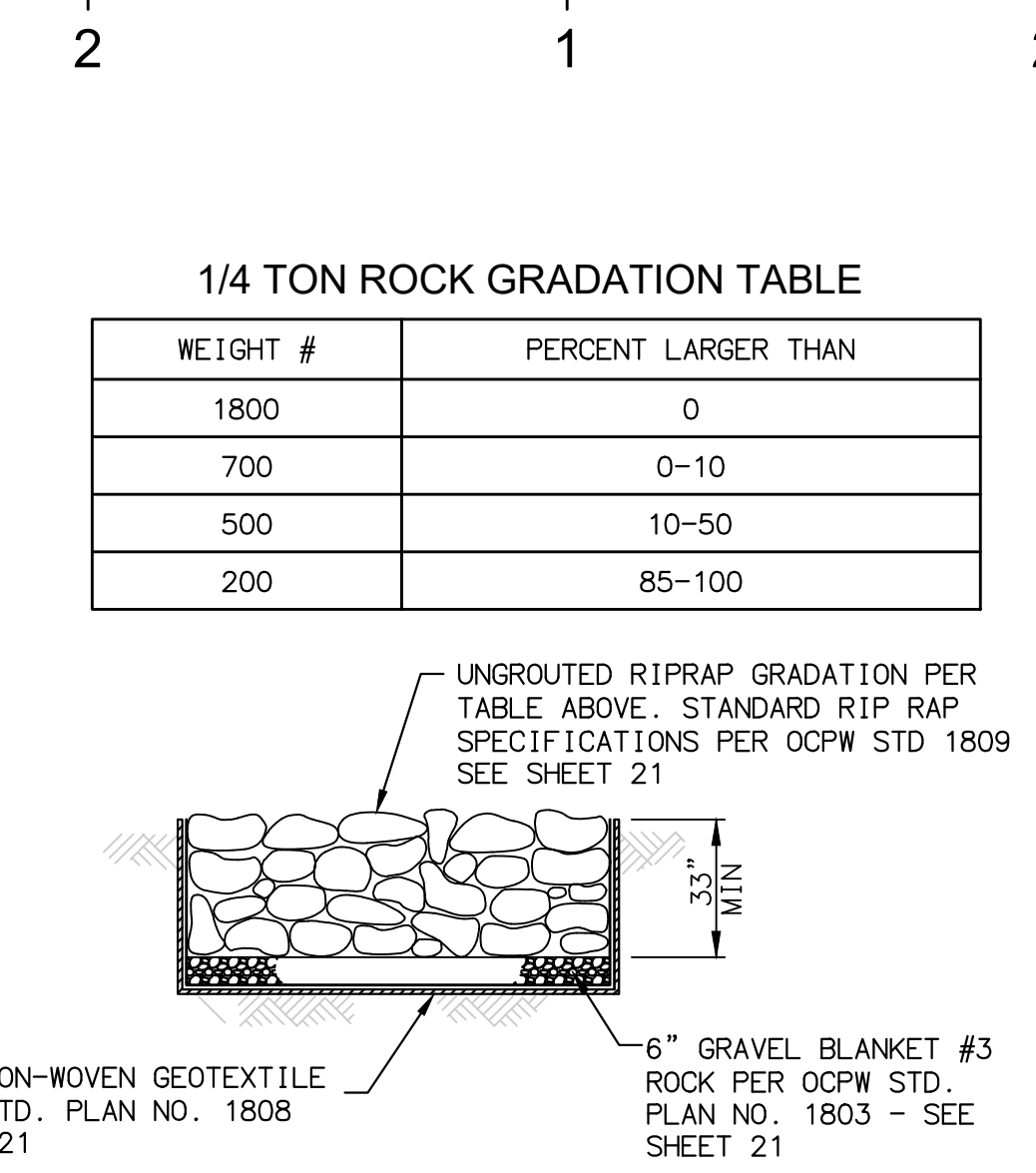
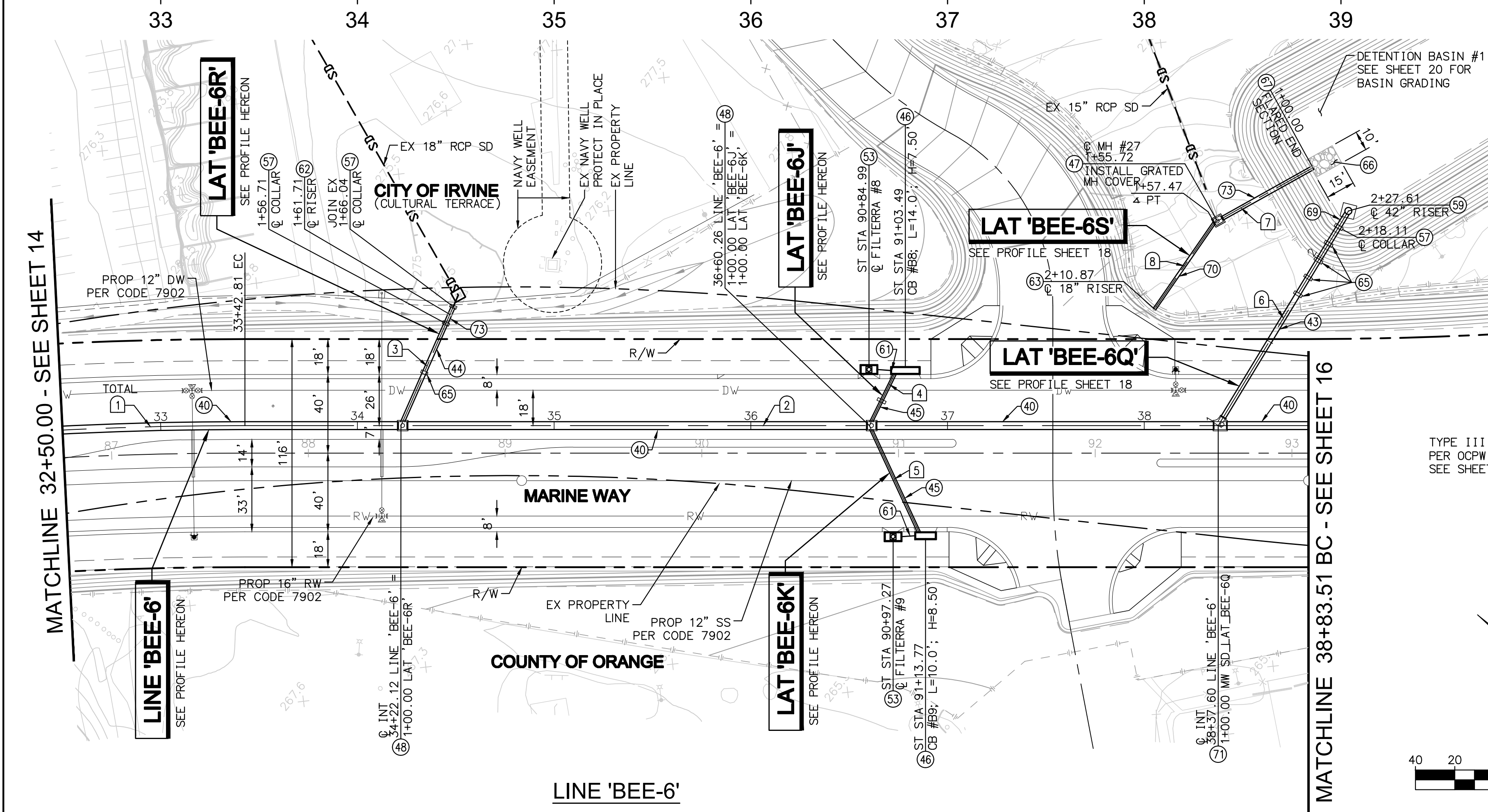
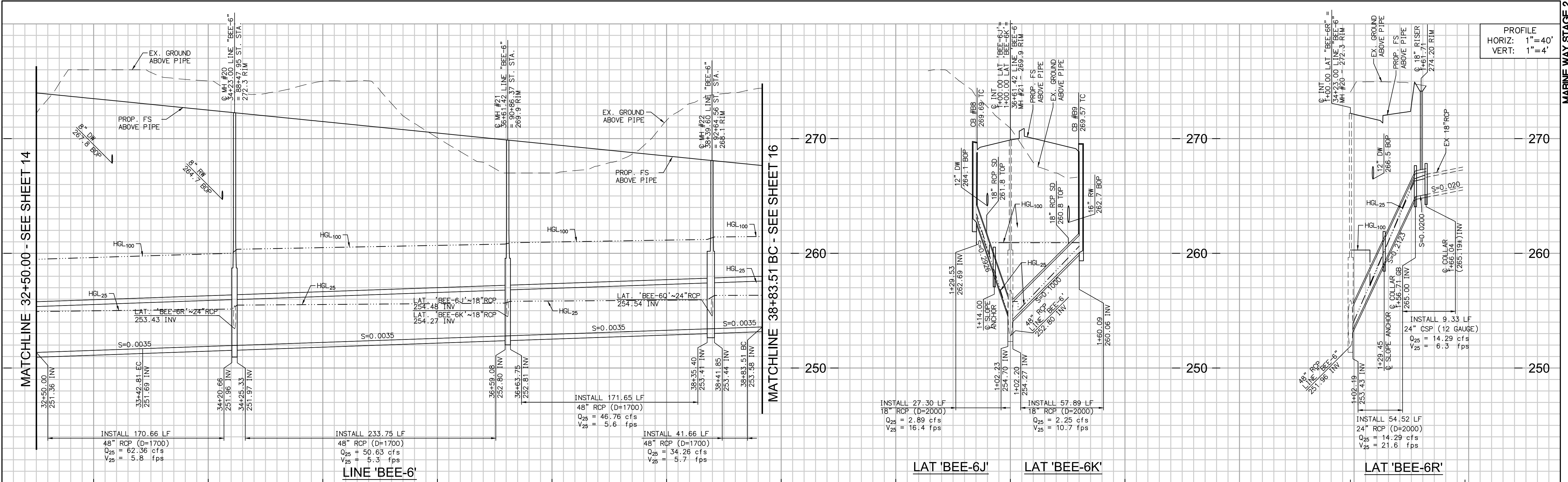
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STORM DRAIN PLAN AND PROFILE
LINE 'BEE-6' FROM STA 24+00.00 TO 32+50.00
LATERALS 'BEE-6H', 'BEE-6I' & 'BEE-6P'

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO. 00760917-EMC	PROJECT NO. 20.059
PERMIT NO. 00766614-MCE	SHEET 14 OF 28



- STORM DRAIN CONSTRUCTION NOTES**
- INSTALL 48" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
 - INSTALL 30" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
 - INSTALL 24" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
 - INSTALL 18" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
 - CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STD. 301 (L & H PER PLAN)
 - CONSTRUCT JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STD. 306 AND 306A
 - CONSTRUCT JUNCTION STRUCTURE NO. II PER CITY OF IRVINE STD. 307 AND 307A
 - INSTALL 8" L X 4" W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
 - CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STD. 310
 - CONSTRUCT BASIN RISER PER DETAIL SHEET 13
 - INSTALL 4" (SCH 40) PVC PIPE @ 2% MIN
 - CONSTRUCT CSP DROP INLET PER CITY OF IRVINE STD PLAN 304, AS MODIFIED FOR TEE AT THE BOTTOM
 - CONSTRUCT CSP DROP INLET PER CITY OF IRVINE STD PLAN 304, AS MODIFIED PER DETAIL SHEET 19
 - CONSTRUCT ANTI SEEP COLLAR PER OCPW STD PLAN 1333 (SAME AS SLOPE ANCHOR)
 - INSTALL UNGROUTED RIP RAP PER DETAIL ON SHEET 15
 - CONSTRUCT CSP FLARED END SECTION, PIPE SIZE PER PLAN
 - INSTALL 36" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318
 - INSTALL 18" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318
 - CONSTRUCT JUNCTION STRUCTURE NO. III PER CITY OF IRVINE STD PLAN 308 and 308A
 - INSTALL 24" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318

LINE/CURVE DATA TABLE

NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	11°14'08"	1894.00'	371.41'	186.30'
2	N38°37'12"W	--	540.70'	--
3	N75°08'05"E	--	66.04'	--
4	N77°32'49"E	--	29.53'	--
5	N26°28'42"E	--	60.09'	--
6	N82°36'50"E	--	127.61'	--
7	N67°47'54"W	--	57.47'	--
8	N86°03'47"E	--	53.40'	--

PLAN CHECK NO.
00760917-EMC

PERMIT NO.
00766614-MCE

PROJECT NO.
20.059

SHEET
15
OF
28

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STORM DRAIN PLAN AND PROFILE
LINE 'BEE-6' FROM STA 32+50.00 TO 38+83.51 BC
LATERALS 'BEE-6J', 'BEE-6K', 'BEE-6R', 'BEE-6S' & 'BEE-6Q'

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

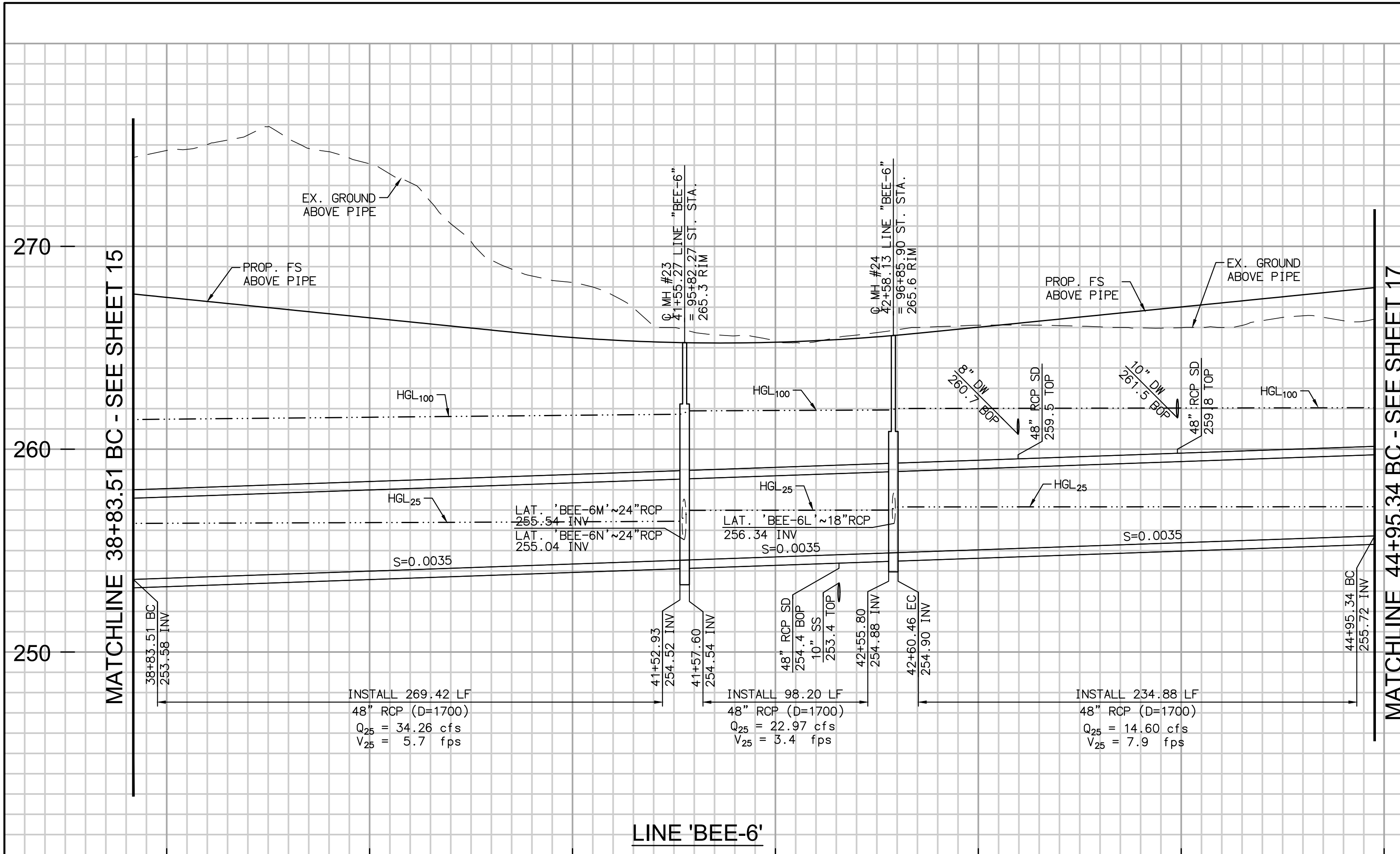
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

JEFFREY C. LANGDON R.C.E. 42429 DATE

REGISTERED PROFESSIONAL ENGINEER
JEFFREY C. LANGDON
NO. 42429
CIVIL
STATE OF CALIFORNIA

7
6
5
4
3
2
1
NO. DATE REVISIONS ENGR. APPROV. DATE

PROFILE
HORIZ: 1"=40'
VERT: 1"=4'

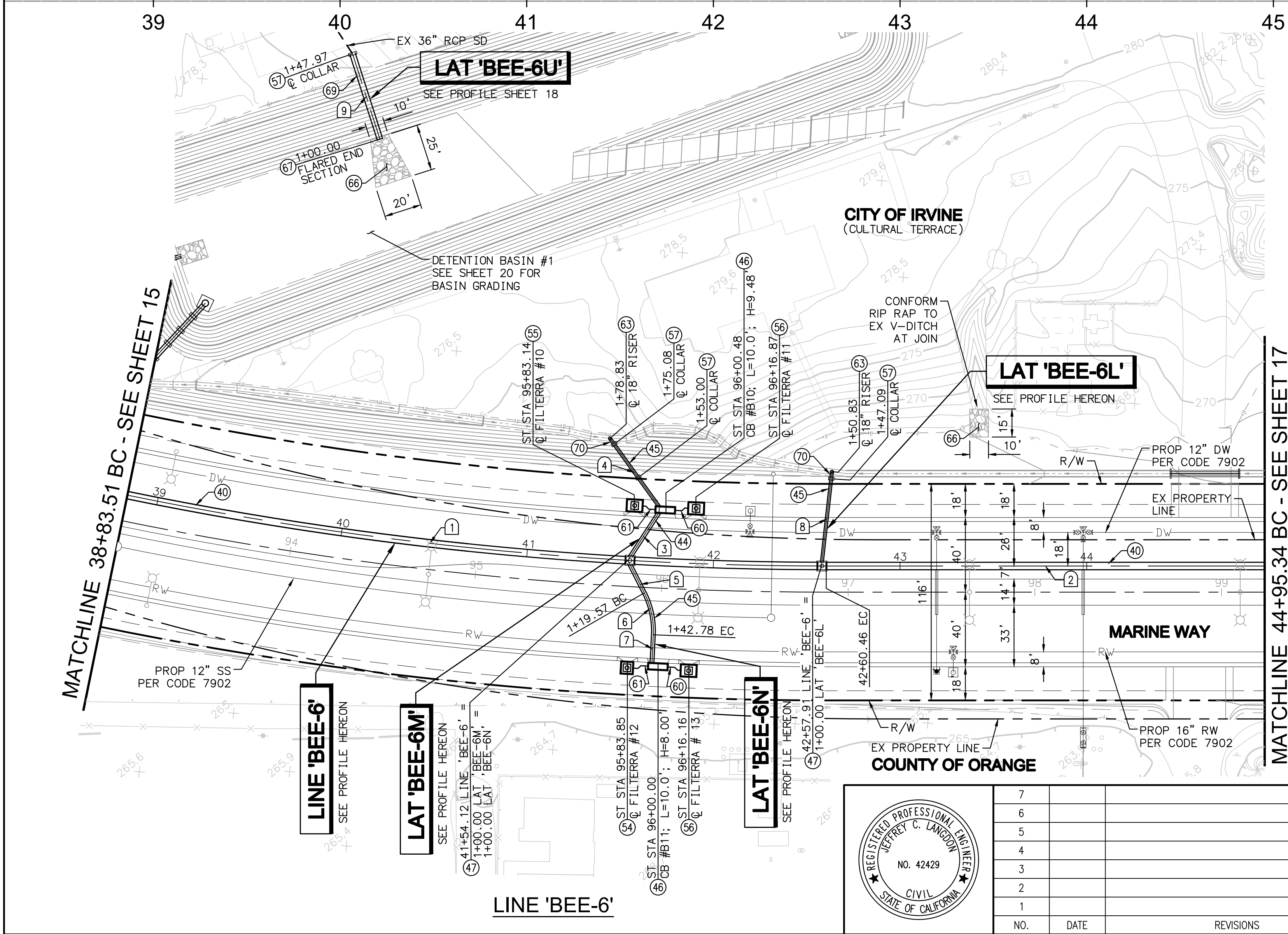


MATCHLINE 44+95.34 BC - SEE SHEET 17

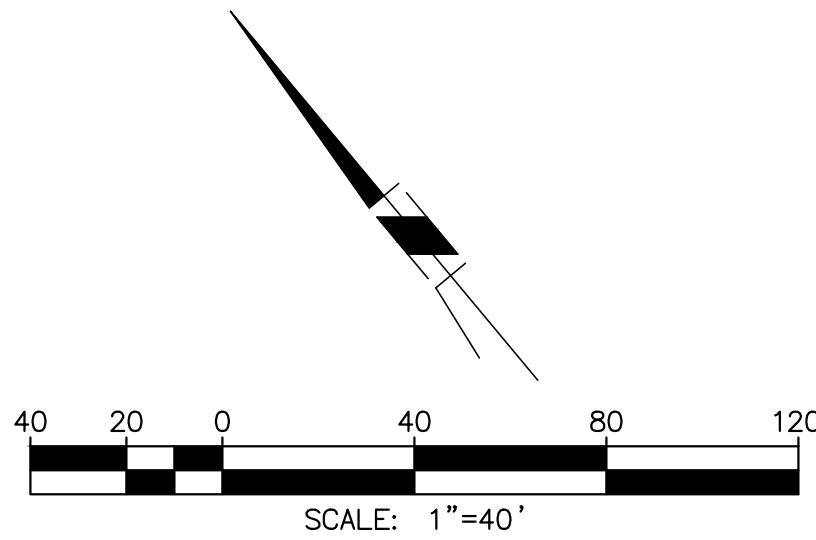
LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	11°34'28"	1866.00'	376.95'	189.12'
2	N 50°11'40" W	---	234.87'	---
3	N 72°55'01" E	---	30.63'	---
4	N 03°59'44" E	---	45.19'	---
5	N 12°56'41" E	---	19.57'	---
6	29°33'01"	45.00'	23.21'	11.87'
7	N 42°29'42" E	---	15.37'	---
8	N 46°10'04" E	---	50.83'	---
9	N 22°00'45" E	---	47.97'	---

STORM DRAIN CONSTRUCTION NOTES

- INSTALL 48" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
- INSTALL 24" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
- INSTALL 18" RCP STORM DRAIN, BEDDING PER COI STD 318 (D-LOAD PER PLAN)
- CONSTRUCT CATCH BASIN TYPE II PER CITY OF IRVINE STD. 301 (L & H PER PLAN)
- CONSTRUCT JUNCTION STRUCTURE NO. I PER CITY OF IRVINE STD. 306 AND 306A
- INSTALL 6'L X 6'W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
- INSTALL 8'L X 6'W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
- INSTALL 10'L X 6'W FILTERRA PER FILTERRA AND CATCH BASIN DETAIL ON SHEET 3
- CONSTRUCT CONCRETE COLLAR PER CITY OF IRVINE STD. 310
- INSTALL 6" (SCH 40) PVC PIPE @ 2% MIN
- INSTALL 4" (SCH 40) PVC PIPE @ 2% MIN
- CONSTRUCT CSP DROP INLET PER CITY OF IRVINE STD PLAN 304, AS MODIFIED PER DETAIL SHEET 19
- INSTALL UNGROUTED RIP RAP PER DETAIL ON SHEET 15
- CONSTRUCT CSP FLARED END SECTION, PIPE SIZE PER PLAN
- INSTALL 36" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318
- INSTALL 18" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318



MATCHLINE 44+95.34 BC - SEE SHEET 17



NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

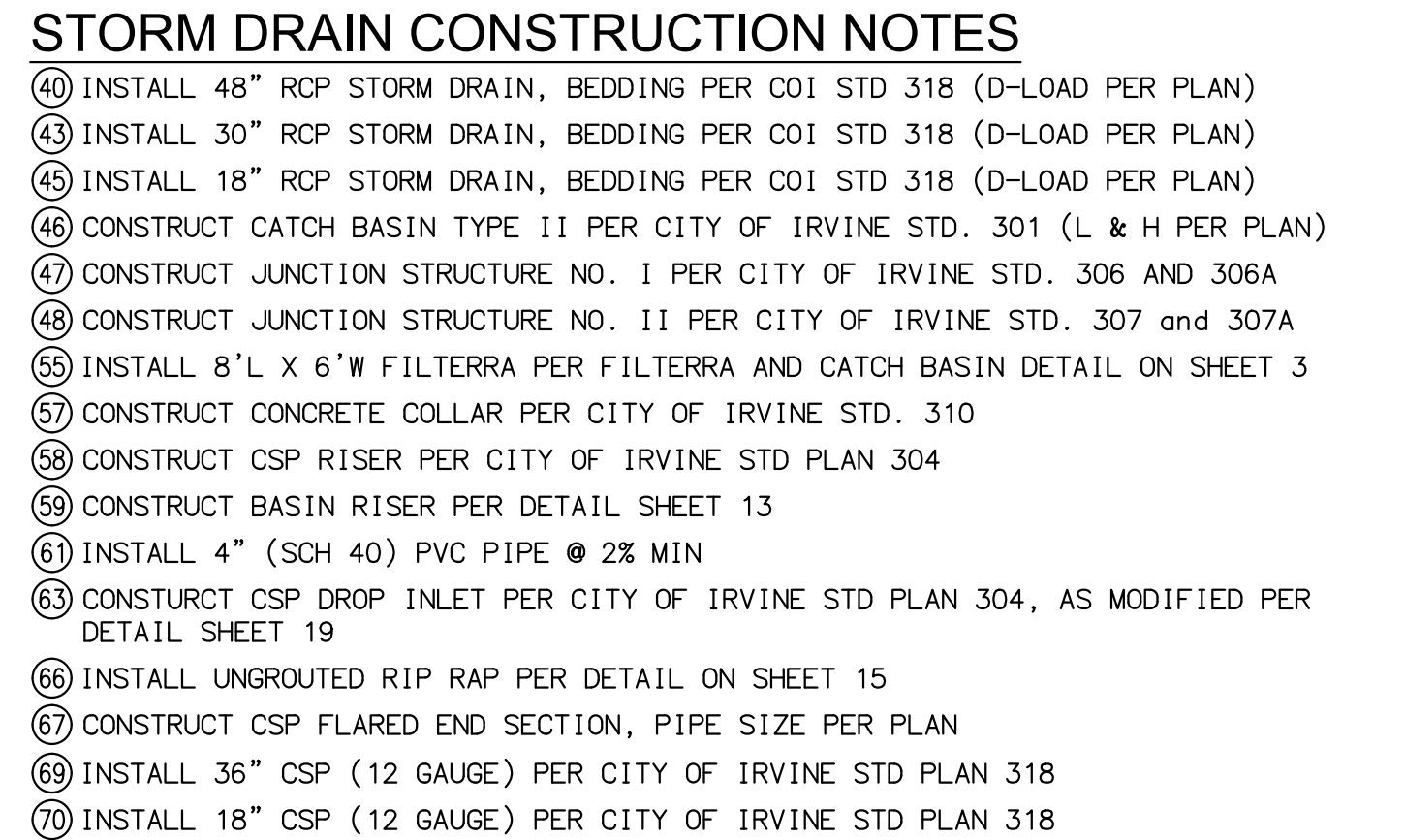
JEFFREY C. LANGDON R.C.E. 42429 DATE

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STORM DRAIN PLAN AND PROFILE
LINE 'BEE-6' FROM STA 38+83.51 TO 44+95.34
LATERALS 'BEE-6L', 'BEE-6M' & 'BEE-6N'

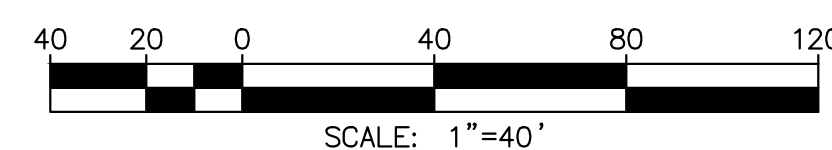
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.
00760917-EMC
PERMIT NO.
00766614-MCE

PROJECT NO.
20.059
SHEET
16
OF 28



LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	TANGEN
1	21°20'32"	1866.00'	695.07'	351.61'
2	49°41'04"	90.00'	78.04'	41.67'
3	N 58°46'44" E	--	120.81'	--
4	N 54°02'39" E	--	30.67'	--
5	N 68°19'24" E	--	45.54'	--
6	N 08°23'17" E	--	56.54'	--
7	N 54°52'38" E	--	65.58'	--
8	N 73°11'46" W	--	46.22'	--
9	N 51°41'22" E	--	115.75'	--



PLAN CHECK NO.	00760917-EMC
PERMIT NO.	00766614-MCD

PROJECT NO
20.059

SHEET
17
OF **28**

**CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
STORM DRAIN PLAN AND PROFILE
LINE 'BEE-6' FROM STA 44+95.34 TO 53+89.26
LATERALS 'BEE-60', 'BEE-60-1', 'BEE-6V' & 'BEE-6X'**

**CITY OF IRVINE
PUBLIC WORKS DEPARTMENT**

PLAN PREPARED BY:

PROACTIVE
ENGINEERING CONSULTANTS

27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

PLAN PREPARED BY:

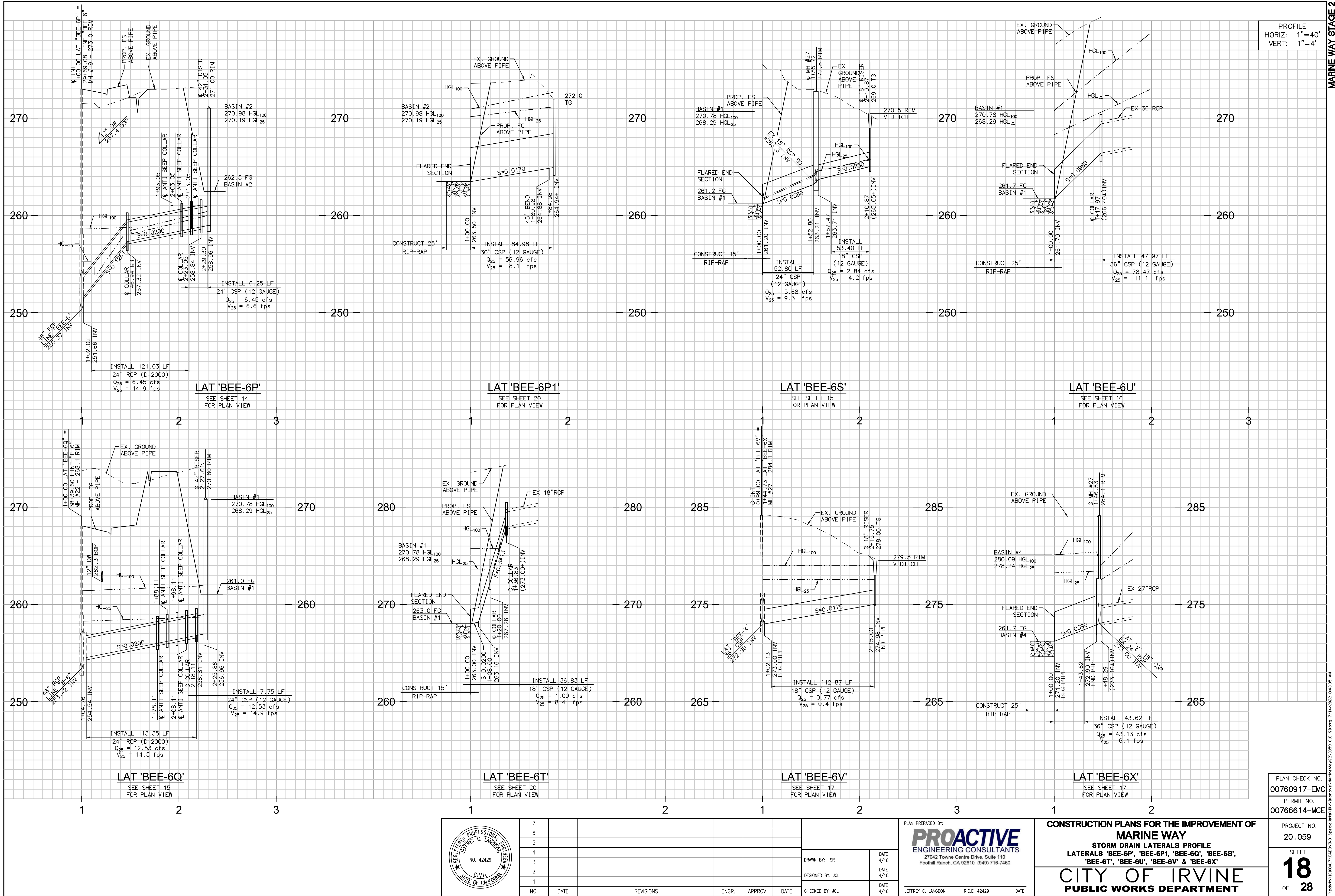
PROACTIVE
ENGINEERING CONSULTANTS

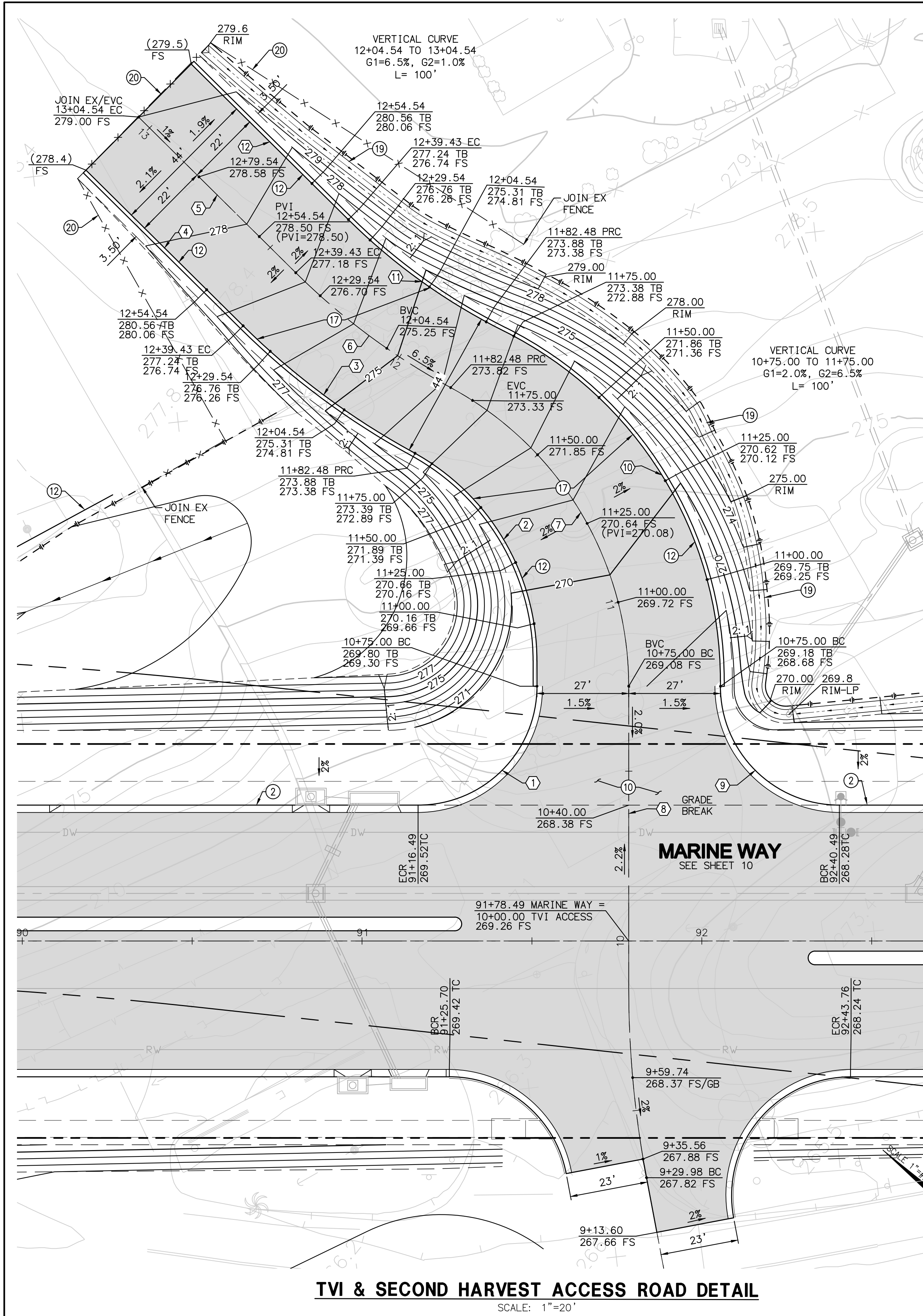
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

JEFFREY C. LANGDON R.C.F. 42429 D

7					
6					
5					
4					
3					
2					
1					
Nº	DATE	REVISIONS	ENCR	ADDP/OW	DATE

DRAWN BY: SR	DATE: 4/18/2018
DESIGNED BY: JCL	DATE: 4/18/2018
CHECKED BY: JCL	DATE: 4/18/2018

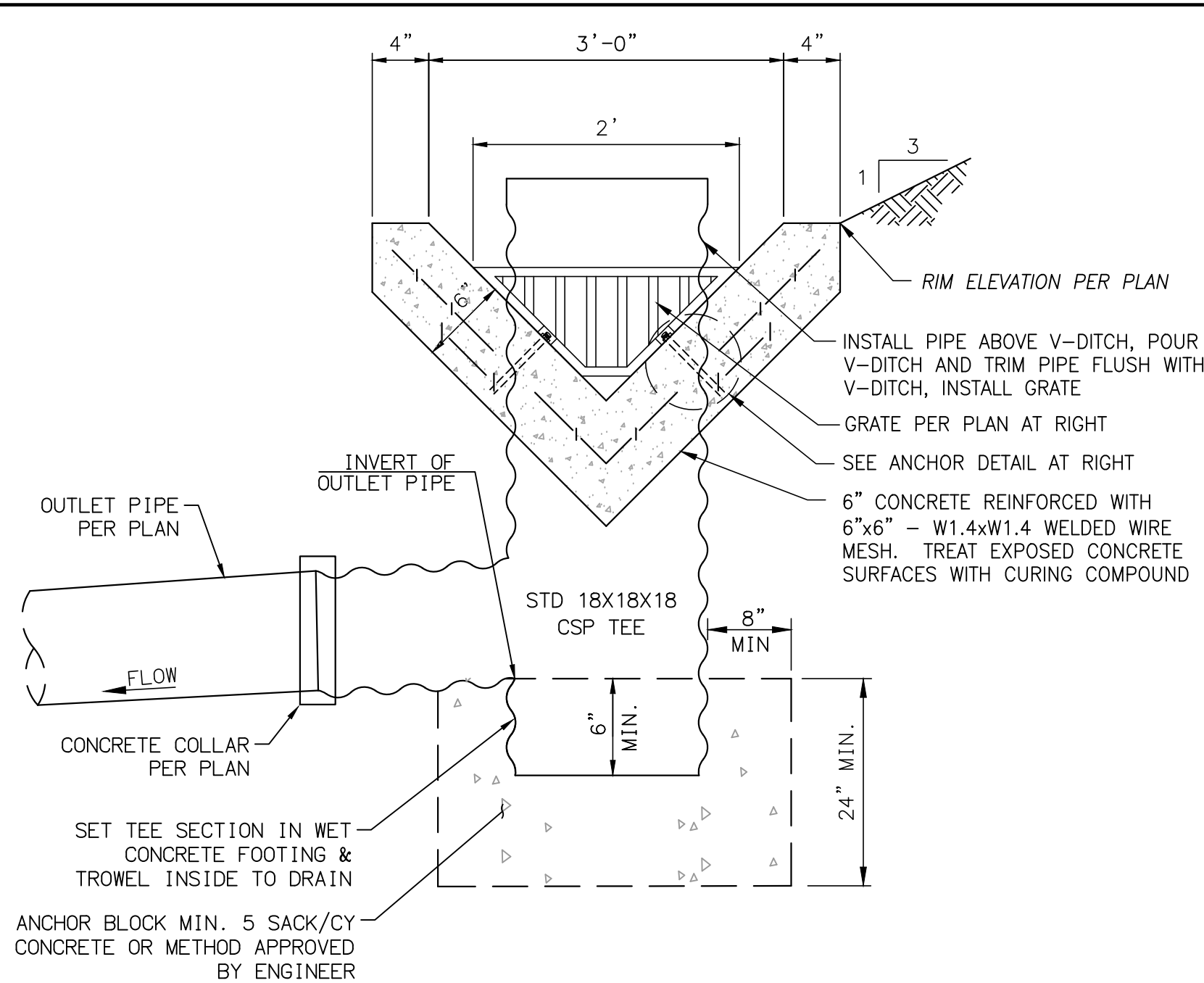




TVI & SECOND HARVEST ACCESS ROAD DETAIL
SCALE: 1"=20'

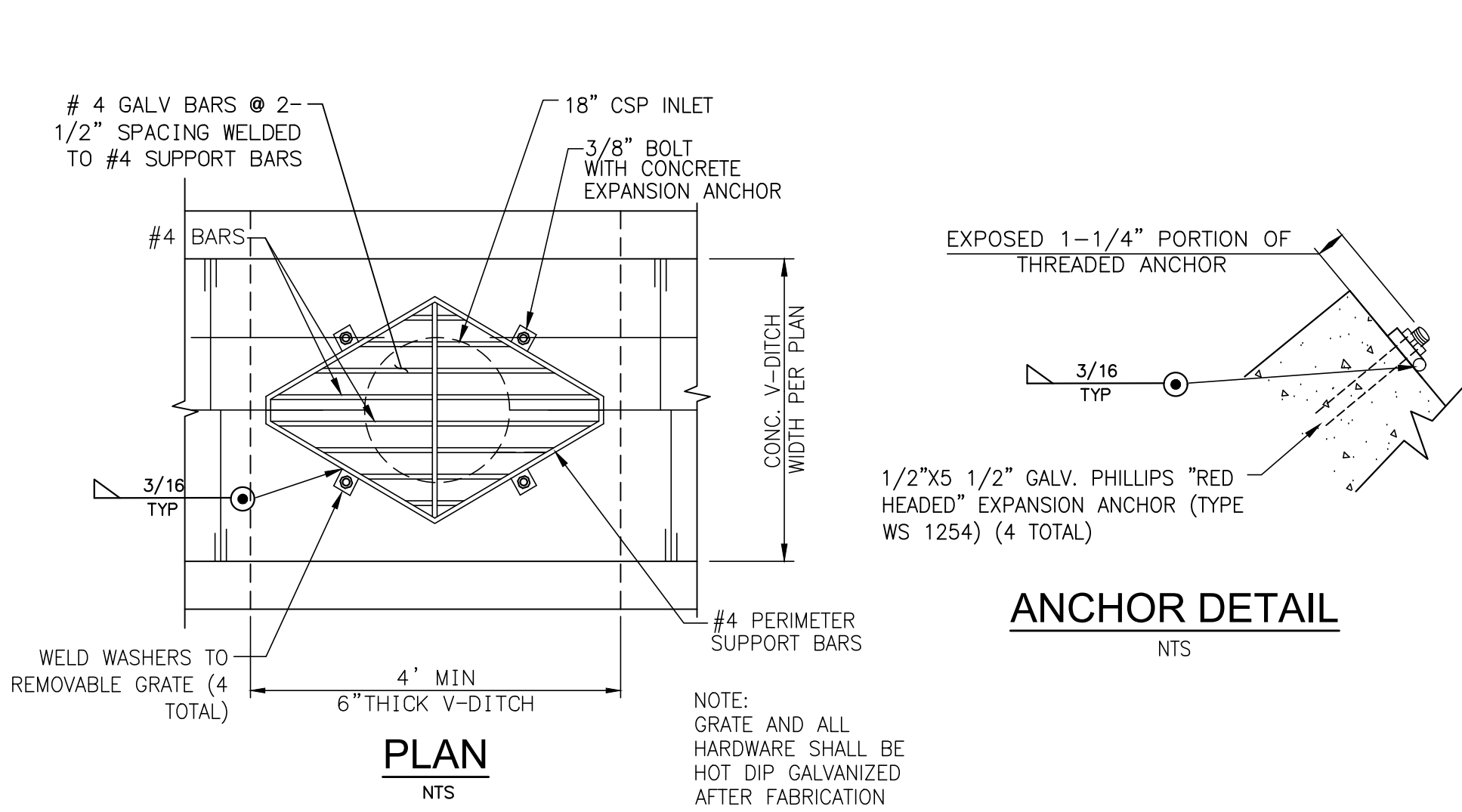
STREET CONSTRUCTION NOTES

- ② CONSTRUCT CONCRETE CURB AND GUTTER PER CITY OF IRVINE STD. PLAN NO. 200, TYPE A-2
- ⑤ INSTALL WOOD HEADER PER DETAIL ON SHEET 9
- ⑩ CONSTRUCT DRIVEWAY TYPE II PER CITY OF IRVINE STD. PLAN NO. 205 (WIDTH PER PLAN)
- ⑫ CONSTRUCT 8" AC CURB D1-8 PER SPWPC STD. PLAN 120-2 (SEE SHEET 23)
- ⑬ CONSTRUCT 4" AC OVER 8" CMB DRIVEWAY ON COMPACTED NATIVE PER SOILS ENGINEER
- ⑮ CONSTRUCT 3" WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3
- ⑯ INSTALL CHAIN LINK FENCE AND GATE PER SPWPC STD PLAN 600-3 (SEE SHEET 23)
- ⑰ SAWCUT AND REMOVE EXISTING 1' MINIMUM AC PAVEMENT



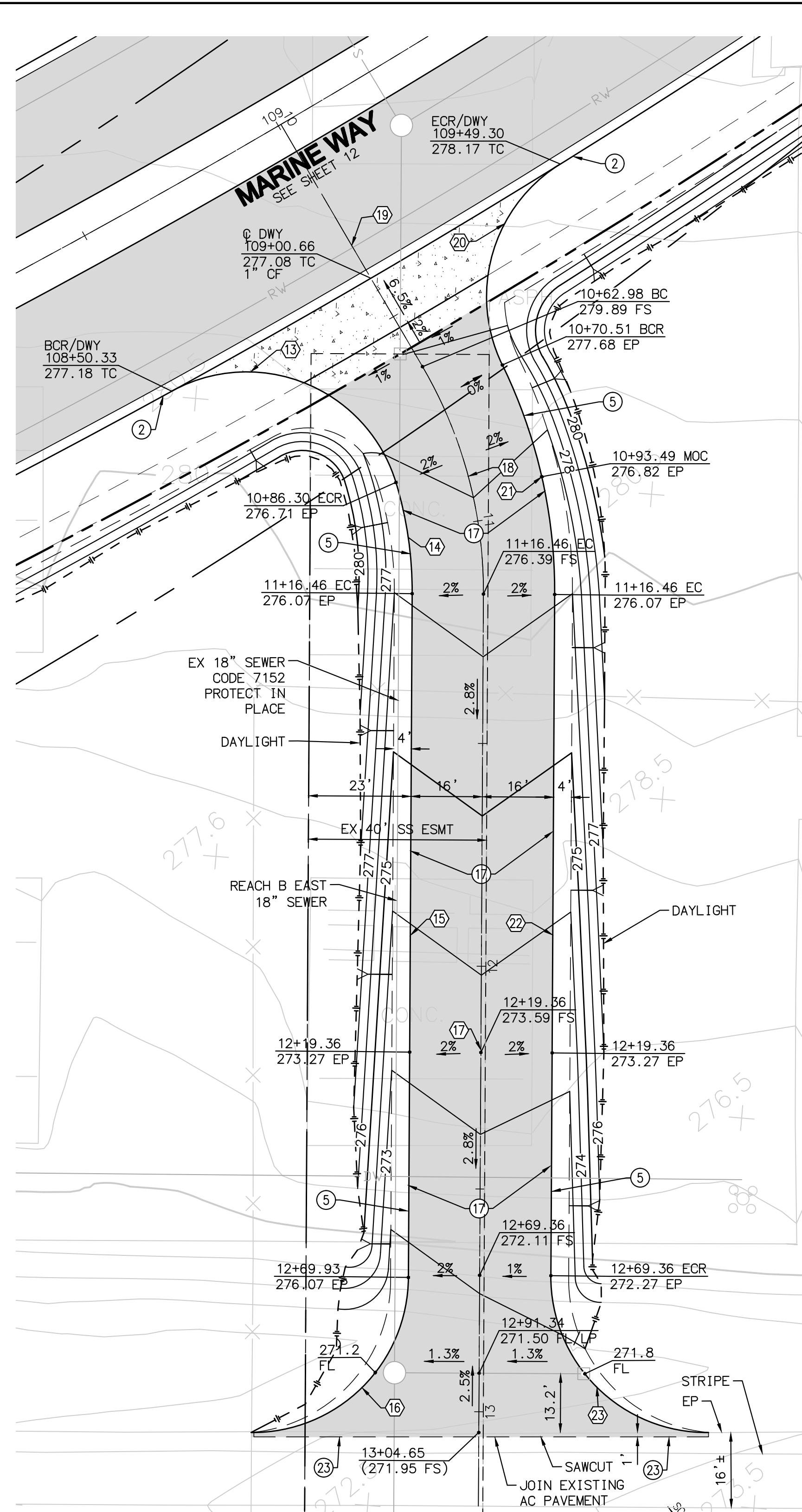
NOTE: FOR DETAILS NOT SHOWN SEE COI STD. PLAN 304

63 CSP DROP INLET DETAIL

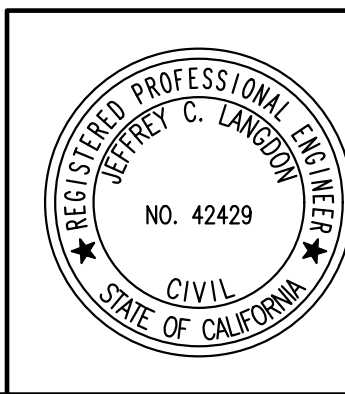


PLAN

LINE/CURVE DATA TABLE				
NO	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	90°00'00"	35.00'	54.98'	35.00'
2	61°24'11"	70.00'	75.02'	41.57'
3	16°07'57"	222.00'	62.51'	31.46'
4	N06°06'34"E	---	65.12'	---
5	N06°06'34"E	---	65.12'	---
6	16°18'46"	200.00'	56.94'	28.67'
7	61°35'00"	100.00'	107.48'	59.59'
8	N51°22'48"E	---	75.00'	---
9	90°00'00"	35.00'	54.98'	35.00'
10	63°29'38"	115.00'	127.44'	71.16'
11	18°13'24"	178.00'	56.61'	28.55'
12	N06°06'34"E	---	65.12'	---
13	60°10'26"	35.00'	36.76'	20.28'
14	17°16'52"	84.00'	25.34'	12.76'
15	N40°39'34"E	---	153.47'	---
16	90°10'25"	35.00'	55.08'	35.11'
17	N40°39'34"E	---	204.72'	---
18	30°38'30"	100.00'	53.48'	27.40'
19	N10°01'04"E	---	62.98'	---
20	60°29'29"	35.00'	36.95'	20.41'
21	26°19'35"	116.00'	53.30'	27.13'
22	N40°39'34"E	---	152.90'	---
23	90°58'10"	35.00'	55.57'	35.60'



PERIMETER ROAD ACCESS ROAD DETAIL
SCALE: 1"=20'



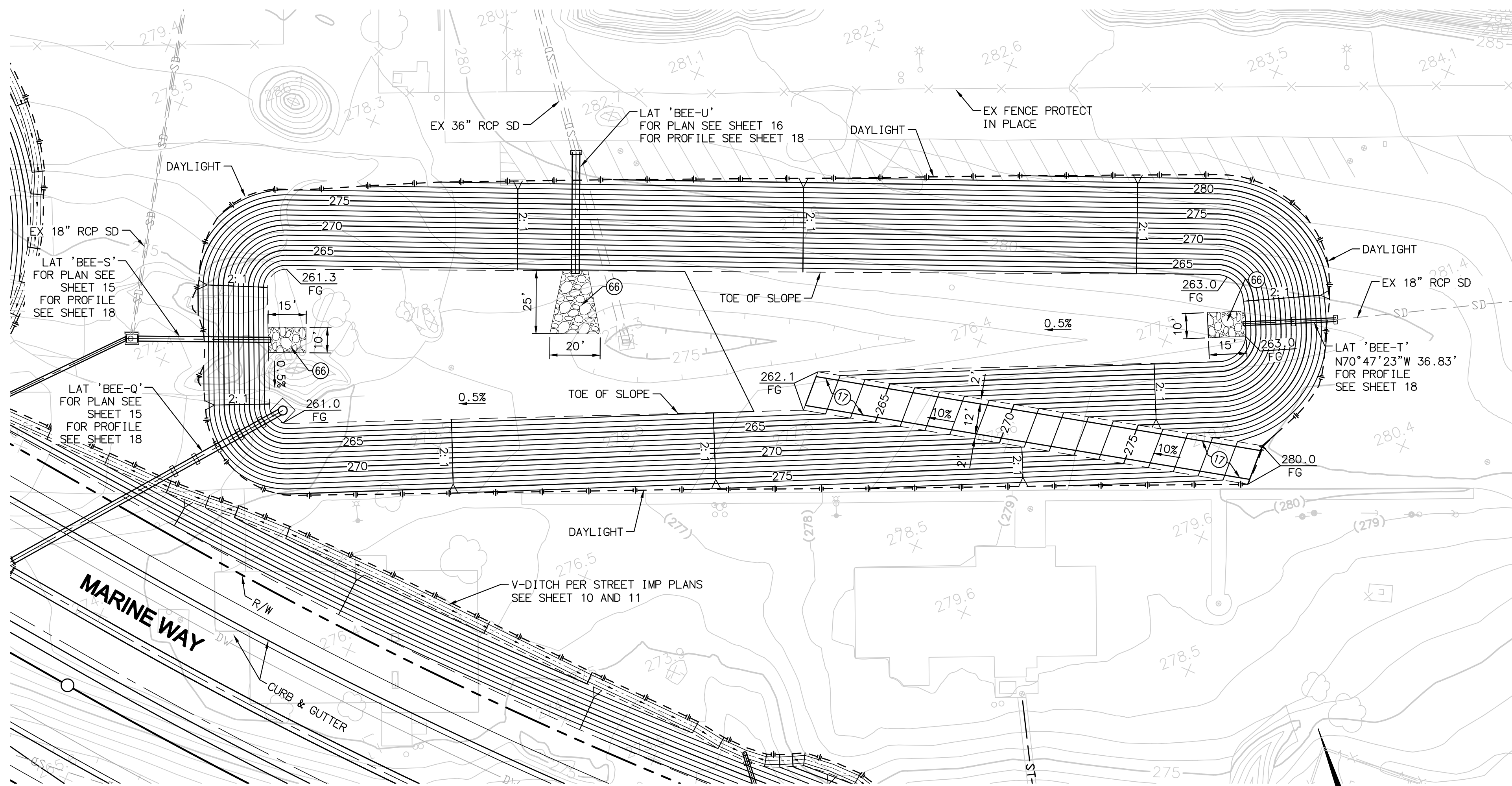
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

DRAWN BY: SR	DATE: 4/18
DESIGNED BY: JCL	DATE: 4/18
CHECKED BY: JCL	DATE: 4/18

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
DRIVEWAY DETAILS
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

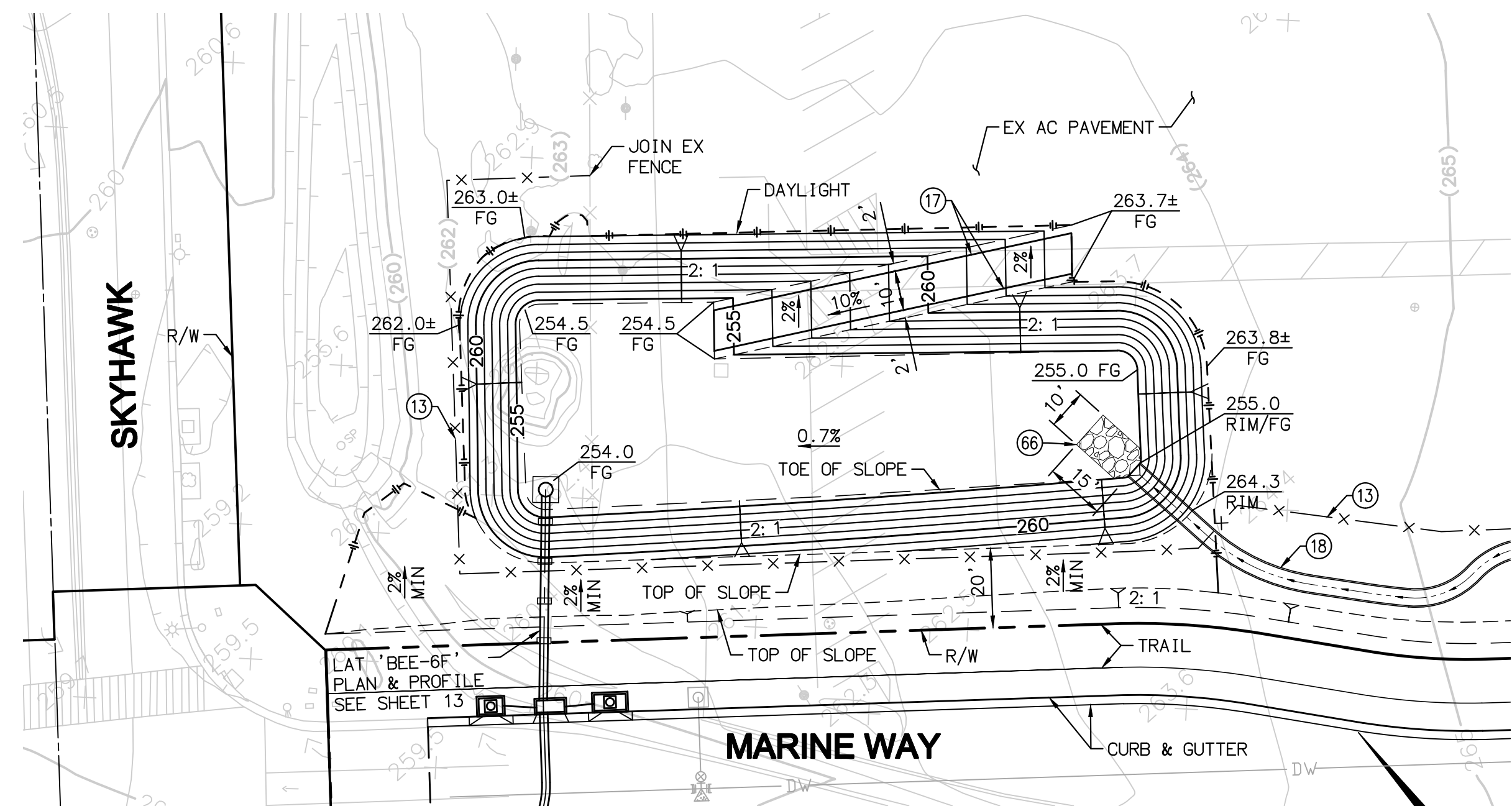
PLAN CHECK NO. 00760917-EMC
PERMIT NO. 00766614-MCE
PROJECT NO. 20.059
SHEET 19 OF 28



DETENTION BASIN #1

SCALE: 1"=30'

NOTE: SEE SHEET 6A FOR DEMOLITION
SEE SHEET 10 & 11 FOR STREET IMPROVEMENT
SEE SHEET 15 & 16 FOR STORM DRAIN IMPROVEMENT



DETENTION BASIN #3

SCALE: 1"=30'

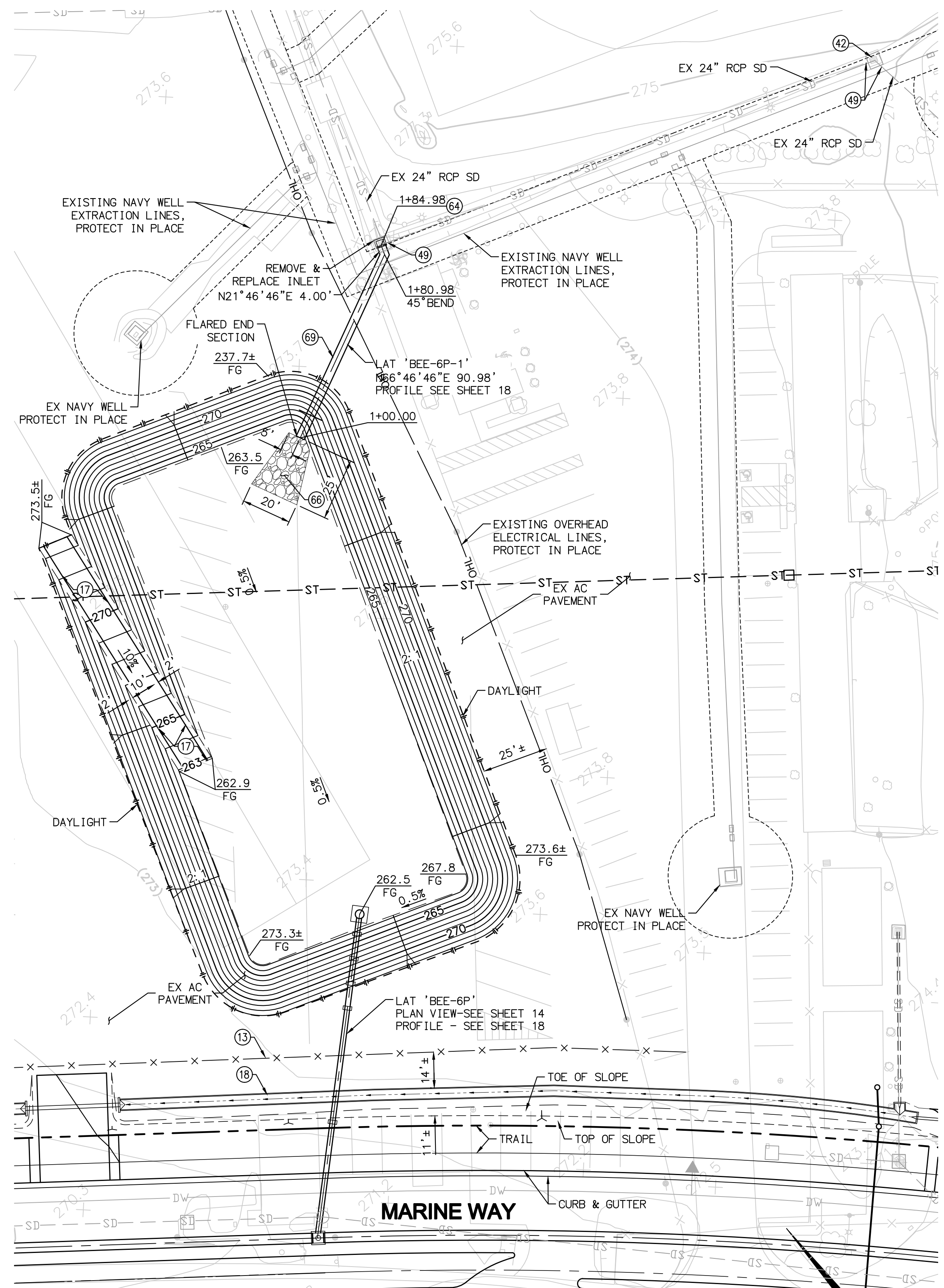
NOTE: SEE SHEET 5 FOR DEMOLITION
SEE SHEET 8 FOR STREET IMPROVEMENT
SEE SHEET 13 FOR STORM DRAIN IMPROVEMENT

STREET CONSTRUCTION NOTES

- 13 RELOCATE EXISTING TEMPORARY FENCE PER PLAN WITH GRAVEL BAGS ON LEG SUPPORTS
- 17 CONSTRUCT 4" AC OVER 8" CMB DRIVEWAY ON COMPACTED NATIVE PER SOILS ENGINEER
- 18 CONSTRUCT 4' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3

STORM DRAIN CONSTRUCTION NOTES

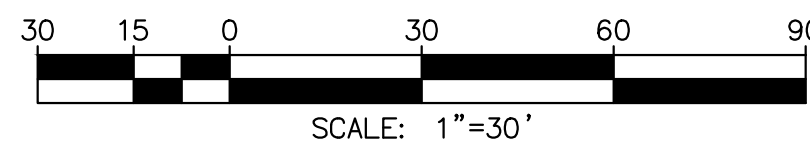
- 42 REMOVE GRATED INLET, FILL CATCH BASIN WITH CMB, POUR 6" THICK TOP TO MATCH EX CONCRETE SWALE
- 49 INSTALL BRICK AND MORTAR PLUG PER DETAIL SHEET 3
- 64 CONSTRUCT GRATING CATCH BASIN PER SPPWC STD PALN 304-3 (SEE SHEET 22)
- 66 INSTALL UNGROUTED RIP RAP PER DETAIL ON SHEET 15
- 69 INSTALL 36" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318



DETENTION BASIN #2

SCALE: 1"=30'

NOTE: SEE SHEET 6 FOR DEMOLITION
SEE SHEET 9 FOR STREET IMPROVEMENT
SEE SHEET 14 FOR STORM DRAIN IMPROVEMENT



7							
6							
5							
4							
3							
2							
1							
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE		

DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

PLAN PREPARED BY:
PROACTIVE
ENGINEERING CONSULTANTS
27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

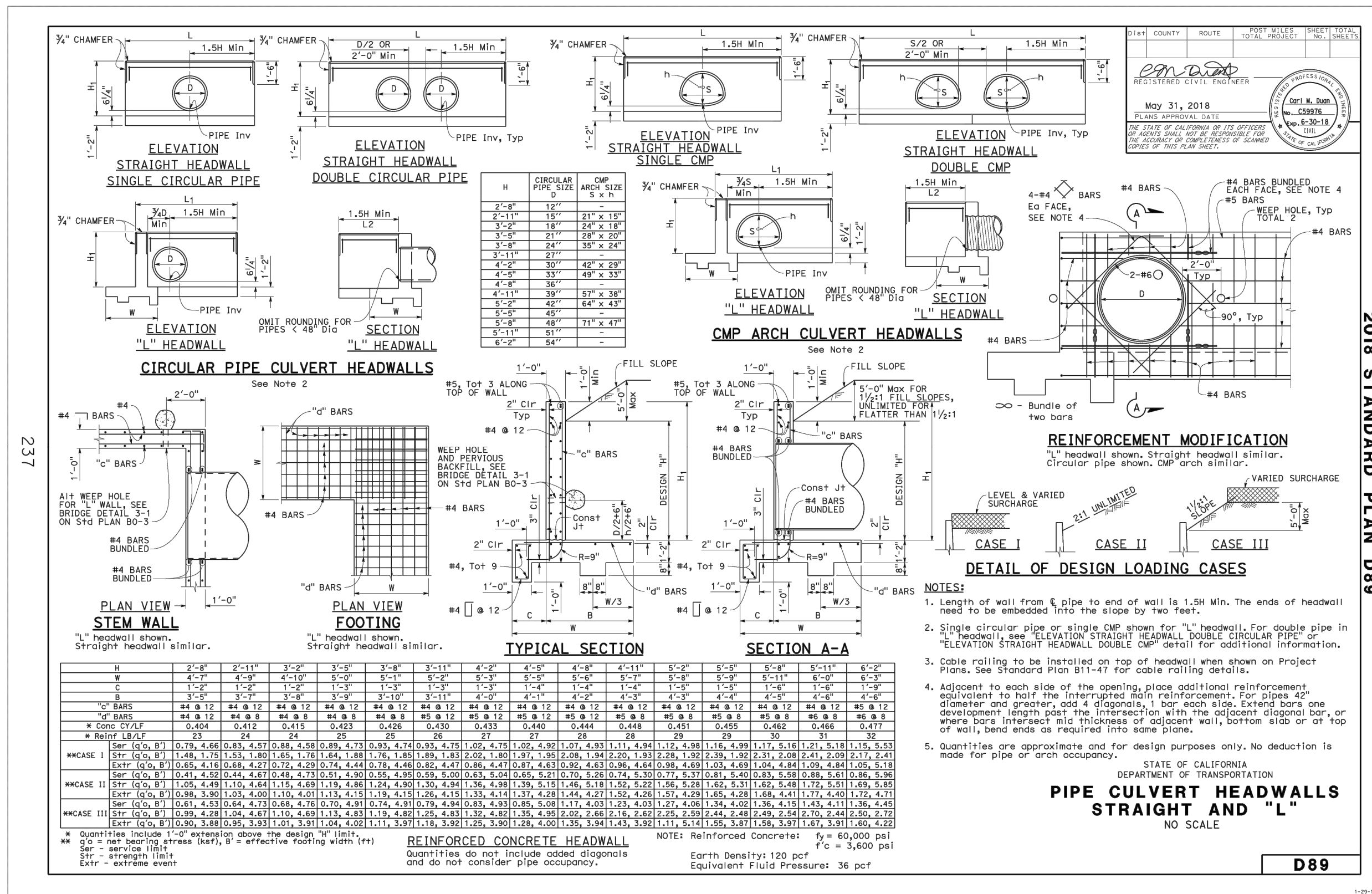
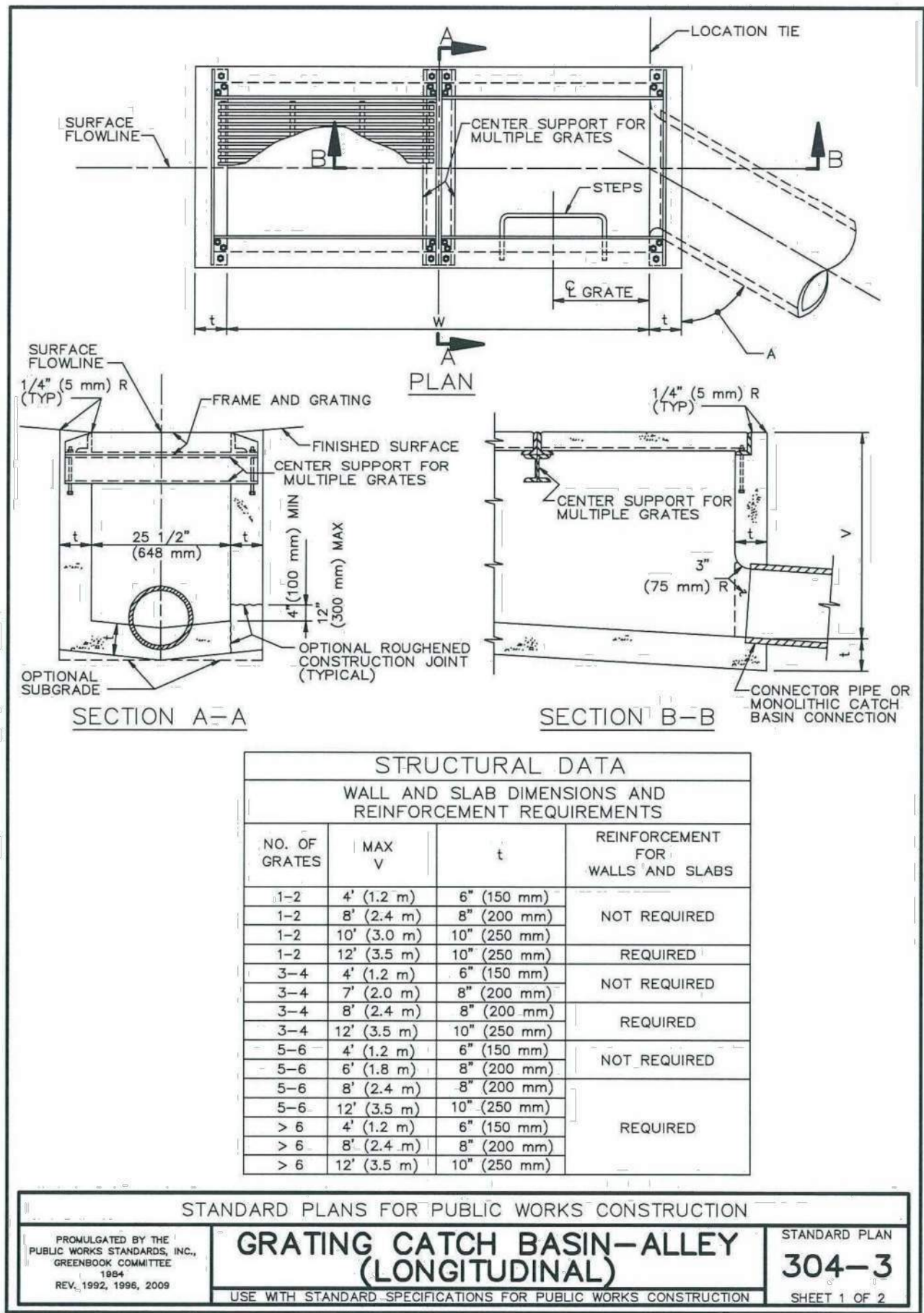
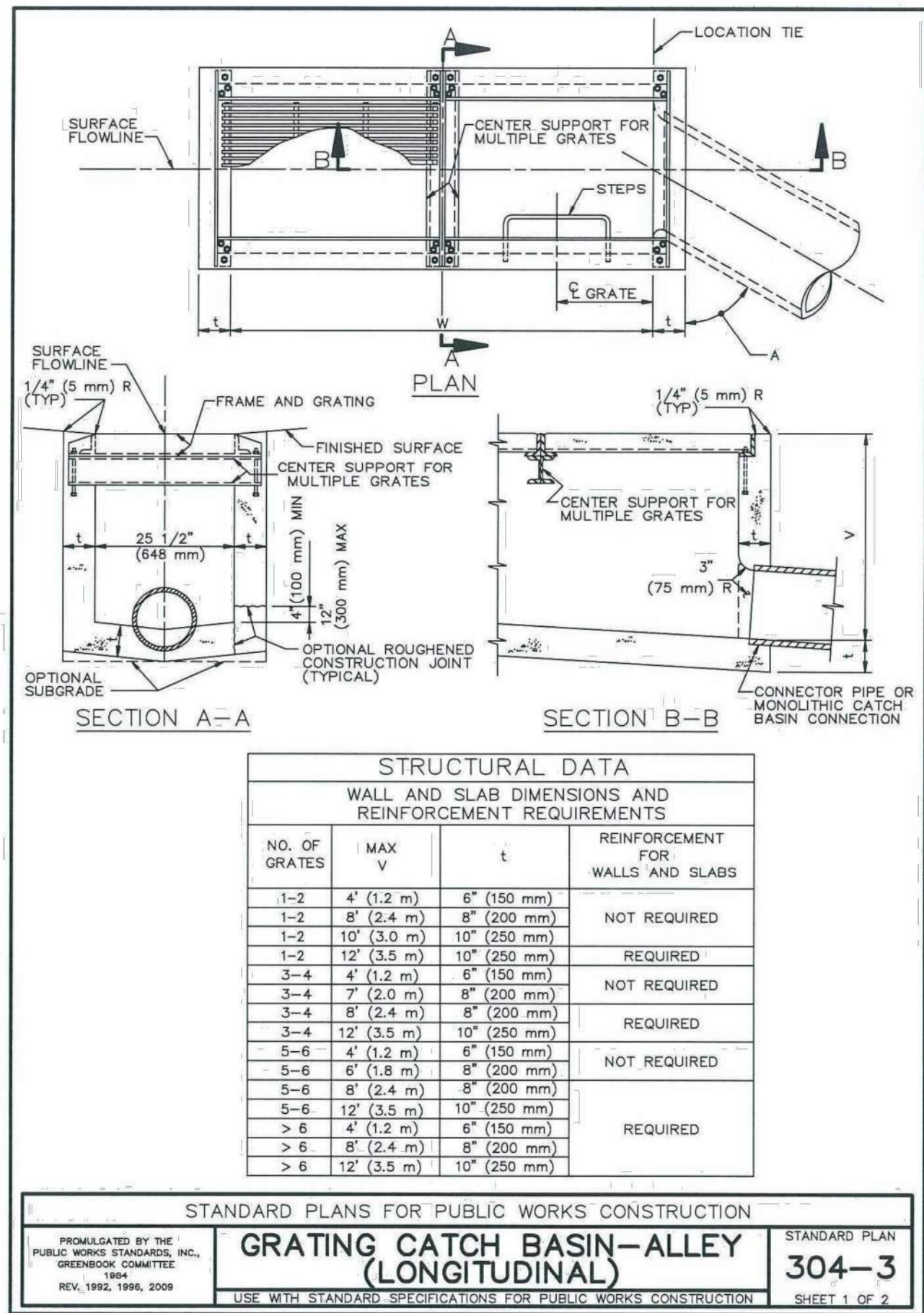
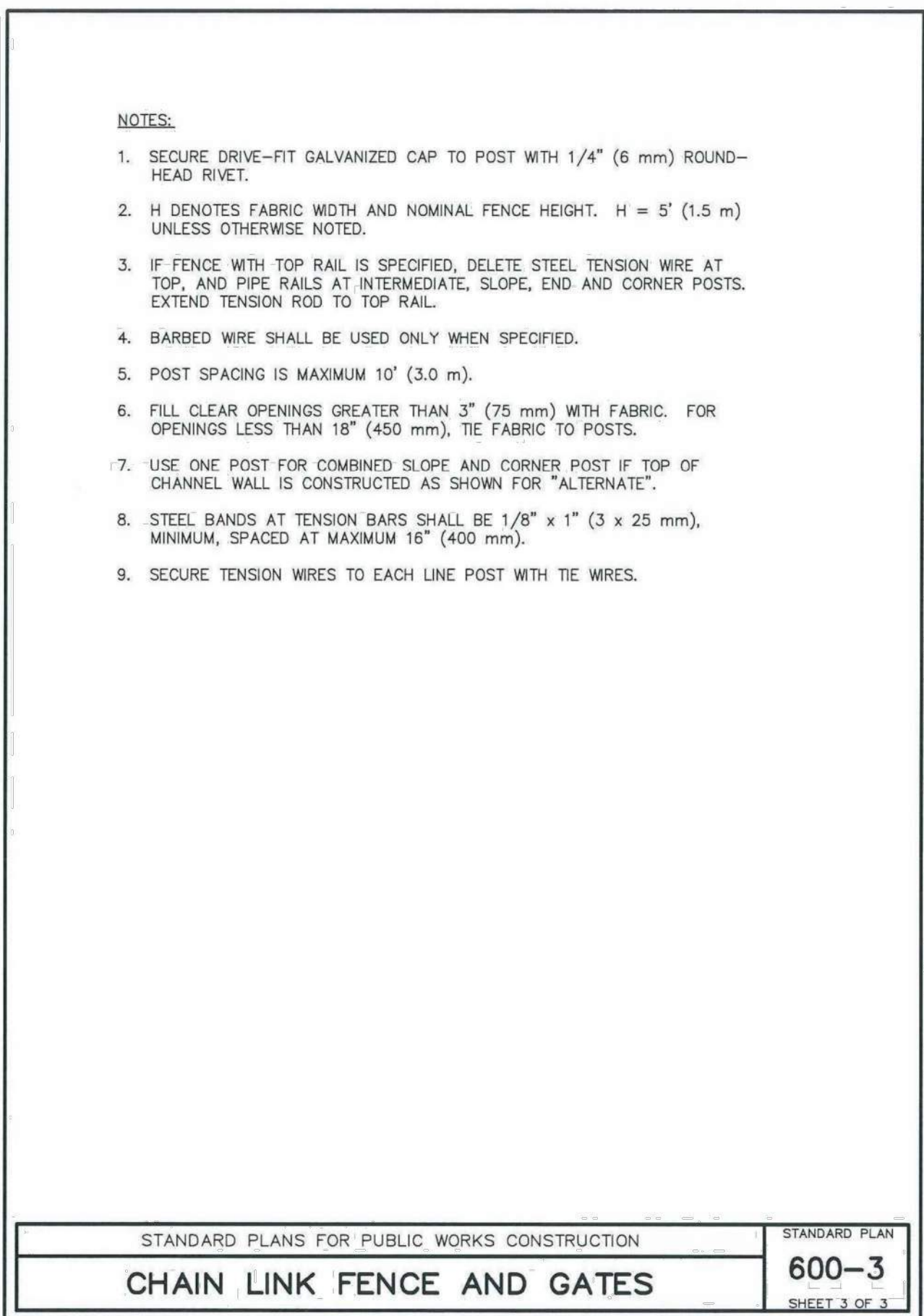
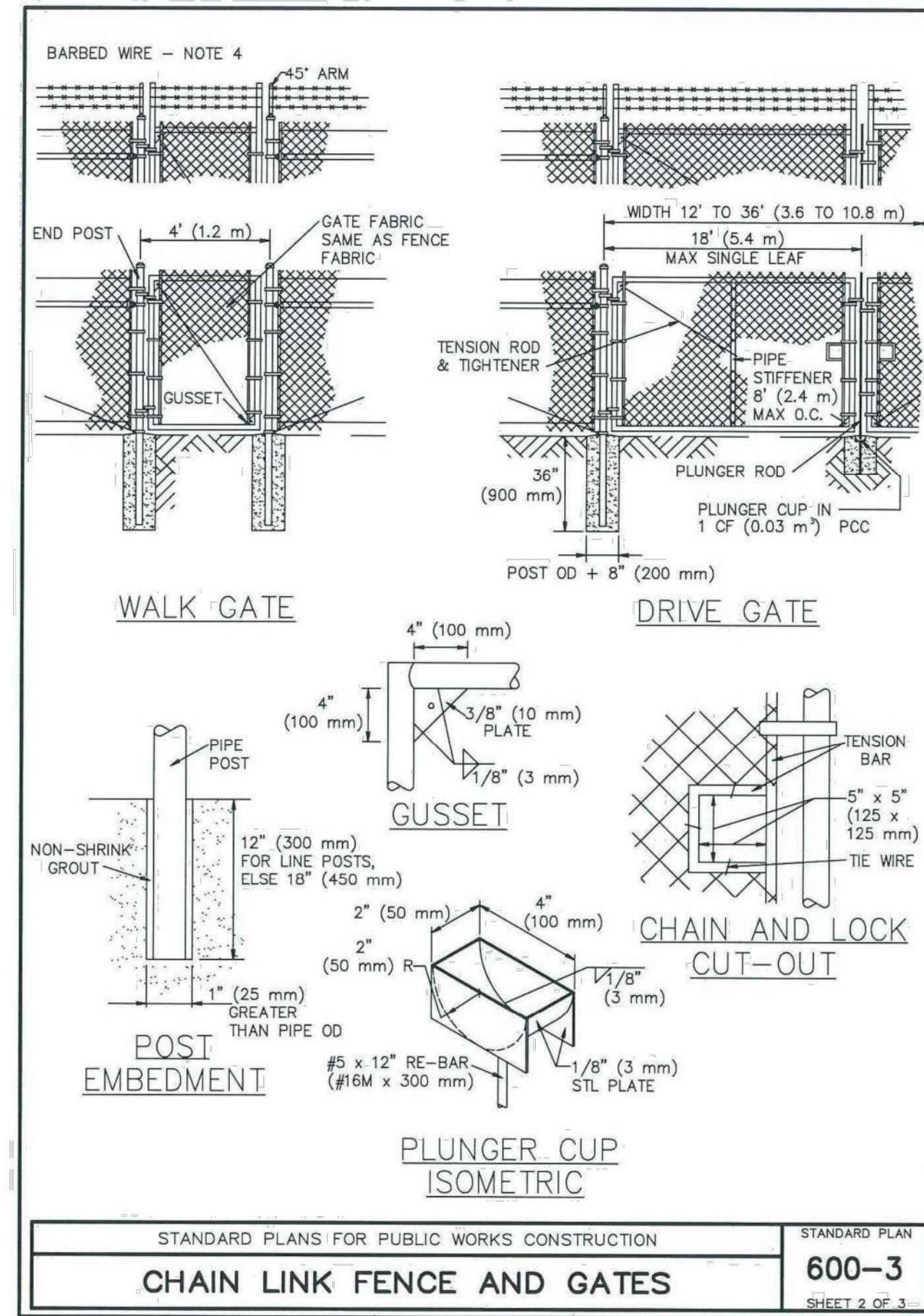
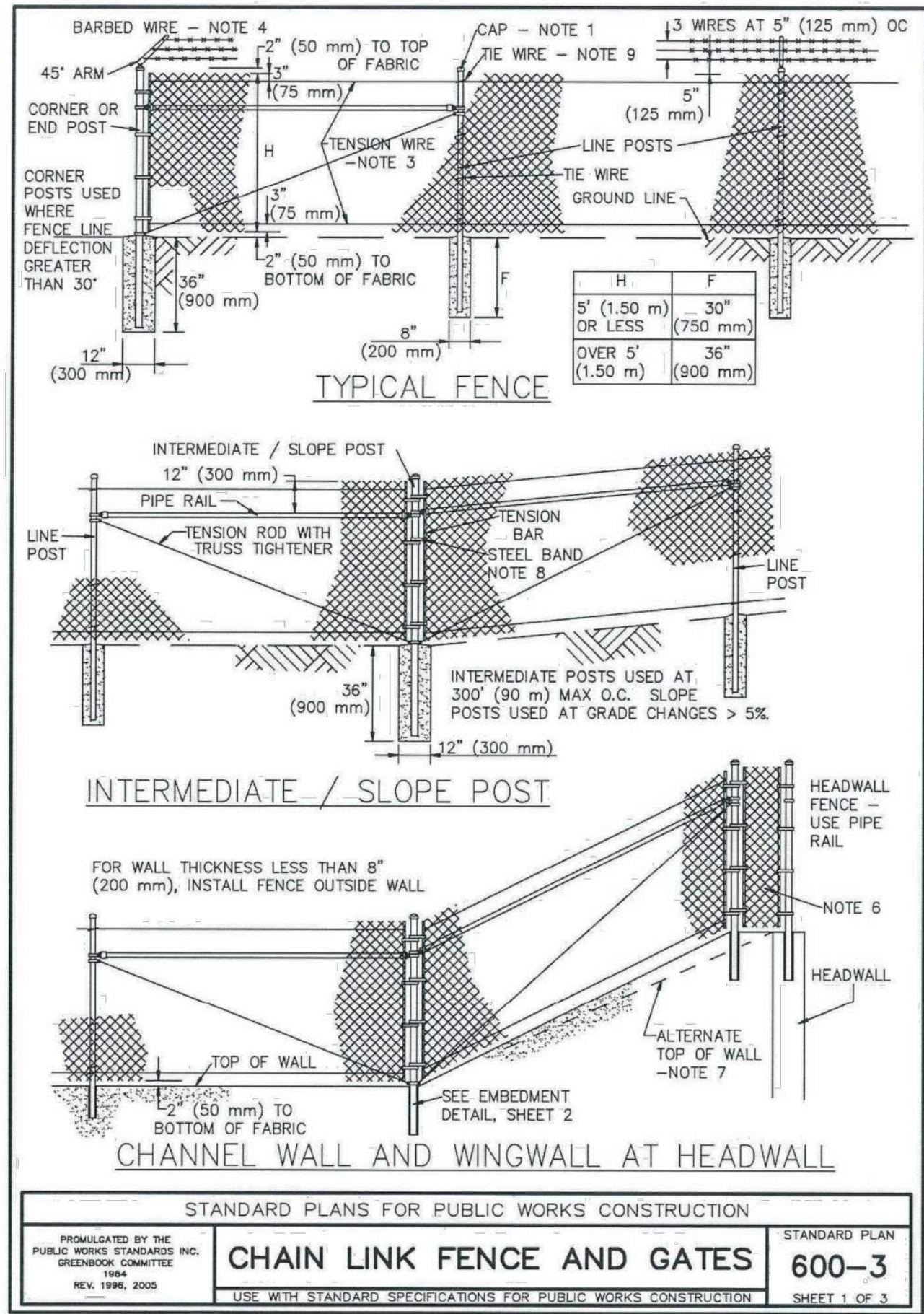
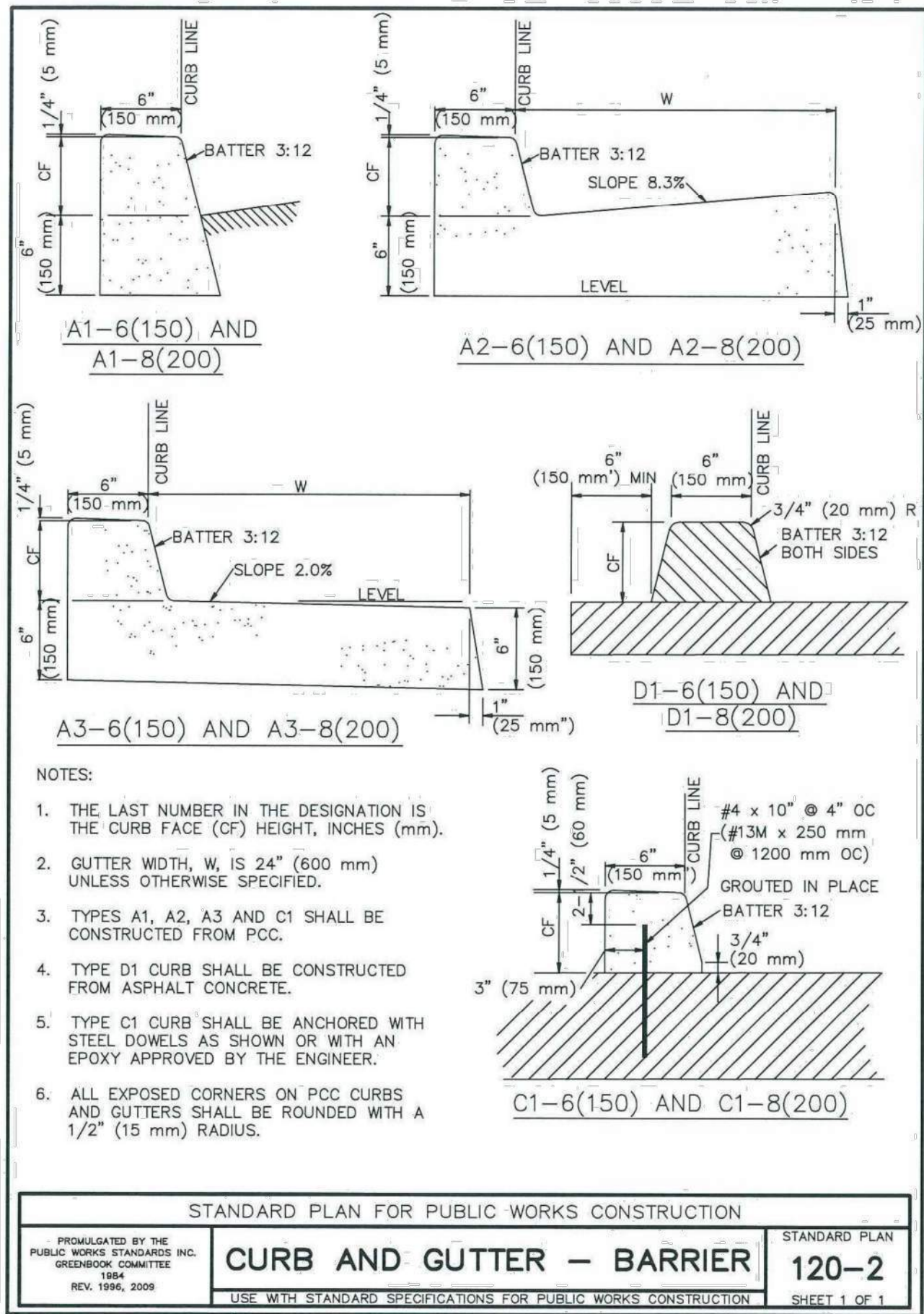
JEFFREY C. LANGDON R.C.E. 42429 DATE

**CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
BASIN DETAILS**

**CITY OF IRVINE
PUBLIC WORKS DEPARTMENT**

PLAN CHECK NO.
00760917-EMC
PERMIT NO.
00766614-MCE

PROJECT NO.
20.059
SHEET
20
OF **28**



NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

PLAN PREPARED BY:

PROACTIVE
ENGINEERING CONSULTANTS

27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

DRAWN BY: SR
DATE: 4/18

DESIGNED BY: JCL
DATE: 4/18

CHECKED BY: JCL
DATE: 4/18

JEFFREY C. LANGDON R.C.E. 42429 DATE:

CONSTRUCTION PLANS FOR THE IMPROVEMENT OF MARINE WAY

STANDARD PLANS

FROM SKYHAWK TO 3800' EAST

CITY OF IRVINE

PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.	00760917-EMC
PERMIT NO.	00766614-MCE
PROJECT NO.	20.059
SHEET	23
OF	28

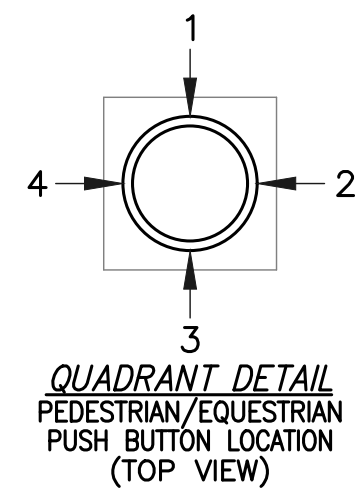
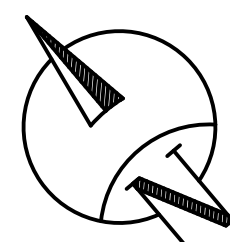
POLE AND EQUIPMENT SCHEDULE Δ																			
CULTRANS SPEC YEAR	CONDITION	POLE	STANDARDS				VEH. SIGNAL MTG.		PED. SIG.	P.P.B.		B.P.B.		POLE LOC.			LED	LED TYPE A IISNS (DOUBLE FACE)	COMMENTS
			TYPE	HEIGHT	SIGNAL M.A.	LUMIN. M.A.	MAST ARM	POLE	MTG.	#	QUAD	#	QUAD	A	B	C	(Lumens) 22,000		
2010	(E)	(A)	29-5-100	30'	50'	15'	2-MAS	SV-2-T	-	-	-	-	-	SEE PLAN	SEE PLAN	2.5'	87W	"Skyhawk"	F=27'
2010	(E)	(B)	26-4-100	30'	45'	15'*	2-MAS	SV-2-T	SP-1-CS	4	2	-	-	SEE PLAN	SEE PLAN	10'	87W	"Marine Way"	F=15'
2010	(E)	(C)	PPB POST	3'-10"	-	-	-	-	-	-	2	1	-	SEE PLAN	SEE PLAN	2.5'	-	-	-
2010	(E)	(D)	29-5-100	30'	50'	15'	2-MAS	SV-1-T	SP-1-CS	4	2	-	-	-	10'	2.5'	87W	"Skyhawk"	F=12'
2010	(E)	(E)	1-A	10'	-	-	-	TV-1-T	SP-1-CS	6	3	4	2	10'	-	2.5'	-	-	-
2010	(E)	(F)	15TS	30'	-	15'	-	-	-	6	3	-	-	-	11'	2.5'	87W	-	-
2010	(E)	(G)	1-A	10'	-	-	-	TV-2-T	SP-1-CS	-	-	6	3	10'	-	2.5'	-	-	-

GENERAL TRAFFIC SIGNAL NOTES:

- | <u>SENSOR SCHEDULE:</u> | | | | | |
|--------------------------------|----------|---------|------|----------|-----------|
| SLOT | POSITION | CHANNEL | SLOT | POSITION | CHANNEL |
| I1 | U | 5-#2 | J1 | U | 1-#2 |
| | L | 6-#2 | | L | FUT |
| I2 | U | 1-#5 | J2 | U | FUT |
| | L | 2-#5 | | L | FUT |
| I3 | U | FUT | J3 | U | 1-#4 |
| | L | ◆5-#4 | | L | 2-#4 |
| I4 | U | 1-#7 | J4 | U | FUT |
| | L | FUT | | L | SP |
| I5 | U | 5-#6 | J5 | U | 1-#6 |
| | L | ◆6-#6 | | L | 2-#6 |
| I6 | U | FUT | J6 | U | FUT |
| | L | FUT | | L | FUT |
| I7 | U | FUT | J7 | U | FUT |
| | L | FUT | | L | FUT |
| I8 | U | FUT | J8 | U | FUT |
| | L | FUT | | L | SP |
| I9 | U | VD COM | J9 | U | SP |
| | L | | | L | SP |
| I10 | U | VD COM | J10 | U | FREE |
| | L | | | L | DL |
| I11 | U | #2 BIKE | J11 | U | EVA-#2 |
| | L | #4 BIKE | | L | EVA-#6 |
| I12 | U | #6 BIKE | J12 | U | EVA-#4 |
| | L | FUT | | L | FUT |
| I13 | U | FUT | J13 | U | MAN ADV |
| | L | #4 PED | | L | MAN EN |
| I14 | U | #6 PED | J14 | U | FLASH SEN |
| | L | FUT | | L | STOP TIME |



Know what's below.
Call before you dig.



$\phi 1$ 	$\phi 2$ 	$\phi 3$ 	$\phi 4$
$\phi 5$ 	$\phi 6$ 	$\phi 7$ 	$\phi 8$

VIDEO DETECTION ZONE LEGEND:



- CONSTRUCTION NOTES:

- SIGN LEGEND:**



36"X36"

A square sign with a black border. Inside, there is a black circle with a diagonal slash from the top-left to the bottom-right. A black silhouette of a person sitting is positioned behind the slash, indicating that sitting is prohibited.

R9-3a
18"X18"



NO LEFT TURN

R73-6(CA)
36"X36"

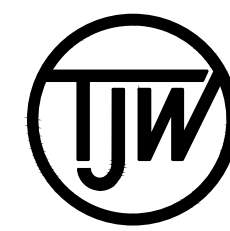
CONDUCTOR SCHEDULE										
AWG SIZE OR CABLE TYPE	POLE	CIRCUIT	CONDUIT RUN NUMBER							
			(E)	(E)	(E)	(E)	(E)	(E)	(E)	
			1	2	3	4	5	6	7	
12CSC	(A)	#2, #5 / - / #7								
	(B)	#4, #7, #4P / #4PPB / #2								
	(C)	- / #2BPB / -								
3CSC	(D)	#6, #6P / #4PPB / -			1	1	1	1	1	1
	(E)	#4, #4P / #6PPB, #4BPB / -			2	2	2	2	2	2
	(F)	- / #6PPB / -								
5CSC	(G)	#5, #6, #6P / #6BPB / -						1	1	1
		TOTAL	1	1	1	2	2	3	3	2
#14		I.I.S.N.S.	2	2	2	2	2	2	4	
#10		SIGNAL COMMON	1	1	1	1	1	1	1	2
		LUMINAIRES	2	2	2	2	2	2	4	
		TOTAL	3	3	3	3	3	3	6	
DLC (TYPE "B")		#2	2	2	-	-	-	-	2	
		#4	-	-	-	2	-	2	2	
		#6	-	-	-	-	-	2	2	
		TOTAL	2	2	-	2	-	4	6	
EVP CABLE			1	2	1	1	1	1	3	
VIDEO DETECTION CABLE			1	2	1	1	1	1	3	
CAT 5E CABLE (AXIS IP CCTV)			-	2	-	-	-	-	-	1
CONDUIT SIZE			4"	4"	4"	4"	4"	4"	2-4"	
% FILL			-	-	-	-	-	-	-	

[illegible]

3 APPROX. 1,900' TO
SECOND HARVEST DWY

7								
6								
5								
4								
3								
2								
1				TJW				
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE	DRAWN BY: KM DATE 5/16/2022 DESIGNED BY: KM DATE 5/16/2022 CHECKED BY: JS DATE 6/7/2022		

SEAL



TJW ENGINEERING, INC.
Traffic Engineering &
Transportation Planning Consultants
41 Irvine Center Dr., Suite 200, Irvine, CA 92618
t: (949) 878-3509 f: (949) 878-3593
www.tjwengineering.com

FOR PLANCHECK ONLY

THOMAS JOSEPH WHEAT R.C.E. No. 69467

Exp. 6/30/24

TRAFFIC SIGNAL MODIFICATION PLAN

MARINE WAY at
SKYHAWK

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.

PERMIT NO.

PROJECT NO.

SHEET

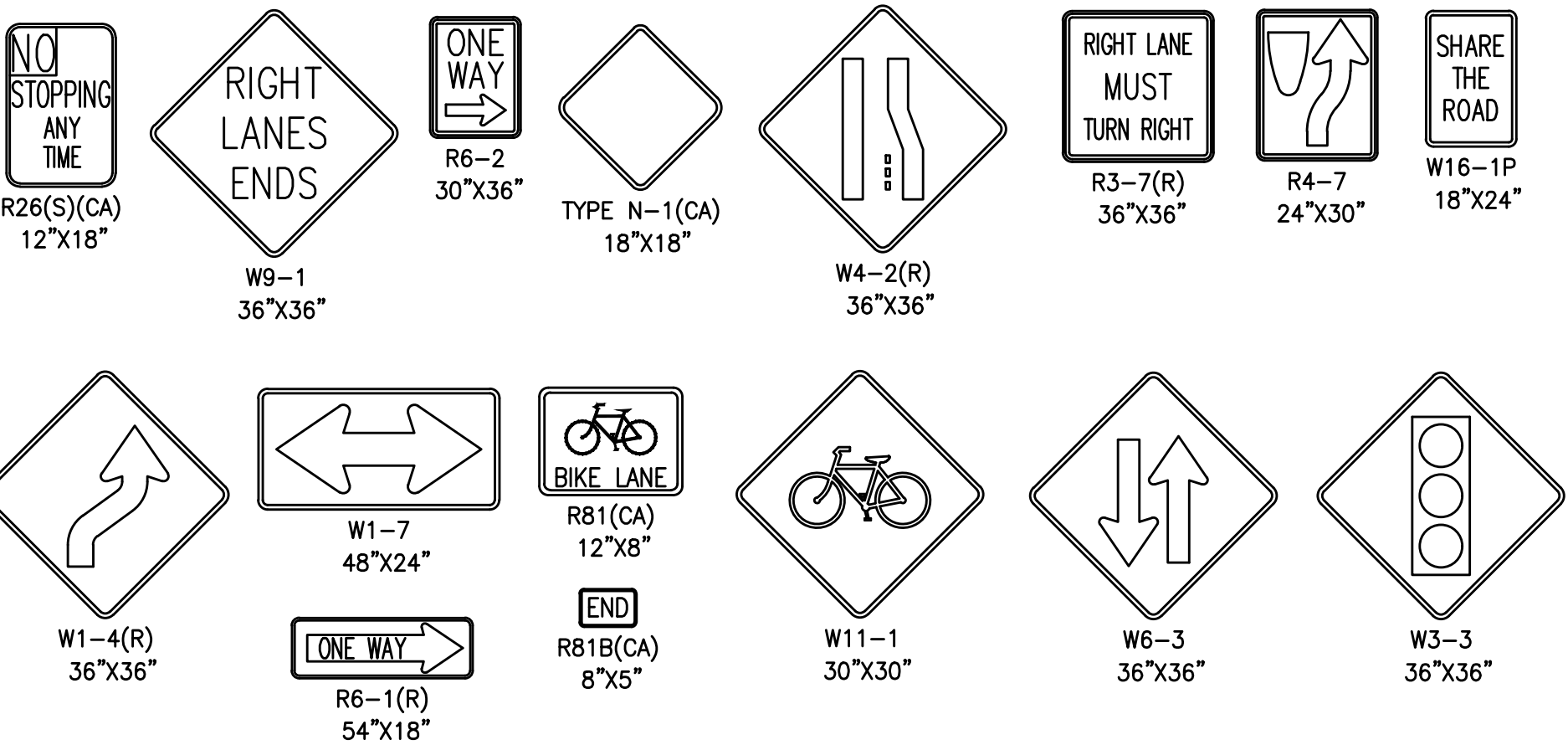
24 OF 28

SIGNING AND STRIPING GENERAL NOTES:

- 1. SIGNING AND STRIPING SHALL CONFORM TO PART 2 SIGNS AND PART 3 MARKINGS OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND ANY ADDENDUMS THERE TO OR LATEST EDITION, THESE PLANS AND SPECIAL PROVISIONS.
- 2. DETAIL 9 LANE LINE STRIPING PATTERN IN PART 3 MARKINGS SHALL BE USED ON ALL MULTILANE STREETS REGARDLESS OF STREET DESIGN SPEED.
- 3. PAVEMENT LEGENDS SHALL MATCH THE CITY STENCILS OR EQUIVALENT,
- 4. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE REFLECTORIZED AND APPLIED IN TWO COATS. A MINIMUM OF SEVEN DAYS SHALL BE PROVIDED BETWEEN FIRST AND SECOND COATS.
- 5. ALL CONFLICTING STRIPINGS, PAVEMENT MARKINGS, AND CURB PAINT SHALL BE REMOVED BY WET SANDBLASTING OR OTHER APPROVED METHOD PRIOR TO INSTALLATION OF NEW STRIPING. ALL CONFLICTING RAISED PAVEMENT MARKERS SHALL BE REMOVED.
- 6. PAVEMENT THAT IS DAMAGED DUE TO REMOVAL OF MARKERS OR STRIPING SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY INSPECTOR.
- 7. THE CONTRACTOR SHALL CONTACT THE CITY OF IRVINE INSPECTION SERVICES FOR INSPECTION 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
- 8. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. IF CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE SHOWN ON THESE PLANS, THE CITY OF IRVINE INSPECTION SERVICES SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.
- 9. ALL WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.
- 10. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO PART 6 - TEMPORARY TRAFFIC CONTROL OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND ANY ADDENDUMS THERE TO OR LATEST EDITION AND ALL O.S.H.A. REQUIREMENTS.

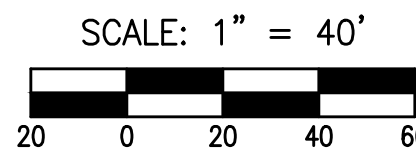
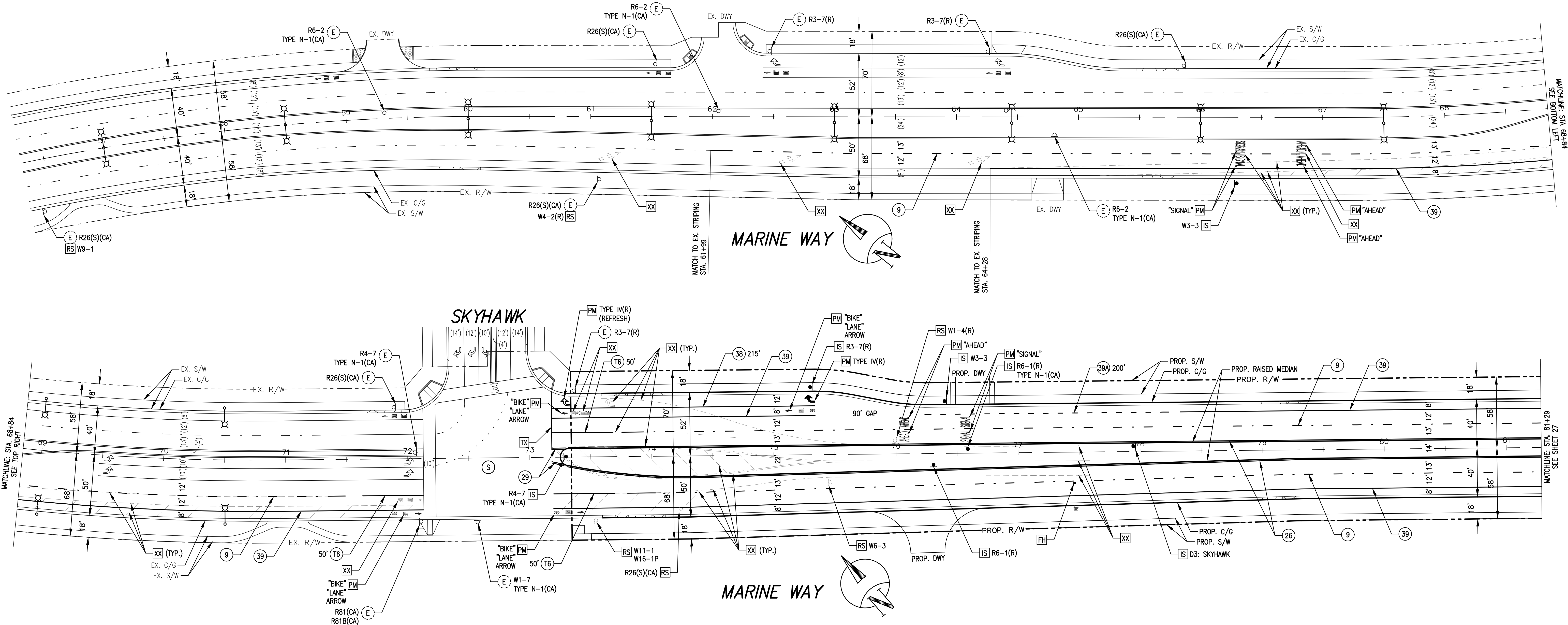
- 11. THE CONTRACTOR SHALL HAVE ALL TRAFFIC CONTROL CONSTRUCTION SIGNS, DELINEATORS, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
- 12. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL SIGNS, DELINEATORS, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC WHILE WORKING IN THE STREET.
- 13. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED BY THE CITY INSPECTOR/ REPRESENTATIVE TO ASSURE PUBLIC SAFETY AT ALL TIMES.
- 14. THE CONTRACTOR SHALL UTILIZE A FLAGMAN DURING CONSTRUCTION WORK AS DEEMED NECESSARY BY THE CITY INSPECTOR.
- 15. ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURE ON ARTERIAL STREETS.
- 16. STRIPING SHALL BE CAT TRACKED AND APPROVED BY THE CITY INSPECTOR PRIOR TO FINAL INSTALLATION.
- 17. CROSSWALK SHALL CONFORM TO THE CITY OF IRVINE STANDARD PLAN NO. 203.
- 18. ALL SIGN FACE REFLECTIVE SHEETING SHALL BE HIGH INTENSITY GRADE WITH PROTECTIVE OVERLAY FILM.
- 19. ALL SIGN POSTS SHALL BE 2"x2" PERFORATED SQUARE TUBE INSTALLED WITH ACCOMPANYING SLEEVE PER THE CITY OF IRVINE REQUIREMENTS. CITY OF IRVINE SPECIAL SIGN R26EB SIGN SHALL BE INSTALLED ON "U" CHANNEL POST OR ON STREET LIGHT POLE.
- 20. ADVANCED STREET NAME SIGNS AND STREET NAME SIGNS SHALL BE SILVER LETTERS WITH "IRVINE BROWN" BACKGROUND.
- 21. BLUE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED ADJACENT TO ALL EXISTING FIRE HYDRANTS IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

SIGN LEGEND:



SIGNING AND STRIPING CONSTRUCTION NOTES:

(E)	EXISTING SIGN TO REMAIN.
(FH)	INSTALL BLUE REFLECTIVE FIRE HYDRANT PAVEMENT MARKER PER CA MUTCD AND CALTRANS STANDARDS.
(IS)	INSTALL SIGN AND POST.
(RL)	RELOCATE EXISTING SIGN.
(RS)	REMOVE AND SALVAGE EXISTING SIGN AND POST.
(PM)	INSTALL THERMOPLASTIC PAVEMENT MARKING AS SHOWN PER CA-MUTCD STANDARDS.
(TX)	INSTALL THERMOPLASTIC 12" SOLID WHITE LIMIT LINE OR CROSSWALK PER CA-MUTCD STANDARDS.
(XX)	REMOVE CONFLICTING STRIPING OR MARKINGS BY WET SANDBLASTING PROCESS.
(T6)	INSTALL THERMOPLASTIC 6" SOLID WHITE LANE LINE STRIPE.
(9)	INSTALL THERMOPLASTIC 6" WHITE LANE LINE SKIP STRIPE PER CALTRANS STD. PLAN A20A - DETAIL 9.
(22)	INSTALL THERMOPLASTIC 6" DOUBLE YELLOW CENTERLINE STRIPE PER CALTRANS STD. PLAN A20A - DETAIL 22.
(26)	INSTALL RED-YELLOW RETROREFLECTIVE MARKER LEFT EDGELINE ALONG RAISED MEDIAN PER CALTRANS STD. PLAN A20B - DETAIL 26.
(29)	INSTALL THERMOPLASTIC 6" DOUBLE YELLOW MEDIAN STRIPE PER CALTRANS STD. PLAN A20B - DETAIL 29.
(38)	INSTALL THERMOPLASTIC 8" WHITE CHANNELIZING LANE LINE STRIPE PER CALTRANS STD. PLAN A20D - DETAIL 38.
(39)	INSTALL THERMOPLASTIC 6" WHITE BIKE LANE STRIPE PER CALTRANS STD. PLAN A20D - DETAIL 39.
(39A)	INSTALL THERMOPLASTIC 6" WHITE BIKE LANE INTERSECTION STRIPE PER CALTRANS STD. PLAN A20D - DETAIL 39A.
(S)	SIGNALIZED INTERSECTION



NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

DRAWN BY:	KM	DATE	-
DESIGNED BY:	KM	DATE	-
CHECKED BY:		DATE	-



TJW ENGINEERING, INC.
Traffic Engineering &
Transportation Planning Consultants
9841 Irvine Center Dr., Suite 200, Irvine, CA 92618
t: (949) 878-3509 f: (949) 878-3593
www.tjwengineering.com

FOR PLANCHECK ONLY
THOMAS JOSEPH WHEAT R.C.E. No. 69467 Exp. 6/30/24

SIGNING AND STRIPING PLAN
MARINE WAY
from STA. 56+50 to STA. 81+29

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

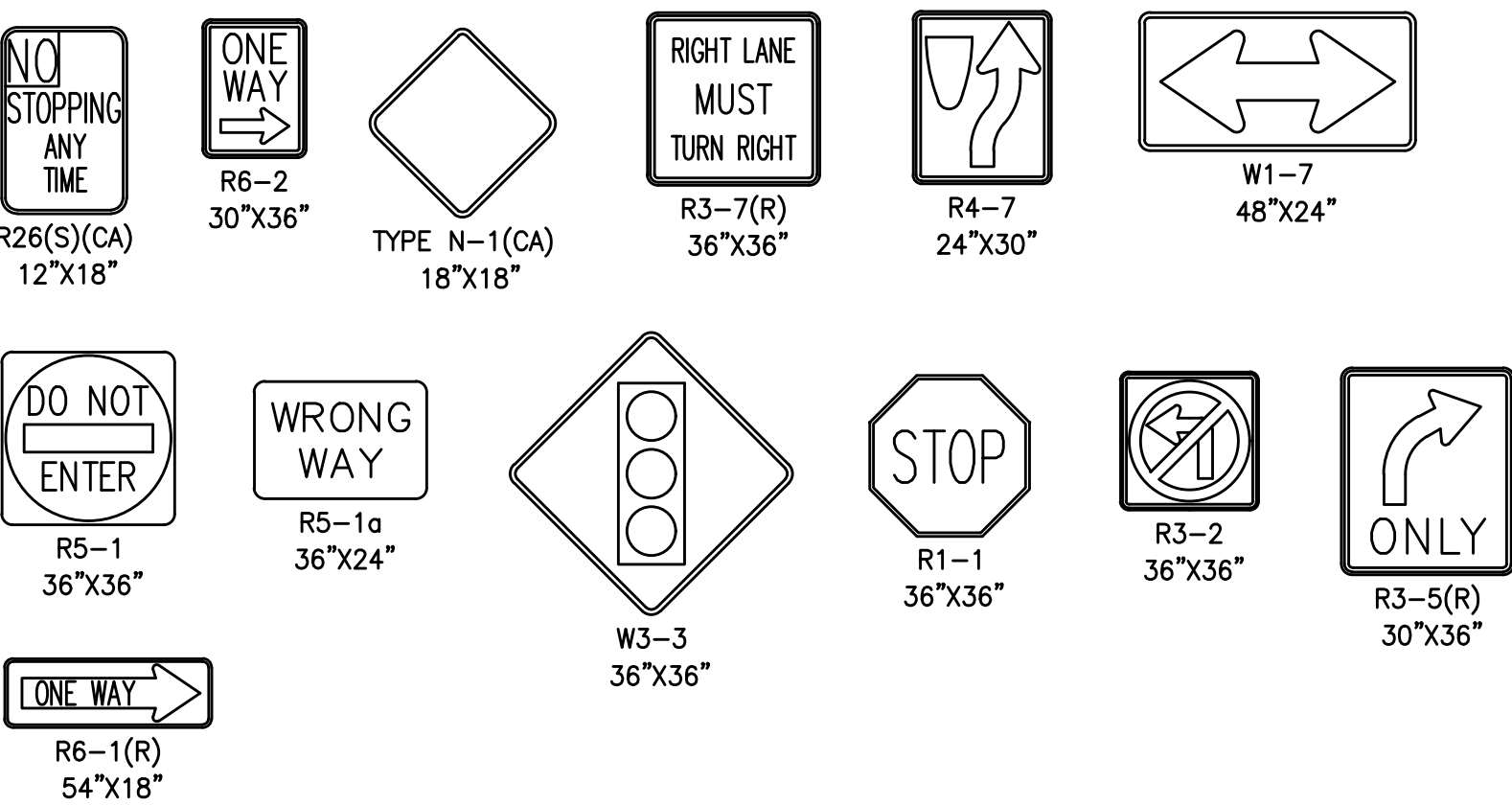
PLAN CHECK NO.
-
PERMIT NO.
-
PROJECT NO.
-
SHEET
26
OF
28

SIGNING AND STRIPING GENERAL NOTES:

- 1. SIGNING AND STRIPING SHALL CONFORM TO PART 2 SIGNS AND PART 3 MARKINGS OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND ANY ADDENDUMS THERE TO OR LATEST EDITION, THESE PLANS AND SPECIAL PROVISIONS.
- 2. DETAIL 9 LANE LINE STRIPING PATTERN IN PART 3 MARKINGS SHALL BE USED ON ALL MULTILANE STREETS REGARDLESS OF STREET DESIGN SPEED.
- 3. PAVEMENT LEGENDS SHALL MATCH THE CITY STENCILS OR EQUIVALENT,
- 4. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE REFLECTORIZED AND APPLIED IN TWO COATS. A MINIMUM OF SEVEN DAYS SHALL BE PROVIDED BETWEEN FIRST AND SECOND COATS.
- 5. ALL CONFLICTING STRIPINGS, PAVEMENT MARKINGS, AND CURB PAINT SHALL BE REMOVED BY WET SANDBLASTING OR OTHER APPROVED METHOD PRIOR TO INSTALLATION OF NEW STRIPING. ALL CONFLICTING RAISED PAVEMENT MARKERS SHALL BE REMOVED.
- 6. PAVEMENT THAT IS DAMAGED DUE TO REMOVAL OF MARKERS OR STRIPING SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY INSPECTOR.
- 7. THE CONTRACTOR SHALL CONTACT THE CITY OF IRVINE INSPECTION SERVICES FOR INSPECTION 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
- 8. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. IF CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE SHOWN ON THESE PLANS, THE CITY OF IRVINE INSPECTION SERVICES SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.
- 9. ALL WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.
- 10. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO PART 6 - TEMPORARY TRAFFIC CONTROL OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND ANY ADDENDUMS THERE TO OR LATEST EDITION AND ALL O.S.H.A. REQUIREMENTS.

- 11. THE CONTRACTOR SHALL HAVE ALL TRAFFIC CONTROL CONSTRUCTION SIGNS, DELINEATORS, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
- 12. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL SIGNS, DELINEATORS, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC WHILE WORKING IN THE STREET.
- 13. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED BY THE CITY INSPECTOR/ REPRESENTATIVE TO ASSURE PUBLIC SAFETY AT ALL TIMES.
- 14. THE CONTRACTOR SHALL UTILIZE A FLAGMAN DURING CONSTRUCTION WORK AS DEEMED NECESSARY BY THE CITY INSPECTOR.
- 15. ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURE ON ARTERIAL STREETS.
- 16. STRIPING SHALL BE CAT TRACKED AND APPROVED BY THE CITY INSPECTOR PRIOR TO FINAL INSTALLATION.
- 17. CROSSWALK SHALL CONFORM TO THE CITY OF IRVINE STANDARD PLAN NO. 203.
- 18. ALL SIGN FACE REFLECTIVE SHEETING SHALL BE HIGH INTENSITY GRADE WITH PROTECTIVE OVERLAY FILM.
- 19. ALL SIGN POSTS SHALL BE 2"x2" PERFORATED SQUARE TUBE INSTALLED WITH ACCOMPANYING SLEEVE PER THE CITY OF IRVINE REQUIREMENTS. CITY OF IRVINE SPECIAL SIGN R26EB SIGN SHALL BE INSTALLED ON "U" CHANNEL POST OR ON STREET LIGHT POLE.
- 20. ADVANCED STREET NAME SIGNS AND STREET NAME SIGNS SHALL BE SILVER LETTERS WITH "IRVINE BROWN" BACKGROUND.
- 21. BLUE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED ADJACENT TO ALL EXISTING FIRE HYDRANTS IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

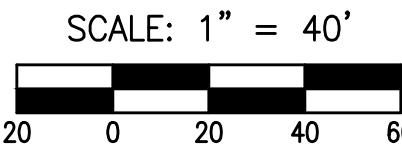
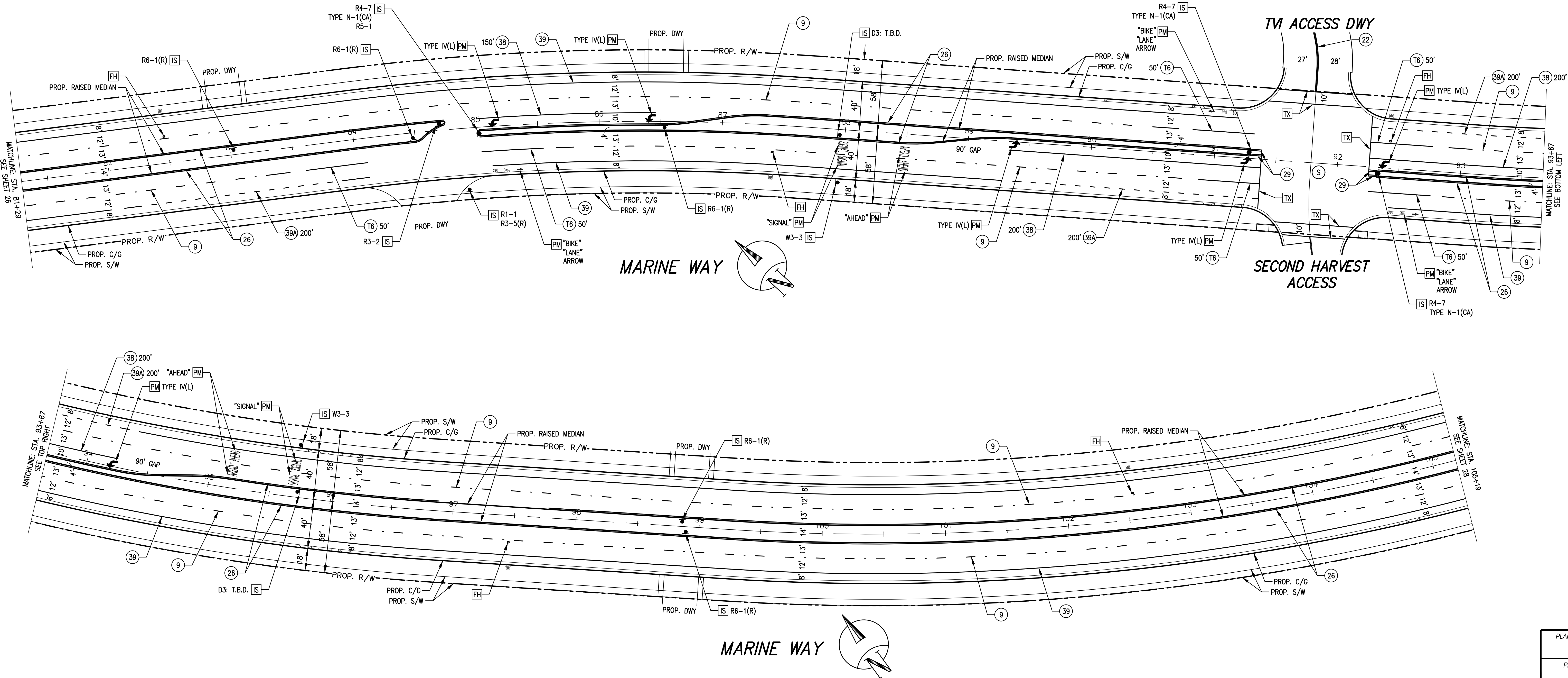
SIGN LEGEND:



SIGNING AND STRIPING CONSTRUCTION NOTES:

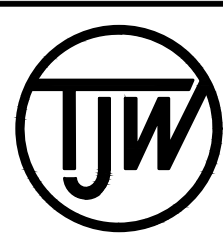
(E)	EXISTING SIGN TO REMAIN.
(FH)	INSTALL BLUE REFLECTIVE FIRE HYDRANT PAVEMENT MARKER PER CA MUTCD AND CALTRANS STANDARDS.
(IS)	INSTALL SIGN AND POST.
(RL)	RELOCATE EXISTING SIGN.
(RS)	REMOVE AND SALVAGE EXISTING SIGN AND POST.
(PM)	INSTALL THERMOPLASTIC PAVEMENT MARKING AS SHOWN PER CA-MUTCD STANDARDS.
(TX)	INSTALL THERMOPLASTIC 12" SOLID WHITE LIMIT LINE OR CROSSWALK PER CA-MUTCD STANDARDS.
(XX)	REMOVE CONFLICTING STRIPING OR MARKINGS BY WET SANDBLASTING PROCESS.
(T6)	INSTALL THERMOPLASTIC 6" SOLID WHITE LANE LINE STRIPE.
(9)	INSTALL THERMOPLASTIC 6" WHITE LANE LINE SKIP STRIPE PER CALTRANS STD. PLAN A20A - DETAIL 9.
(22)	INSTALL THERMOPLASTIC 6" DOUBLE YELLOW CENTERLINE STRIPE PER CALTRANS STD. PLAN A20A - DETAIL 22.
(26)	INSTALL RED-YELLOW RETROREFLECTIVE MARKER LEFT EDGELINE ALONG RAISED MEDIAN PER CALTRANS STD. PLAN A20B - DETAIL 26.
(29)	INSTALL THERMOPLASTIC 6" DOUBLE YELLOW MEDIAN STRIPE PER CALTRANS STD. PLAN A20B - DETAIL 29.
(38)	INSTALL THERMOPLASTIC 8" WHITE CHANNELIZING LANE LINE STRIPE PER CALTRANS STD. PLAN A20D - DETAIL 38.
(39)	INSTALL THERMOPLASTIC 6" WHITE BIKE LANE STRIPE PER CALTRANS STD. PLAN A20D - DETAIL 39.
(39A)	INSTALL THERMOPLASTIC 6" WHITE BIKE LANE INTERSECTION STRIPE PER CALTRANS STD. PLAN A20D - DETAIL 39A.

(S) SIGNALIZED INTERSECTION



NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE
7					
6					
5					
4					
3					
2					
1					

DRAWN BY:	KM	DATE	-
DESIGNED BY:	KM	DATE	-
CHECKED BY:		DATE	-



TJW ENGINEERING, INC.
Traffic Engineering &
Transportation Planning Consultants
9841 Irvine Center Dr., Suite 200, Irvine, CA 92618
t: (949) 878-3509 f: (949) 878-3593
www.tjwengineering.com

FOR PLANCHCK ONLY
THOMAS JOSEPH WHEAT R.C.E. No. 69467 Exp. 6/30/24

SIGNING AND STRIPING PLAN
MARINE WAY
from STA. 81+29 to STA. 105+19
CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

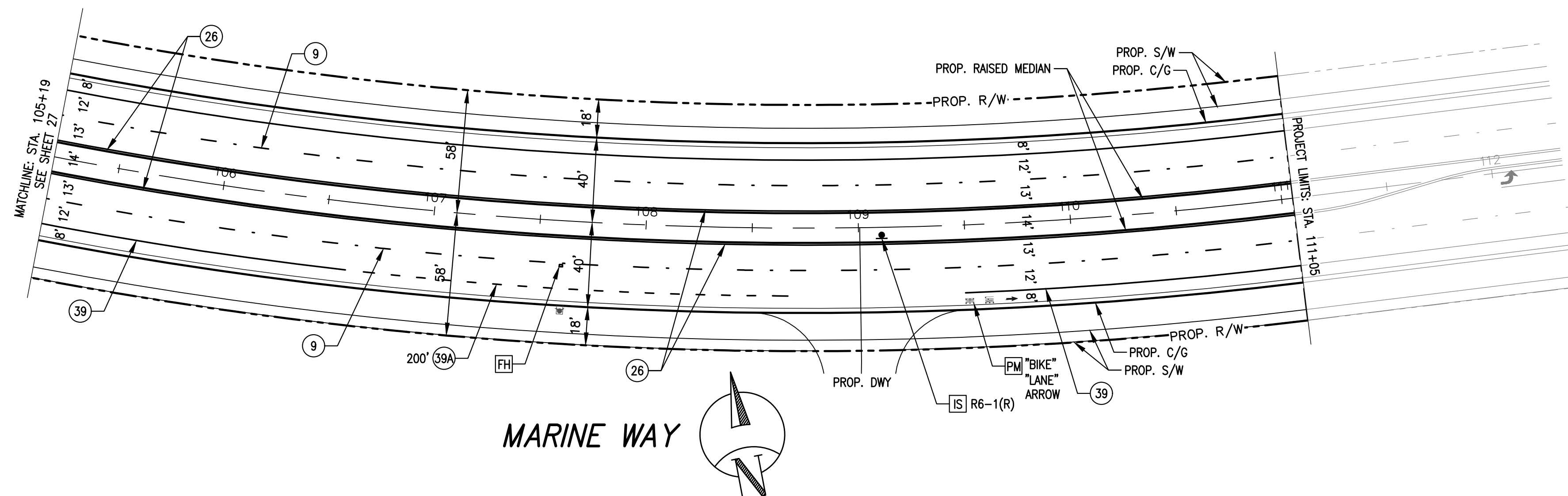
PLAN CHECK NO.	-
PERMIT NO.	-
PROJECT NO.	
SHEET	27 OF 28

1. SIGNING AND STRIPING SHALL CONFORM TO PART 2 SIGNS AND PART 3 MARKINGS OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND ANY ADDENDUMS THERE TO OR LATEST EDITION, THESE PLANS AND SPECIAL PROVISIONS.
2. DETAIL 9 LANE LINE STRIPING PATTERN IN PART 3 MARKINGS SHALL BE USED ON ALL MULTILANE STREETS REGARDLESS OF STREET DESIGN SPEED.
3. PAVEMENT LEGENDS SHALL MATCH THE CITY STENCILS OR EQUIVALENT,
4. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE REFLECTORIZED AND APPLIED IN TWO COATS. A MINIMUM OF SEVEN DAYS SHALL BE PROVIDED BETWEEN FIRST AND SECOND COATS.
5. ALL CONFLICTING STRIPINGS, PAVEMENT MARKINGS, AND CURB PAINT SHALL BE REMOVED BY WET SANDBLASTING OR OTHER APPROVED METHOD PRIOR TO INSTALLATION OF NEW STRIPING. ALL CONFLICTING RAISED PAVEMENT MARKERS SHALL BE REMOVED.
6. PAVEMENT THAT IS DAMAGED DUE TO REMOVAL OF MARKERS OR STRIPING SHALL BE REPAIRED TO THE SATISFACTION OF THE CITY INSPECTOR.
7. THE CONTRACTOR SHALL CONTACT THE CITY OF IRVINE INSPECTION SERVICES FOR INSPECTION 48 HOURS PRIOR TO BEGINNING OF CONSTRUCTION
8. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. IF CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE SHOWN ON THESE PLANS, THE CITY OF IRVINE INSPECTION SERVICES SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.
9. ALL WORK SHALL CONFORM TO THE PLANS AND SPECIFICATIONS IN ALL RESPECTS AND SHALL BE SUBJECT TO APPROVAL BY THE CITY ENGINEER.
10. ALL TRAFFIC CONTROL WORK FOR CONSTRUCTION SHALL CONFORM TO PART 6 - TEMPORARY TRAFFIC CONTROL OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) AND ANY ADDENDUMS THERE TO OR LATEST EDITION AND ALL O.S.H.A. REQUIREMENTS.

11. THE CONTRACTOR SHALL HAVE ALL TRAFFIC CONTROL CONSTRUCTION SIGNS, DELINEATORS, ETC., PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
12. THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC CONTROL SIGNS, DELINEATORS, ETC., TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC WHILE WORKING IN THE STREET.
13. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED BY THE CITY INSPECTOR/ REPRESENTATIVE TO ASSURE PUBLIC SAFETY AT ALL TIMES.
14. THE CONTRACTOR SHALL UTILIZE A FLAGMAN DURING CONSTRUCTION WORK AS DEEMED NECESSARY BY THE CITY INSPECTOR.
15. ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURE ON ARTERIAL STREETS.
16. STRIPING SHALL BE CAT TRACKED AND APPROVED BY THE CITY INSPECTOR PRIOR TO FINAL INSTALLATION.
17. CROSSWALK SHALL CONFORM TO THE CITY OF IRVINE STANDARD PLAN NO. 203.
18. ALL SIGN FACE REFLECTIVE SHEETING SHALL BE HIGH INTENSITY GRADE WITH PROTECTIVE OVERLAY FILM.
19. ALL SIGN POSTS SHALL BE 2"x2" PERFORATED SQUARE TUBE INSTALLED WITH ACCOMPANYING SLEEVE PER THE CITY OF IRVINE REQUIREMENTS. CITY OF IRVINE SPECIAL SIGN R26EB SIGN SHALL BE INSTALLED ON "U" CHANNEL POST OR ON STREET LIGHT POLE.
20. ADVANCED STREET NAME SIGNS AND STREET NAME SIGNS SHALL BE SILVER LETTERS WITH "IRVINE BROWN" BACKGROUND.
21. BLUE RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED ADJACENT TO ALL EXISTING FIRE HYDRANTS IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).

R6-1(R)
54"x18"

TYPE N-1(CA)
18"x18"



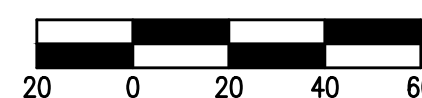
(E)	EXISTING SIGN TO REMAIN.
(FH)	INSTALL BLUE REFLECTIVE FIRE HYDRANT PAVEMENT MARKER PER CA MUTCD AND CALTRANS STANDARDS.
(IS)	INSTALL SIGN AND POST.
(RL)	RELOCATE EXISTING SIGN.
(RS)	REMOVE AND SALVAGE EXISTING SIGN AND POST.
(PM)	INSTALL THERMOPLASTIC PAVEMENT MARKING AS SHOWN PER CA--MUTCD STANDARDS.
(TX)	INSTALL THERMOPLASTIC 12" SOLID WHITE LIMIT LINE OR CROSSWALK PER CA--MUTCD STANDARDS.
(XX)	REMOVE CONFLICTING STRIPING OR MARKINGS BY WET SANDBLASTING PROCESS.
(T6)	INSTALL THERMOPLASTIC 6" SOLID WHITE LANE LINE STRIPE.
(9)	INSTALL THERMOPLASTIC 6" WHITE LANE LINE SKIP STRIPE PER CALTRANS STD. PLAN A20A -- DETAIL 9.
(22)	INSTALL THERMOPLASTIC 6" DOUBLE YELLOW CENTERLINE STRIPE PER CALTRANS STD. PLAN A20A -- DETAIL 22
(26)	INSTALL RED--YELLOW RETROREFLECTIVE MARKER LEFT EDGELINE ALONG RAISED MEDIAN PER CALTRANS STD. PLAN A20B -- DETAIL 26.
(29)	INSTALL THERMOPLASTIC 6" DOUBLE YELLOW MEDIAN STRIPE PER CALTRANS STD. PLAN A20B -- DETAIL 29.
(38)	INSTALL THERMOPLASTIC 8" WHITE CHANNELIZING LANE LINE STRIPE PER CALTRANS STD. PLAN A20D -- DETAIL 38.
(39)	INSTALL THERMOPLASTIC 6" WHITE BIKE LANE STRIPE PER CALTRANS STD. PLAN A20D -- DETAIL 39.
(39A)	INSTALL THERMOPLASTIC 6" WHITE BIKE LANE INTERSECTION STRIPE PER CALTRANS STD. PLAN A20D -- DETAIL 39A.

(S) SIGNALIZED INTERSECTION

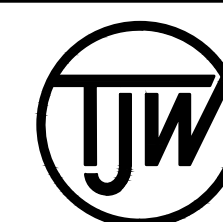
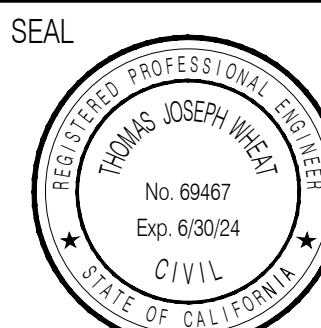


Know what's below.
Call before you dig.

SCALE: 1" = 40'

[illegible]

SEAL



TJW ENGINEERING, INC.
Traffic Engineering &
Transportation Planning Consultants
841 Irvine Center Dr., Suite 200, Irvine, CA 92618
t: (949) 878-3509 f: (949) 878-3593
www.tjwengineering.com

FOR PLANCHECK ONLY

THOMAS JOSEPH WHEAT R.C.E. No. 69467

Exp. 6/30/2

MARINE WAY
from STA. 105+19 to STA. 111+05

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.	—
PERMIT NO.	—
PROJECT NO.	

SHEET

28
OF 28

M I 00:44 7707/0/1 .2100d0 1607

[illegible]

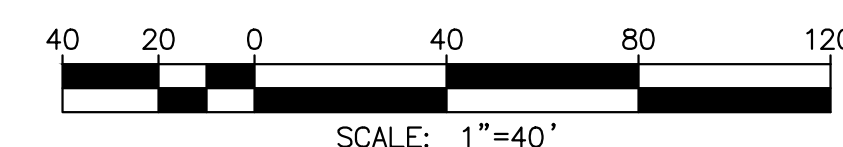
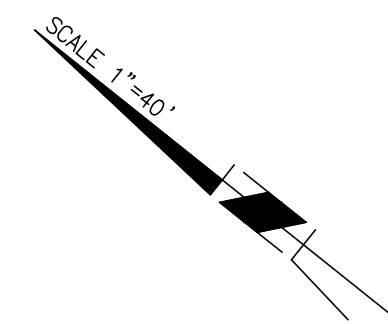
0361. 7-0000ALAGUWU

MO DATE: 01/11/2022 2:12:40 PM

☐ CAP PIPE END
☐ PROTECT IN PLACE
☐ REMOVE AND DISPOSE
☐ RELOCATE
☒ REMOVE AND SALVAGE
☐ SALVAGE

SAWCUT AND REMOVE
EX AC PAVEMENT

SAWCUT AND REMOVE
EX CONC PAVEMENT



NOTE:
CONTRACTOR TO MAINTAIN/ALLOW
OR PROVIDE ACCESS TO EXISTING
PROPERTY OWNERS ALONG THE
FRONTAGE ON MARINE WAY.



7					
6					
5					
4					
3					
2					
1					
NO.	DATE	REVISIONS	ENGR.	APPROV.	DATE

DRAWN BY: SR	DATE 4/18
DESIGNED BY: JCL	DATE 4/18
CHECKED BY: JCL	DATE 4/18

PLAN PREPARED BY:

PROACTIVE
ENGINEERING CONSULTANTS

27042 Towne Centre Drive, Suite 110
Foothill Ranch, CA 92610 (949) 716-7460

JEFFREY C. LANGDON R.C.E. 42429

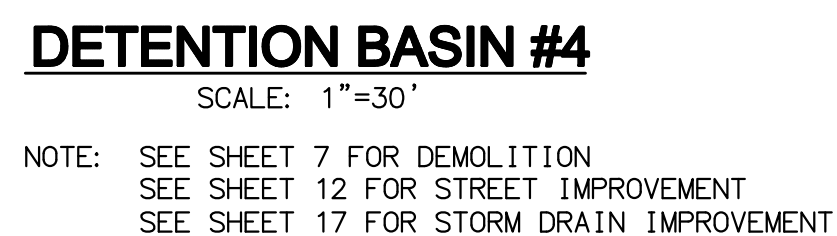
**CONSTRUCTION PLANS FOR THE IMPROVEMENT OF
MARINE WAY
DEMOLITION PLAN
FROM STA 81+30 TO STA 99+50**

CITY OF IRVINE
PUBLIC WORKS DEPARTMENT

PLAN CHECK NO.	00760917-EMC
PERMIT NO.	00766614-MCE

PROJECT NO.
20.059

SHEET
6A
OF **28**



- 5 INSTALL WOOD HEADER PER DETAIL ON SHEET 9
- 6 CONSTRUCT DRIVEWAY TYPE I PER CITY OF IRVINE STD. PLAN NO. 204 (WIDTH PER PLAN) $x=4'$
- 7 CONSTRUCT DRIVEWAY TYPE II PER CITY OF IRVINE STD. PLAN NO. 205 (WIDTH PER PLAN)
- 8 CONSTRUCT 8" AC CURB D1-8 PER SPWCC STD. PLAN 120-2 (SEE SHEET 23)
- 9 CONSTRUCT 4" AC OVER 8" CMB DRIVEWAY ON COMPACTED NATIVE PER SOILS ENGINEER
- 10 CONSTRUCT 4' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3
- 11 CONSTRUCT 3' WIDE CONCRETE V-DITCH PER DETAIL ON SHEET 3

(50) CONSTRUCT HEADWALL PER CALTRANS STD D89 (SEE SHEET 23)
 (66) INSTALL UNGROUTED RIP RAP PER DETAIL ON SHEET 15
 (70) INSTALL 18" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318
 (72) INSTALL 12" CSP (12 GAUGE) PER CITY OF IRVINE STD PLAN 318

	7						PLAN PREPARED BY: PROACTIVE ENGINEERING CONSULTANTS 27042 Towne Centre Drive, Suite 110 Foothill Ranch, CA 92610 (949) 716-7460	CONSTRUCTION PLANS FOR THE IMPROVEMENT OF MARINE WAY BASIN AND DRIVEWAY DETAILS	PROJECT NO. 20.059
	6								SHEET
	5								21 OF 28
	4								
	3								
	2								
	1								
NO.	DATE	REVISIONS		ENGR.	APPROV.	DATE	DRAWN BY: SR DATE 4/18 DESIGNED BY: JCL DATE 4/18 CHECKED BY: JCL DATE 4/18 JEFFREY C. LANGDON R.C.E. 42429 DATE	CITY OF IRVINE PUBLIC WORKS DEPARTMENT	