

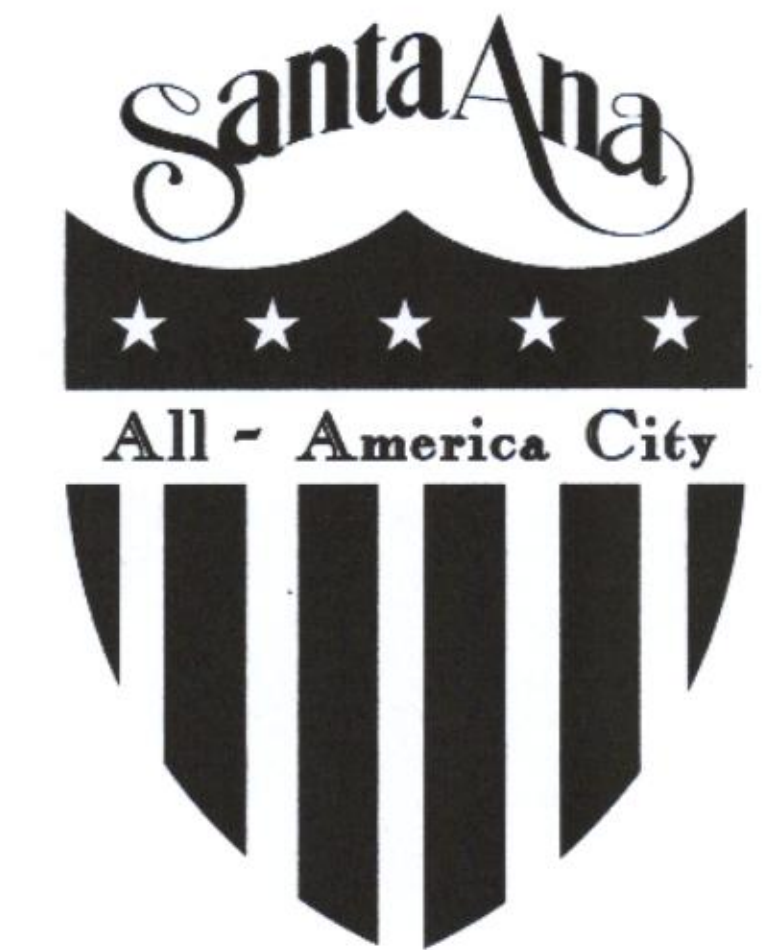


CITY OF SANTA ANA

PUBLIC WORKS AGENCY

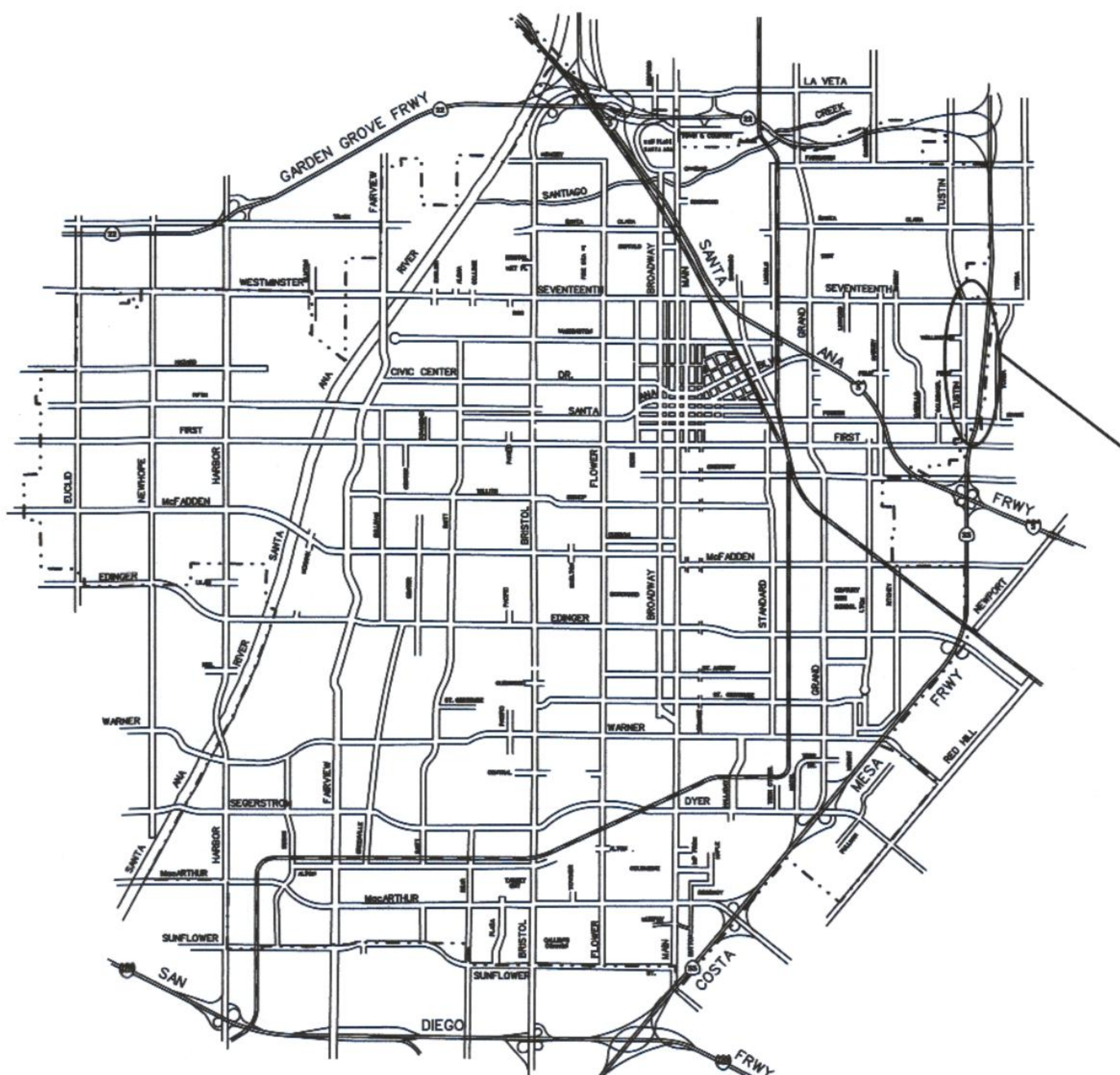
NE ANNEXATION

WATER IMPROVEMENTS: PROJECT NO. 21-6453
SEWER IMPROVEMENTS: PROJECT NO. 21-6619

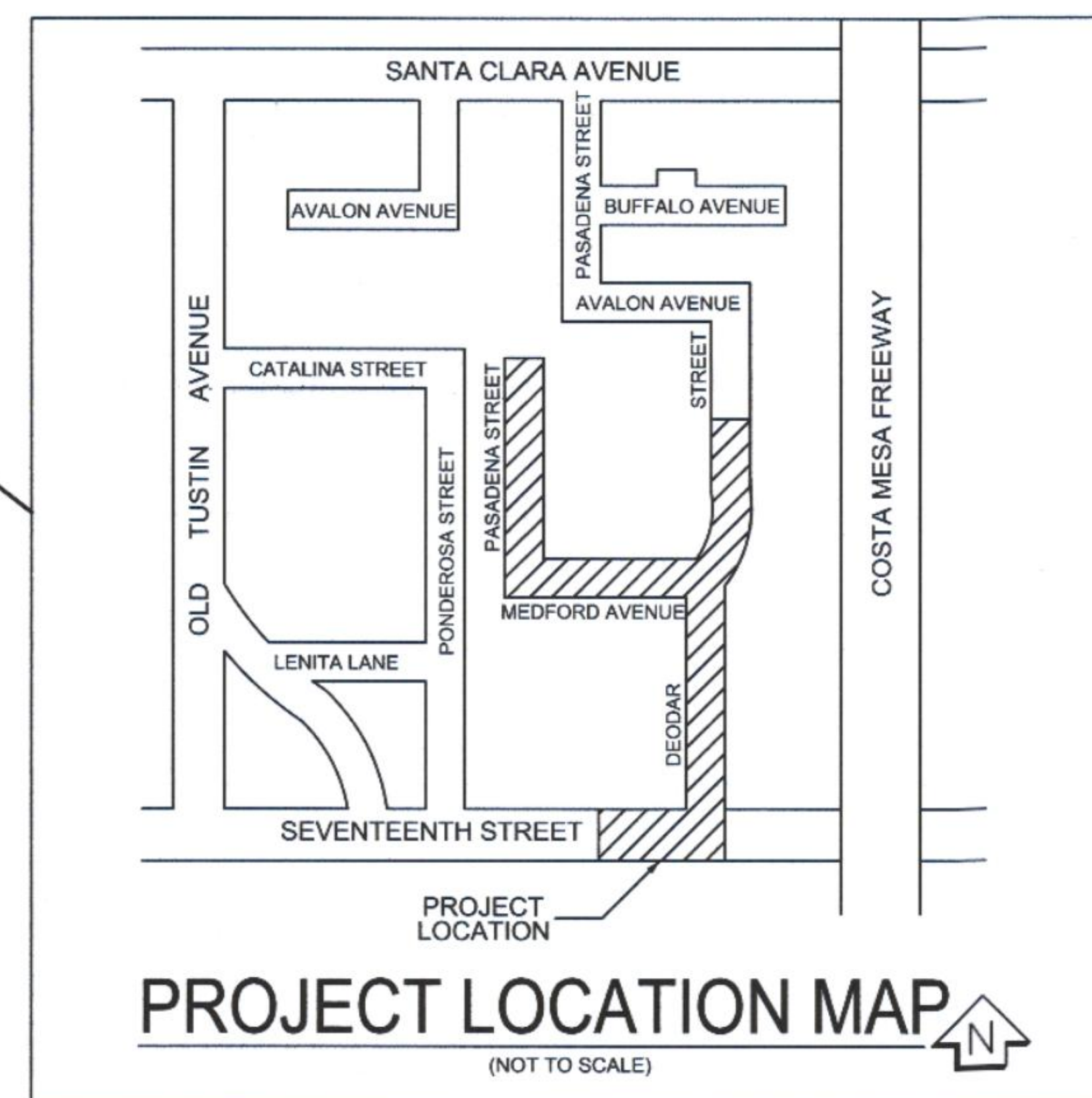


E 17TH STREET: FROM PONDEROSA ST TO CA-55 FWY
DEODAR STREET: FROM E 17TH ST TO E AVALON AVE
MEDFORD AVENUE: FROM DEODAR ST TO PASADENA ST
PASADENA STREET: FROM MEDFORD AVE TO CUL-DE-SAC

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SEWER IMPROVEMENTS	
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4	PASADENA STREET - STA. 10+50 TO 13+71
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15	DEODAR STREET - 17th STREET TO AVALON AVE



VICINITY MAP
(NOT TO SCALE)



UTILITIES

WATER	CITY OF TUSTIN	(714) 573-3375
SEWER	ORANGE COUNTY SANITATION DISTRICT	(714) 962-2411
DRAINAGE	CITY OF SANTA ANA	(714) 647-5074
	ORANGE COUNTY FLOOD CONTROL DISTRICT	(714) 667-4938
	CALTRANS DISTRICT 12	(657) 328-6000
GAS	SOUTHERN CALIFORNIA GAS COMPANY	(714) 634-3040
COMMUNICATION	CHARTER COMMUNICATIONS	(714) 591-4871
TELEPHONE	AT&T SUBSTRUCTURE	(714) 507-3256
POWER	SOUTHERN CALIFORNIA EDISON	(714) 895-0288

LEGEND

PROPOSED DOMESTIC WATER	— DW — DW —
PROPOSED SANITARY SEWER	— — — — —
RIGHT OF WAY	— — — — —
PROPERTY LINE	— — — — —
CENTERLINE	— — — — —
EXISTING SEWER	— — — — —
EXISTING DOMESTIC WATER	— DW — DW —
EXISTING GAS MAIN	— — — — —
EXISTING STORM DRAIN	— — — — —
EXISTING IRRIGATION	— — — — —
NAVY JET FUEL	— — — — —
PROPOSED SANITARY SEWER MANHOLE	— — — — —
EXISTING PALM TREE	— — — — —
EXISTING TREE	— — — — —
EXISTING SANITARY SEWER MANHOLE	— — — — —
EXISTING FIRE HYDRANT	— — — — —
PROPOSED FIRE HYDRANT	— — — — —
EXISTING GAS METER	— — — — —
EXISTING WATER METER	— — — — —
EXISTING STREET LIGHT	— — — — —
EXISTING GATE VALVE	— — — — —

ABBREVIATIONS

AC	ASBESTOS CEMENT
BC	BEGIN CURVE
BOP	BOTTOM OF PIPE
CL	CENTERLINE
DIP	DUCTILE IRON PIPE
DW	DOMESTIC WATER
EC	END CURVE
EX	EXISTING
INT	INTERSECTION
INV	INVERT
LAT	LATERAL
MH	MANHOLE
PL	PROPERTY LINE
PROP.	PROPOSED
R/W	RIGHT OF WAY
SD	STORM DRAIN
SS	SANITARY SEWER
STA	STATION
TOP	TOP OF PIPE
TYP.	TYPICAL
VCP	VITRIFIED CLAY PIPE



Underground Service Alert
of Southern California
TWO WORKING DAYS
BEFORE YOU DIG



NOTICE TO CONTRACTOR

PURSUANT TO ASSEMBLY BILL 3019 NO EXCAVATION PERMIT IS VALID UNLESS THE CONTRACTOR CONTACTS AND OBTAINS AN INQUIRY I.D. NUMBER FROM "UNDERGROUND SERVICE ALERT" (1-800-422-4133) AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING EXCAVATION.

APPROVALS:

NABIL SABA, PE EXECUTIVE DIRECTOR PUBLIC WORKS AGENCY	4/5/2023 DATE
CESAR E. BARRERA, PE DEPUTY PUBLIC WORKS DIRECTOR/ WATER RESOURCES MANAGER	6/5/2023 DATE
RODOLFO ROSAS, PE CITY ENGINEER	6/5/23 DATE



PREPARED UNDER THE SUPERVISION OF:

Miguel Hernandez	06/02/2023 DATE
R.C.E. NO. 61378	

SHEET 1 OF 15

SS-121, W-464

BAR MEASURES 1 INCH

NE ANNEXATION WATER & SEWER MAIN IMPROVEMENTS

PROJECT NOS. 21-6453 & 21-6619

GENERAL NOTES

1.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2018 EDITION OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" AS WRITTEN AND PROMULGATED BY THE PUBLIC WORKS STANDARDS, INC., HEREIN REFERRED TO AS THE STANDARD SPECIFICATIONS, AND THE CITY OF SANTA ANA STANDARD PLANS & SPECIFICATIONS (UNLESS SPECIFICALLY NOTED OTHERWISE OR IN THE SPECIAL PROVISIONS FOR THIS PROJECT.
2.

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY OR STRUCTURE SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. NO CERTIFICATION IS MADE AS TO ACCURACY OR THOROUGHNESS OF THESE RECORDS. APPROVAL OF THIS PLAN BY THE CITY OF SANTA ANA DOES NOT CONSTITUTE AN EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY OR SUBSTRUCTURE WITHIN THE LIMITS OF THIS PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES (BY POTHOLING OR OTHER MEANS). THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (811) 48 HOURS BEFORE ANY EXCAVATION.
3.

THESE CONSTRUCTION DOCUMENTS WERE CREATED FROM DIGITIZED BASE INFORMATION PROVIDED BY THE CITY OF SANTA ANA. EXACT LAYOUTS OF ALL HARDSCAPE ELEMENTS MAY NEED TO BE MODIFIED AND SOME FIELD ADJUSTMENTS MAY BE NECESSARY. THE CONTRACTOR SHALL INCLUDE AS PART OF THE BID, TIME AND LABOR FOR ANY MODIFICATIONS NECESSARY TO IMPLEMENT THE INTENT OF THE DRAWINGS.

SEWER GENERAL NOTES

1.

CONSTRUCTION AND INSTALLATION OF ALL SEWER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CITY OF SANTA ANA STANDARD PLANS AND SPECIFICATIONS. WHERE THE STANDARD PLANS ARE SILENT, CONSTRUCTION AND INSTALLATION OF SEWER MAINS AND APPURTENACES SHALL CONFORM TO THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) SPECIFICATIONS.
2.

CONSTRUCTION OF SEWER MAINS AND APPURTENANCES SHALL ONLY BE PERFORMED BY QUALIFIED CONTRACTORS WITH A VALID CALIFORNIA CONTRACTOR A OR C34 LICENSE.
3.

ALL NEWLY CONSTRUCTED SEWER MAINS AND APPURTENANCES SHALL BE TESTED IN ACCORDANCE WITH APWA SPECIFICATIONS. ALL NEWLY CONSTRUCTED SEWER MAINS, LATERALS AND MANHOLES MUST BE INSPECTED VIA CLOSED CIRCUIT TELEVISION CAMERA BY A NATIONAL ASSOCIATION OF SEWER SERVICE COMPANIES (NASSCO) CERTIFIED TECHNICIAN AND VIDEO SUBMITTED IN A DIGITAL FORMAT TO THE WATER RESOURCES DIVISION FOR REVIEW AND FINAL ACCEPTANCE OF WORK.
4.

ALL SEWER MAINS SHALL BE VITRIFIED CLAY PIPE (VCP) PIPE OR PVC SDR-26 PIPE. ALL OTHER PIPE MATERIALS REQUIRE SPECIAL REVIEW AND APPROVAL FROM THE WATER RESOURCES DIVISION.
5.

TRENCH PLATES SHALL BE FLUSH WITH PAVEMENT.
6.

CONTRACTOR TO VERIFY DEPTH AND LOCATION OF ALL UTILITIES PRIOR TO TRENCHING.
7.

WHEN PUBLIC SEWER FACILITIES ARE LOCATED ON PRIVATE PROPERTY, EASEMENT DOCUMENTS ARE TO BE SUBMITTED TO CITY FOR APPROVAL PRIOR TO A PERMIT BEING ISSUED.
8.

FINAL ACCEPTANCE WILL NOT OCCUR UNTIL ORIGINAL RECORD DRAWINGS ON MYLAR AND DIGITAL FORMAT ARE DELIVERED AND ACCEPTED BY THE CITY'S INSPECTOR. SHOW ALL FILED CHANGES ON RECORD DRAWINGS.
9.

ALL SEWER REPAIRS SHALL BE ACCOMPLISHED USING STAINLESS STEEL DOUBLE BANDED COUPLINGS.

WATER GENERAL NOTES

1.

CONSTRUCTION AND INSTALLATION OF ALL WATER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CITY OF SANTA ANA STANDARD PLANS AND SPECIFICATIONS. WHERE THE STANDARD PLANS ARE SILENT, CONSTRUCTION AND INSTALLATION OF WATER MAINS AND APPURTENANCES SHALL CONFORM TO THE AMERICAN WATER WORKS ASSOCIATION (AWWA) SPECIFICATIONS AND THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) SPECIFICATIONS.
2.

CONSTRUCTION OF WATER MAINS AND APPURTENANCES SHALL ONLY BEPERFORMED BY QUALIFIED CONTRACTORS WITH A VALID CALIFORNIA CONTRACTOR A OR C34 LICENSE.
3.

NO PERSON, OTHER THAN CITY OF SANTA ANA WATER RESOURCES DIVISION STAFF CERTIFIED BY THE STATE OF CALIFORNIA AS A WATER DISTRIBUTION OPERATOR, SHALL BE ALLOWED TO OPERATE THE CITY'S WATER SYSTEM VALVES.
4.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE CITY FOR REVIEW AND APPROVAL "DISINFECTION AND FLUSHING PLAN" PER THE CITY OF SANTA ANA DESIGN GUIDELINES AND STANDARD DRAWINGS.
5.

ALL NEWLY CONSTRUCTED WATER MAINS AND APPURTENANCES SHALL BE DISINFECTED AND TEST IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION STANDARD C600'S, PRIOR TO CONNECTING TO THE CITY'S WATER DISTRIBUTION SYSTEM. DISINFECTING TESTING RESULTS SHALL BE SUBMITTED TO THE WATER RESOURCES DIVISION FOR REVIEW AND APPROVAL PRIOR TO CONNECTING TO THE CITY'S WATER DISTRIBUTION SYSTEM.
6.

WATER MAINS WILL BE HYDROSTATIC TESTED AT 200 PSI FOR 2 HOURS. NEW WATER MAINS CANNOT BE TESTED AGAINST EXISTING VALVE BUT CAN BE TESTED USING A TEST PLATE.
7.

REQUESTS TO SHUT-DOWN THE WATER DISTRIBUTION SYSTEM FOR TIE-INS OR OTHER PURPOSES SHALL BE COORDINATED WITH THE WATER RESOURCES DIVISION STAFF AT LEAST 2 WEEKS IN ADVANCE THROUGH THE CITY INSPECTOR. ALL CUSTOMERS AFFECTED BY THE PROPOSED SHUT DOWN SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE BY THE CONTRACTOR.
8.

THE CITY IF SANTA ANA WATER RESOURCES DIVISION CANNOT GUARANTEE A COMPLETE SHUTDOWN OF EXISTING MAINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND ISOLATION OF CONSTRUCTION FOR TESTING OF ANY OTHER PURPOSES.
9.

ALL FIRE HYDRANTS WHICH ARE OUT OF SERVICE OR NEW FIRE HYDRANTS WHICH HAVE NOT BEEN ACCEPTED FOR SERVICE SHALL BE COVERED WITH A SACK INDICATING THAT THE HYDRANTS ARE NOT IN SERVICE.
10.

MAINTAINING WATER SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR FOR ANY SHUTDOWN LASTING LONGER THAN FOUR (4) HOURS. METHOD OF PROVIDING TEMPORARY SERVICE MUST BE APPROVED BY THE WATER RESOURCES DIVISION. THE WATER SHALL BE SAFE FOR DRINKING IN ACCORDANCE WITH STATE OF CALIFORNIA WATER RESOURCES CONTROL BOARD (SWRCB) DRINKING WATER PROGRAM (DWP).

WATER GENERAL NOTES (CONTINUED)

11.

WATER METER WILL NOT BE INSTALLED OR WATER TURNED ON UNTIL THE BACKFLOW DEVICES REQUIRED FOR THE BUILDING AND IRRIGATION SYSTEMS HAVE BEEN INSTALLED, TESTED, APPROVED AND CERTIFIED, AND APPROVED AND SIGNED OFF BY THE CITY, CONTACT WATER RESOURCES DIVISION AT 714-647-3320.
12.

ALL WATER MAINS SHALL BE AWWA-C900 PVC, DR14 PIPE OR AWWA C-151 DUCTILE IRON PIPE. ALL OTHER PIPE MATERIALS REQUIRE SPECIAL REVIEW AND APPROVAL FROM THE WATER RESOURCES DIVISION.
13.

WATER MAINS SHALL HAVE 36" MINIMUM COVER TO FINISHED GRADE. ANY DEVIATION FROM THIS REQUIREMENT REQUIRES APPROVAL FROM THE WATER RESOURCES DIVISION.
14.

CONTRACTOR TO VERIFY DEPTH AND LOCATION OF ALL UTILITIES AND POINTS OF CONNECTION PRIOR TO TRENCHING.
15.

PRIVATE WATER APPURTENANCES SUCH AS BACKFLOW PREVENTERES, FIRE HYDRANTS AND STANDPIPES, AND VALVES SHALL BE PAINTED AS FOLLOWS:
A. DOMESTIC WATER: BLUE
B. POTABLE IRRIGATION: GREEN
C. RECYCLED IRRIGATION: PURPLE
D. FIRE PROTECTION: OSHA SAFETY RED
16.

DO NOT CUT OR SNAP CUT OR MILL ASBESTOS CEMENT PIPE. WHERE JOINING EXISTING ASBESTOS CEMENT PIPE, EXPOSE SIX FEET IN EACH DIRECTION, LOOKING FOR THE NEARING JOINT AND JOIN TO NEW PIPE WITH A PROPERLY DIMENSIONED ADAPTER PER STANDARD PLAN NUMBER 1443.
17.

DO NOT TAP EXISTING MAINS WITHOUT THE PRESENCE OF A CERTIFIED PUBLIC WORKS INSPECTOR. PRESSURE TEST TAPPING SLEEVE IN THE PRESENCE OF A CERTIFIED PUBLIC WORKS INSPECTOR BEFORE TAPPING EXISTING MAIN.
18.

FINAL ACCEPTANCE WILL NOT OCCUR UNTIL ORIGINAL RECORD DRAWINGS ON MYLAR AND DIGITAL FILE ARE DELIVERED TO AND ACCEPTED BY THE CITY'S INSPECTOR. SHOW ALL FIELD CHANGES ON RECORD DRAWINGS.
19.

TRENCH PLATES SHALL BE FLUSH WITH PAVEMENT AND SHALL BE NON-SKID.
20.

WHEN PUBLIC WATER FACILITIES ARE LOCATED ON PRIVATE PROPERTY, EASEMENT DOCUMENTS ARE TO BE SUBMITTED TO CITY FOR APPROVAL PRIOR TO A PERMIT BEING ISSUED.
21.

ALL RECYCLED WATER PROJECTS REQUIRE REVIEW AND APPROVAL BY THE WATER RESOURCES DIVISION.
22.

REMOVE FROM THE FIELD UPPER AND LOWER FIRE HYDRANTS DRY BARREL AND 24" X 36" IRON VAULT LID COVERS AND DELIVER UNDAMAGED TO THE CITY WATER RESOURCES DIVISION YARD LOCATED AT 215 S. CENTER STREET. PRIOR NOTIFICATION ON THE DELIVERY IS REQUIRED AT 714-647-3320.
23.

WATER MAIN FITTINGS SHALL BE FLANGE OR MECHANICAL JOINTS ONLY, NO PUSH-ON JOINT FITTINGS ALLOWED.
24.

CONTRACTOR SHALL NOT REMOVE OR DISPOSE EXISTING WATER METERS. CONTRACTOR SHALL APPLY FOR AN ABANDON WATER METER APPLICATION. CONTRACTOR SHALL CONTACT WATER RESOURCES DIVISION AT 714-647-3320 FOR EXISTING METER REMOVALS.
25.

INSTALLATION OF NEW METER SERVICE CURB STOP SHALL BE DONE AFTER INSTALLATION OF NEW CURB AND GUTTER OR AFTER CONTRACTOR HAS ESTABLISHED THE PROPOSED CURB GRADE BY STAKING OF THE PROPOSED CURB.

STREET GENERAL NOTES

1.

ALL WORK SHOWN HEREON SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF THE AGCIAPWA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2018 EDITION) AND SUPPLEMENTAL STANDARD PROVISIONS ISSUED BY AND FOR USE IN THE CITY OF SANTA ANA.
2.

CONTRACTOR SHALL COMPLY WITH STANDARD PLAN NO. 1160, REFER TO [HTTPS://WWW.SANTANAA.ORG/SITES/DEFAULT/FILES/DOCUMENTS/1160_ST.PDF](https://www.santanaa.org/sites/default/files/documents/1160_ST.PDF). COPIES ARE AVAILABLE AT THE PUBLIC WORKS COUNTER.
3.

WITHIN 72-HOURS AFTER FINAL SURFACING IS PLACED, ALL MANHOLE AND VALVE BOX FRAMES AND COVERS SHALL BE ADJUSTED BY THE DEVELOPER TO FINISH GRADE. THIS IS TO BE DONE PRIOR TO PLACING SEAL COAT.
4.

WHEN CONSTRUCTION OF ASPHALT CONCRETE (AC) PAVEMENT INCLUDES REPLACEMENT OF PAVEMENT OVER TRENCHES, PATCHES OR CUTS OR AN AC OVERLAY, PAVEMENT SHALL BE COVERED WITH PENETRATION TYPE ASPHALT EMULSION (0.07 GALLONS PER SQUARE YARD) AFTER STREET PAVEMENT HAS BEEN CLEANED. FOG SEAL COAT IS NOT REQUIRED FOR CONSTRUCTION OF NEW STREETS OR WIDENING OF EXISTING STREETS.
5.

FEATHER AC WHERE MEETING EXISTING PAVEMENT. FEATHER TO LANE LINE OR A MINIMUM OF 10 FEET OR AS DIRECTED BY THE CITY ENGINEER.
6.

THE ENGINEER FOR THE SUBDIVIDER SHALL PROVIDE HUBS IN THE STREET FOR FINISHED SUBGRADE AND FINISHED GRADE AT THE CROWN, AT ALL POINTS WHERE ELEVATIONS ARE SHOWN ON THE PLANS AND AT ANY ADDITIONAL POINTS REQUIRED BY THE CITY ENGINEER.
7.

AT THE TIME OF COMPACTING THE BASE SOIL AND PREPARING SUBGRADE, IF THE MOISTURE CONTENT IS SUCH THAT THE SPECIFIED RELATIVE COMPACTION CANNOT BE OBTAINED OR THE SUBGRADE IS YIELDING, THE FOLLOWING REMEDIAL ACTION SHALL BE PROVIDED:
A. REMOVE EXCESS MOISTURE BY SCARIFYING AND AERATING, OR
B. EXCAVATE UNSTABLE AREAS AND BACKFILL WITH SUITABLE MATERIAL OR BASE, OR
C. INCREASE THE AGGREGATE BASE SECTION, OR
D. STABILIZE THE BASEMENT SOIL WITH SUITABLE ADDITIVES, OR
E. PROVIDE AN ALTERNATE METHOD SUITABLE TO THE CITY ENGINEER.
8.

WATER MAINS AND SERVICES ARE TO BE INSTALLED BY THE DEVELOPER AFTER THE CURB AND GUTTER IS CONSTRUCTED AND BEFORE THE BASE UNDER THE AC SURFACING IS LAID. CONTACT WATER DIVISION SUPERVISOR AT (714) 647-3343 TO ARRANGE SCHEDULING FOR WATER SYSTEM WORK BY THE CITY.
9.

THE SUBDIVIDER SHALL RELOCATE ANY EXISTING PUBLIC UTILITIES LOCATED IN A DEDICATED RIGHT-OF-WAY, AS REQUIRED BY THE CITY.

STREET GENERAL NOTES (CONTINUED)

10.

PERMIT NOTE- NO PERMIT WILL BE ISSUED FOR INSTALLATION OF UNDERGROUND UTILITY LINES UNTIL SAID UTILITY LINES ARE SHOWN ON THE STREET IMPROVEMENT PLANS AND THEIR LOCATIONS ARE CERTIFIED BY THE PRIVATE ENGINEER AND APPROVED BY THE CITY.
11.

VCP SEWER CONNECTIONS ARE TO BE CONSTRUCTED FROM SEWER MAIN. ^{1/4" MIN} VCP TO THE PROPERTY LINE. THE DEVELOPER IS TO FURNISH THE CITY WITH THE LOCATION OF EACH CONNECTION. ALL SEWER LATERALS ARE TO BE REFERENCED ON CURB.
12.

ALL VCP JOINTS SHALL BE PLASTIC MECHANICAL COMPRESSION JOINTS OR BANDSEALS.
13.

IT SHALL BE THE RESPONSIBILITY OF THE SEWER CONTRACTOR TO EXPOSE ALL JOIN POINTS TO THE EXISTING SEWER AND TO HAVE THE LOCATION AND ELEVATION VERIFIED PRIOR TO ANY SEWER STAKES BEING FURNISHED.
14.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL FLOW LINE ELEVATIONS AT ALL SEWER MANHOLES VERIFIED PRIOR TO ANY PIPE BACKFILL. "AS BUILT" FLOW LINE ELEVATIONS ARE TO BE SUBMITTED TO THE CITY PRIOR TO ANY PAVING.
15.

CALL UNDERGROUND SERVICE ALERT AT (800) 422-4133 AT LEAST 48 HOURS (TWO WORKING DAYS) PRIOR TO ANY EXCAVATION WHICH MAY DAMAGE OR INTERRUPT THE SERVICE OF ANY UNDERGROUND UTILITY LINE.
16.

USE FULL-DEPTH HEADER FOR VERTICAL FACES OF PCC CONSTRUCTION.
17.

ANY PERMANENT BARRICADE OR SAFETY SIGN OMITTED ON THE PLANS AND CONSIDERED NECESSARY BY THE CITY SHALL BE INSTALLED BY THE DEVELOPER AT NO COST TO THE CITY.
18.

STREET LIGHTING- BEFORE ANY ELECTRICAL CABLE OR CONDUIT IS PLACED FOR STREET LIGHTS, THE LOCATIONS FOR THE PROPOSED STREET LIGHTS ARE TO BE VERIFIED BY THE CONSTRUCTION INSPECTOR AT (714) 647-5074 AFTER THESE LOCATIONS HAVE BEEN MARKED OUT AS SHOWN ON THE IMPROVEMENT PLANS BY THE DEVELOPER/CONTRACTOR.
19.

CLEANUP AND DUST CONTROL THE CONTRACTOR SHALL KEEP THE WORKSITE CLEAN AND FREE FROM RUBBISH AND DEBRIS AT THE END OF EVERY WORKING DAY AND PROTECT EXISTING IMPROVEMENTS PER SECTION 7-9 OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION.
20.

CONTACT TREE SECTION SUPERVISOR AT (714) 647-3337 BEFORE INSTALLING ANY TREES.
21.

TO OBTAIN A PERMIT TO ACCESS WATER FROM A FIRE HYDRANT, CONTACT THE CITY YARD AT (714) 647-3380.

PROJECT QUANTITIES

6" CLASS 305 (DR14) C900 P.V.C. PIPE	5	LF
8" CLASS 305 (DR14) C900 P.V.C. PIPE	2000	LF
12" CLASS 305 (DR14) C900 P.V.C. PIPE	290	LF
1" COPPER WATER SERVICE	51	EA
2" COPPER WATER SERVICE	2	EA
8" RESILIENT WEDGE GATE VALVE	4	EA
FIRE HYDRANT	8	EA
REMOVE FIRE HYDRANT	1	EA
STEEL CASING	60	LF
VERTICAL OFFSET	18	LF
8" SDR-26 P.V.C. PIPE	660	LF
4" SEWER LATERAL AND CLEANOUT (OPEN TRENCH)	28	EA
REMOVE EXISTING MANHOLE STRUCTURE	1	EA
NEW MANHOLE STRUCTURE	4	EA
CCTV INSPECTION OF NEW SEWER MAIN	660	LF
CCTV INSPECTION OF NEW LATERAL	29	EA
UNCLASSIFIED EXCAVATION	1184	CY
ASPHALT RUBBER HOT MIX (2" MIN)	826	TN
COLD MILL (2")	68387	SF
PCC SIDEWALK (T=4")	2493	SF
PCC DRIVEWAY APPROACH (T=6")	1988	SF
PCC CURB & GUTTER (A-2-6)	1281	LF
6" DIAMETER LOOP DETECTOR	2	EA
STRIPPING	1	LS

SEWER CONSTRUCTION NOTES:

- 7

CONSTRUCT 8" SDR-26, P.V.C. SEWER MAIN. TRENCH, BEDDING, BACKFILL, AND PAVING PER DETAIL ON SHEET 6.
- 15

CONSTRUCT 4" P.V.C. SDR 26 SEWER LATERAL AND CLEANOUT FROM SEWER MAIN TO P.L. PER CITY STD. PLAN NO. 1204. SEE NOTE.
- 21

CONSTRUCT NEW MANHOLE PER CITY STD. PLAN NO. 1201. (FOR P.V.C. FURNISH AND INSTALL MANHOLE WATER STOP RUBBER GASKET AT OUTER AND INNER WALL FOR EACH MANHOLE CONNECTION).
- 25

MANHOLE CHANNELIZATION PER DETAIL ON SHEET 6.
- 26

REMOVE EXISTING MANHOLE

WATER CONSTRUCTION NOTES:

- 30

CONSTRUCT 8" CLASS 305 (DR14), AWWA C900, PVC WATER MAIN. PER DETAIL ON SHEET 11.
- 31

CONSTRUCT NEW 1" WATER SERVICE PER CITY STD. PLAN NO. 1401 NEXT TO EXISTING SERVICE. CONTRACTOR TO TIE OVER AFTER CITY INSTALLS NEW METER.
- 32

CONSTRUCT 8" GATE VALVE (MJ X MJ) PER CITY STD. PLAN 1410.
- 33

CONSTRUCT 8" 90° BEND (MJ X MJ).
- 34

CONSTRUCT 8" 45° BEND (MJ X MJ).
- 36

CONSTRUCT 8" 11½° BEND (MJ X MJ).
- 38

CONSTRUCT 8" X 8" TEE (FLG X FLG).
- 39

CONSTRUCT NEW FIRE HYDRANT ASSEMBLY PER CITY STD. PLAN NO. 1405.
- 44

CONSTRUCT THRUST BLOCK PER CITY STD. PLAN NO. 1412.
- 45

CONSTRUCT 8" CAP WITH 2" BLOW OFF PER CITY STD. PLAN NO. 1414.
- 46

CONSTRUCT VALVE ANCHOR PER CITY STD. PLAN NO. 1419.
- 47

SEE TYPICAL CONNECTION PER DETAIL HEREON.
- 48

FURNISH AND INSTALL STEEL CASING PER CITY STD. PLAN NO. 1429. STEEL CASING LIMITS PER PLAN.
- 49

CONSTRUCT 6" X 8" REDUCER (MJ X MJ).
- 50

CONSTRUCT 8" X 12" REDUCER (MJ X MJ).
- 51

CONSTRUCT 12" 90° BEND (MJ X MJ).
- 52

CONSTRUCT 2" WATER SERVICE PER CITY STD. PLAN NO. 1402. FROM NEW WATER MAIN TO EXISTING WATER METER, RESET METER AND RECONNECT TO CUSTOMER LINE.
- 53

CONSTRUCT 12" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN. PER DETAIL ON SHEET 11.
- 55

CONSTRUCT 6" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN PER DETAIL ON SHEET 11.
- 56

CONSTRUCT TYPE 2 VERTICAL OFFSET PER CITY STD. PLAN NO. 1413B.
- 56

REMOVE AND SALVAGE EXISTING FIRE HYDRANT FROM BURY. TRANSPORT TO CITY YARD.
- 57

INSTALL ENVIROPOD LITTATRAP FILTER IN CATCH BASINS.

STREET CONSTRUCTION NOTES:

- 1

CONSTRUCT DRIVEWAY P.C.C. APPROACH PER CITY OF SANTA ANA STD. 1112. CASE PER PLAN. T=6"
- 2

CONSTRUCT P.C.C. SIDEWALK (CASE 1) PER CITY OF SANTA ANA STD. 1104 (A-2-6). W PER PLAN.
- 3

CONSTRUCT P.C.C. CURB AND GUTTER A-2-6 PER CITY OF SANTA ANA STD. 1101.
- 5

COLDMILL 2" AC AND CONSTRUCT ASPHALT RUBBER HOT MIX 2" MIN.
- 6

REMOVE TOP 2' OF SOIL AND RECOMPACT TO 90%
- 7

ADJUST MANHOLE TO GRADE PER CITY OF SANTA ANA STD. 1201.
- 8

CONSTRUCT TRANSITION SIDEWALK PANEL TO MATCH EXISTING.
- 11

INSTALL WHITE TURN LANE PER CITY OF SANTA ANA STD. 1125B
- 12

INSTALL WHITE TURN ARROW TYPE VII (R) PER CALTRANS STD. A24A
- 14

INSTALL DOUBLE YELLOW LINE PER CITY OF SANTA ANA STD. 1125B
- 15

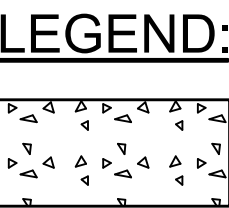
INSTALL 6" DIAMETER LOOP DETECTOR, FIRST LOOP BEHIND STOP BAR SHALL BY TYPE D, ALL OTHER LOOPS SHALL BE TYPE E PER CALTRANS STD. PLAN ES-5B. REPLACING EXISTING IN KIND.
- 16

ADJUST VALVE TO GRADE

DISPOSITION NOTES:

- A

PROTECT IN PLACE.



SAWCUT AND REMOVE EXISTING P.C.C. SLAB CURB, GUTTER AND/OR SIDEWALK AND RECONSTRUCT AS SHOWN ON PLAN.

COLDMILL EXISTING PAVEMENT AND RECONSTRUCT AS SHOWN ON PLAN.

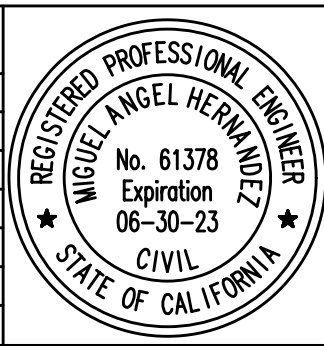
GENERAL NOTES, LEGEND, PROJECT QUANTITIES AND CONSTRUCTION NOTES

PUBLIC WORKS AGENCY
CITY OF SANTA ANA

BAR MEASURES 1 INCH

SS-121, W-464

FILE NO.	CONSTRUCTION COMPLETED:				REVISIONS				REFERENCES			
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPRVD			WATER ATLAS & SEWER ATLAS	BENCH MARK #		ELEV.
WA-06874 SE-06873										3C-26-06		157.56 NAVD88



PREPARED UNDER THE SUPERVISION OF:

MIGUEL A. HERNANDEZ

REVIEWED FOR CONSTRUCTABILITY:

JASON GABRIEL

RECOMMENDED FOR CONSTRUCTION:

ARMANDO FERNANDEZ

DESIGNED: SB

DRAWN: SB

CHECKED: MH

PRINCIPAL CIVIL ENGINEER

PRINCIPAL CIVIL ENGINEER

RCE NO.: 62968

RCE NO.: 87111

DATE

06/02/2023

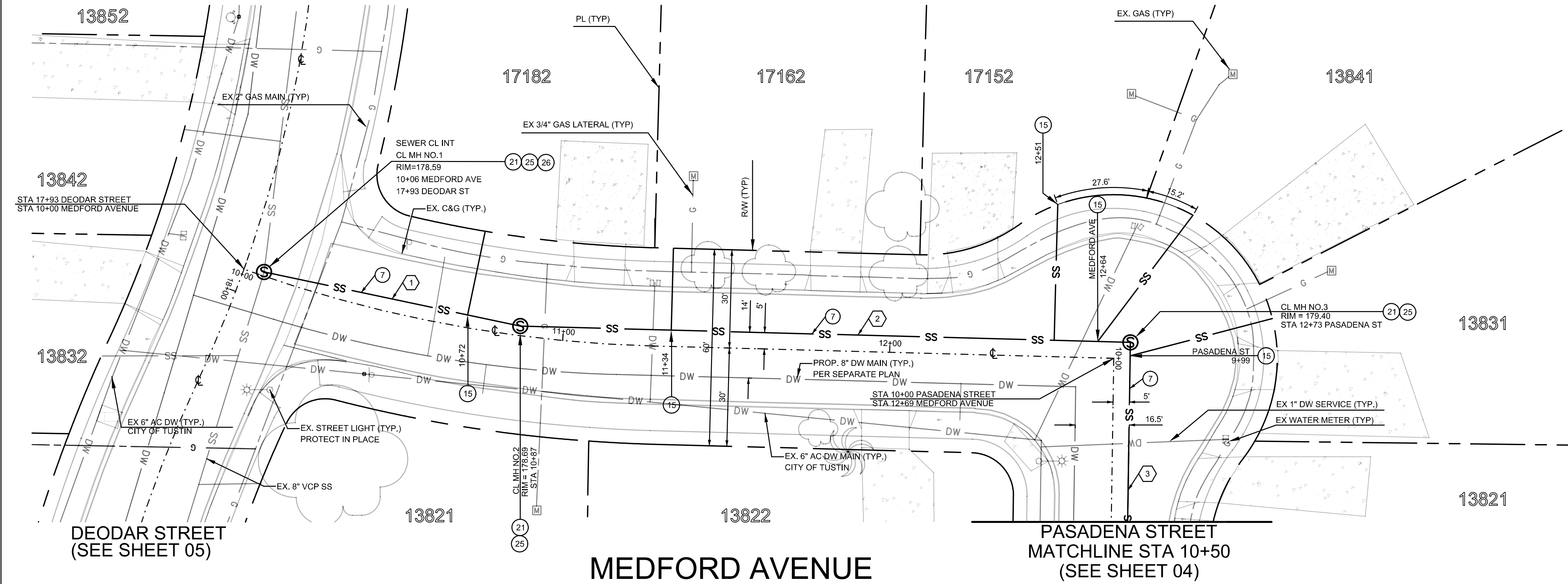
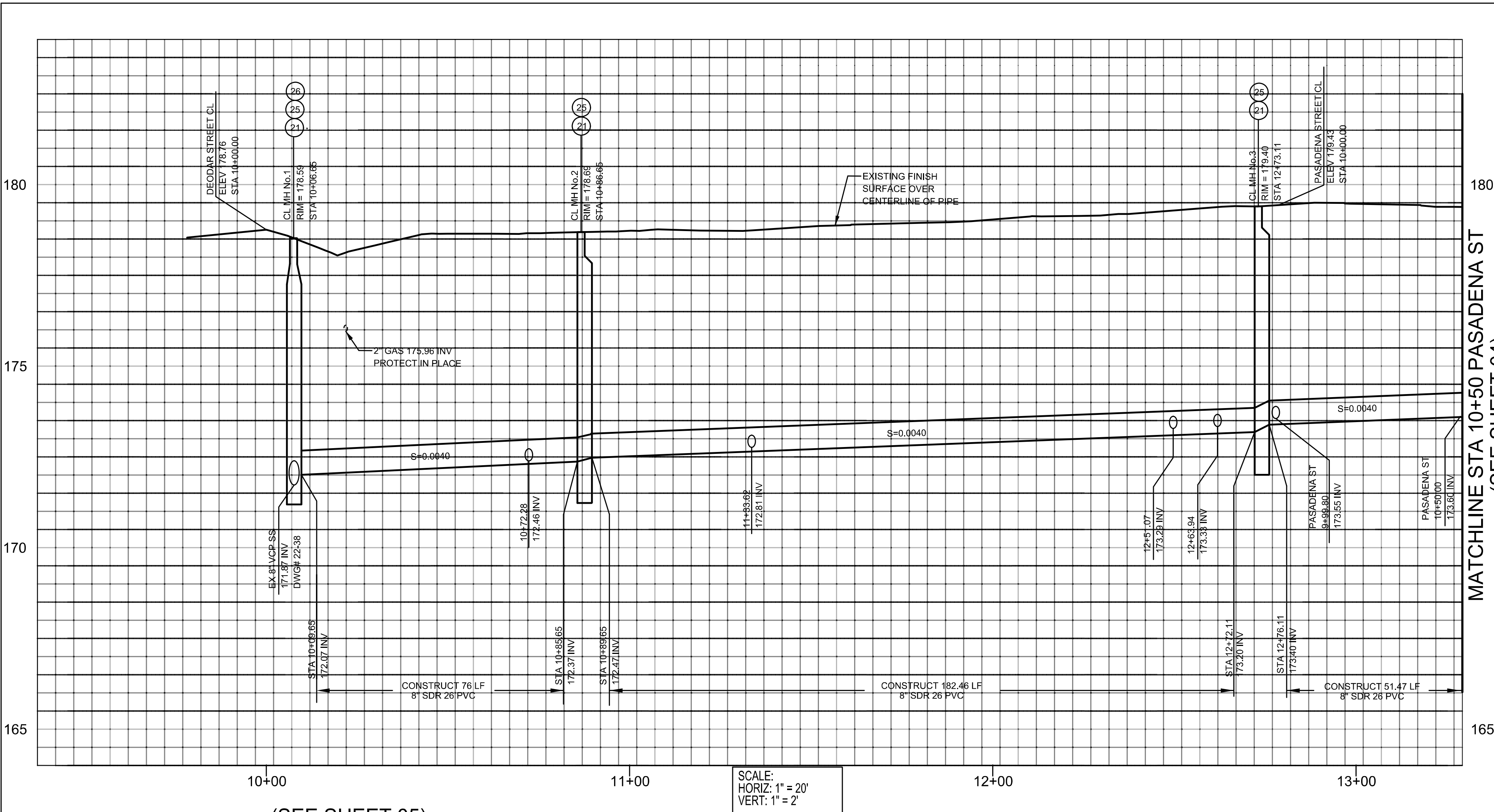
SHEET 2 OF 15

PROJECT NOS. 21-0453 & 21-6619 NE ANNEXATION WATER & SEWER IMPROVEMENTS

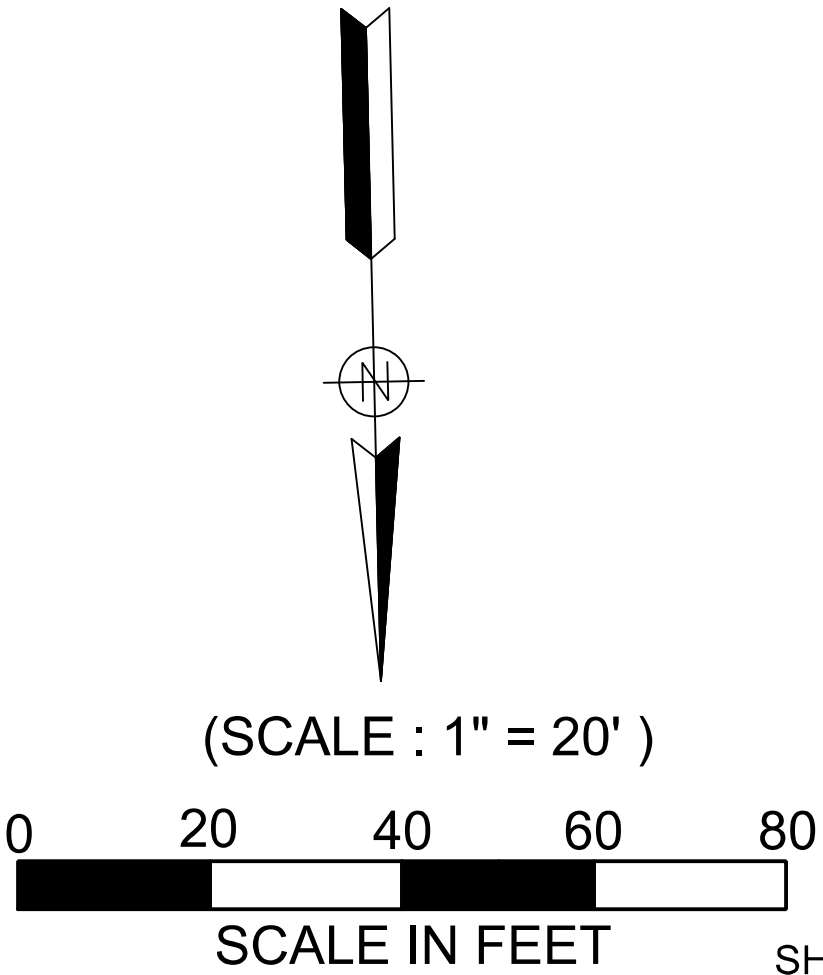
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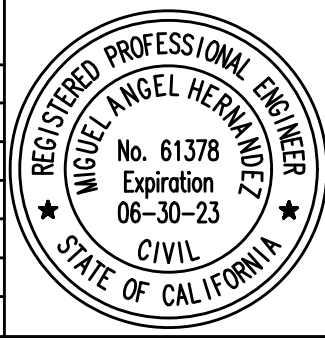
- 7) CONSTRUCT 8" SDR-26, P.V.C. SEWER MAIN. TRENCH, BEDDING, BACKFILL, AND PAVING PER DETAIL ON SHEET 6.
- 15) CONSTRUCT 4" P.V.C. SDR 26 SEWER LATERAL AND CLEANOUT FROM SEWER MAIN TO P.L. PER CITY STD. PLAN NO. 1204. SEE NOTE.
- 21) CONSTRUCT NEW MANHOLE PER CITY STD. PLAN NO. 1201. (FOR P.V.C. FURNISH AND INSTALL MANHOLE WATER STOP RUBBER GASKET AT OUTER AND INNER WALL FOR EACH MANHOLE CONNECTION).
- 25) MANHOLE CHANNELIZATION PER DETAIL ON SHEET 6.
- 26) REMOVE EXISTING MANHOLE

NOTE:
CONTRACTOR TO WORK WITH PROPERTY OWNER TO LOCATE BEST POSSIBLE LOCATION FOR SEWER LATERAL AT PROPERTY OWNER'S REQUEST. FINAL LOCATION TO BE DETERMINED BY THE ENGINEER OR HIS DESIGNEE.



LINE DATA		
#	LENGTH	COURSE
1	80.00'	N78°04'40"W
2	186.46'	N88°28'26"W
3	402.00'	N00°52'48"E



FILE NO. WA-06874 SE-06873	CONSTRUCTION COMPLETED:			REVISIONS		REFERENCES			PREPARED UNDER THE SUPERVISION OF: MIGUEL A. HERNANDEZ REVIEWED FOR CONSTRUCTABILITY: JASON GABRIEL RECOMMENDED FOR CONSTRUCTION: ARMANDO FERNANDEZ	DATE 06/02/2023	SEWER IMPROVEMENTS: MEDFORD AVE / PASADENA ST STA. 10+00 TO STA 12+68 / STA 10+00 TO 10+50 PUBLIC WORKS AGENCY CITY OF SANTA ANA				
	NUMBER	DATE	INITIALS	DESCRIPTIONS	APPROVD	WATER ATLAS & SEWER ATLAS	BENCH MARK # 3C-26-06					ELEV. -157.55' NAVD88	DESIGNED: SB	DRAWN: SB	CHECKED: MH

BAR MEASURES 1 INCH

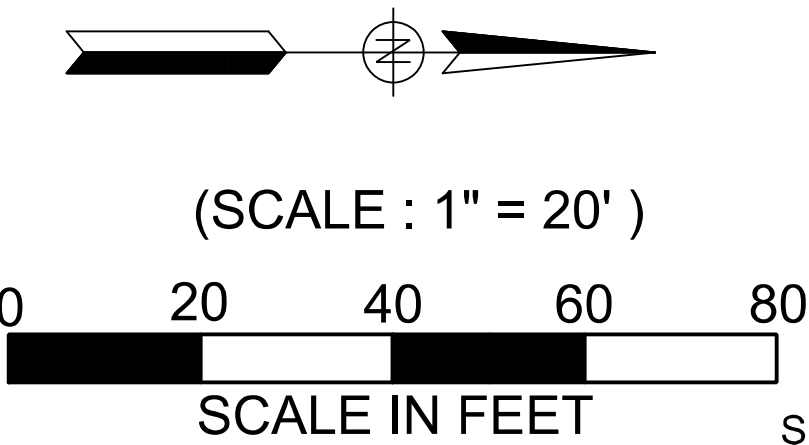
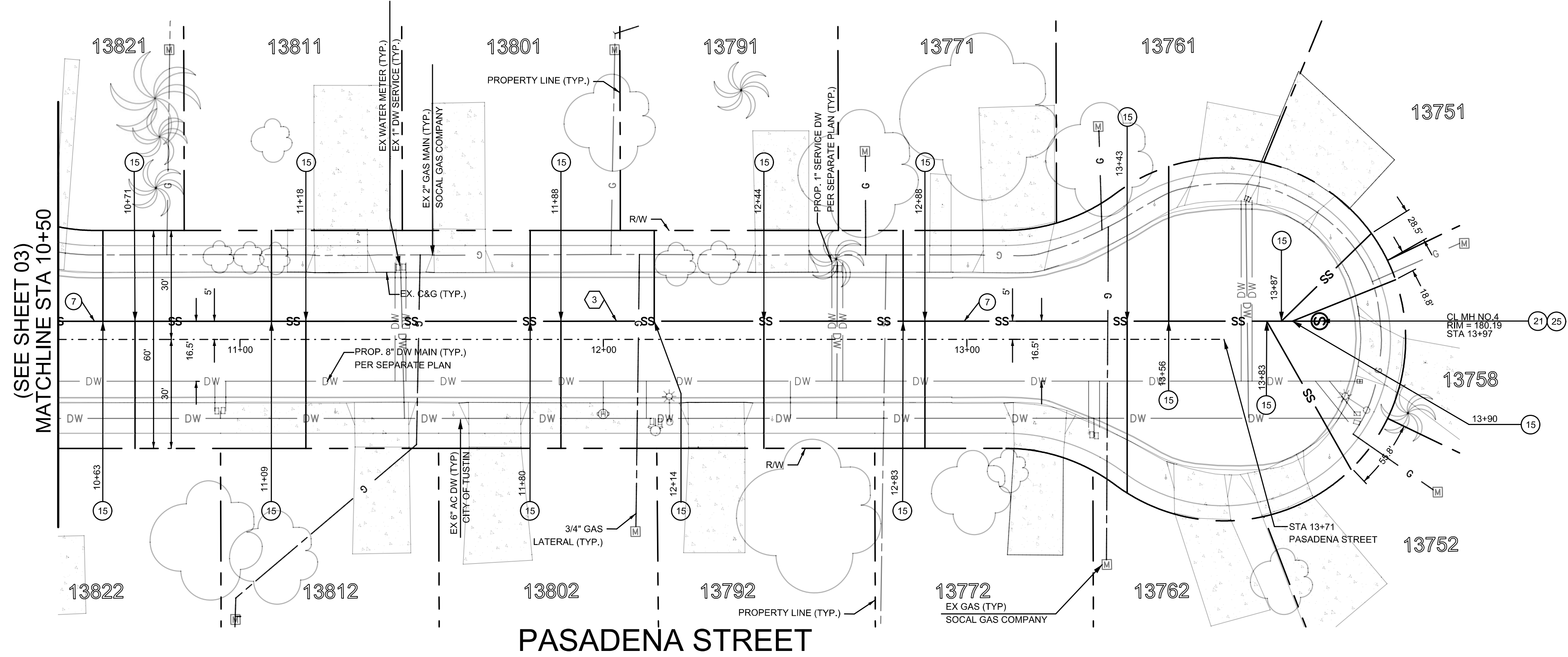
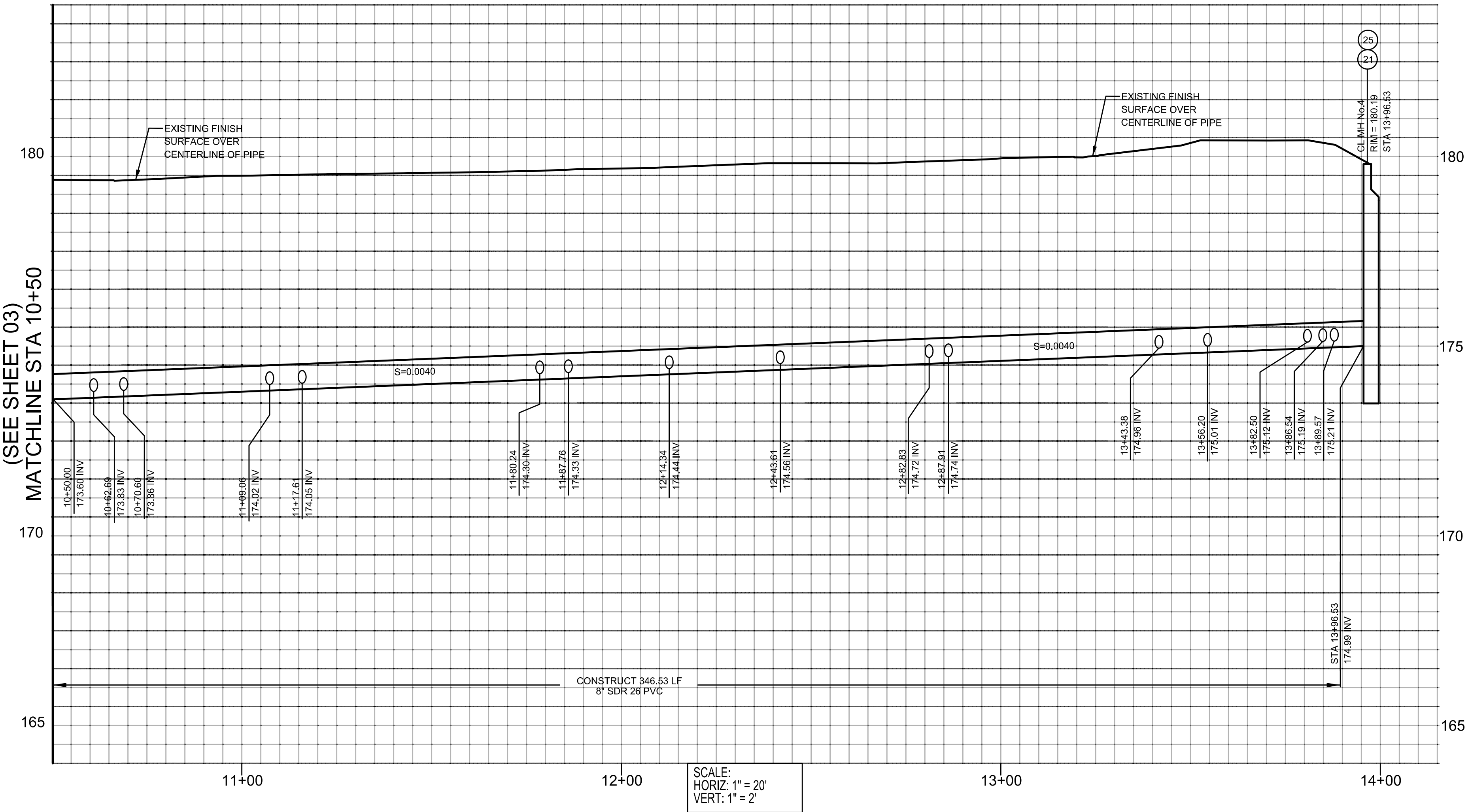
SS-121, W-464

SEWER CONSTRUCTION NOTES:

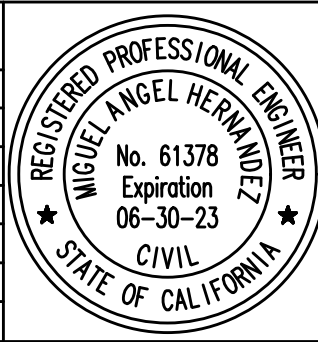
- 7 CONSTRUCT 8" SDR-26, P.V.C. SEWER MAIN. TRENCH, BEDDING BACKFILL AND PAVING PER DETAIL ON SHEET 6.
- 15 CONSTRUCT 4" P.V.C. SDR 26 SEWER LATERAL AND CLEANOUT FROM SEWER MAIN TO P.L. PER CITY STD. PLAN NO. 1204. SEE NOTE.
- 21 CONSTRUCT NEW MANHOLE PER CITY STD. PLAN NO. 1201. (FOR P.V.C. FURNISH AND INSTALL MANHOLE WATER STOP RUBBER GASKET AT OUTER AND INNER WALL FOR EACH MANHOLE CONNECTION).
- 25 MANHOLE CHANNELIZATION PER DETAIL ON SHEET 6.

NOTE:
CONTRACTOR TO WORK WITH PROPERTY OWNER TO LOCATE BEST POSSIBLE LOCATION FOR SEWER LATERAL AT PROPERTY OWNER'S REQUEST. FINAL LOCATION TO BE DETERMINED BY THE ENGINEER OR HIS DESIGNEE.

LINE DATA		
#	LENGTH	COURSE
3	402.00'	N00°52'48"E



FILE NO.	CONSTRUCTION COMPLETED:				REVISIONS		REFERENCES		DESIGNED: SB	DRAWN: SB	CHECKED: MH	DATE
	NUMBER	DATE	INITIALS	APPROVD	DESCRIPTIONS	APPROVD	WATER ATLAS & SEWER ATLAS	BENCH MARK # 3C-26-06				
WA-06874 SE-06873												



PREPARED UNDER THE SUPERVISION OF:	DATE
MIGUEL A. HERNANDEZ	06/02/2023
DESIGNED: SB	ENGINEER OF RECORD
REVIEWED FOR CONSTRUCTABILITY:	JASON GABRIEL
RECOMMENDED FOR CONSTRUCTION:	ARMANDO FERNANDEZ
PRINCIPAL CIVIL ENGINEER	RCE NO.: 62968
PRINCIPAL CIVIL ENGINEER	RCE NO.: 87111

PASADENA STREET
FROM STA. 10+50 TO STA. 13+71
PUBLIC WORKS AGENCY
CITY OF SANTA ANA

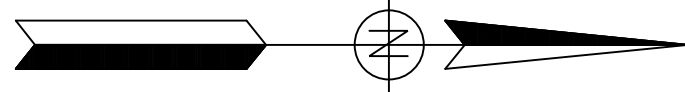
SS-121, W-464

BAR MEASURES 1 INCH

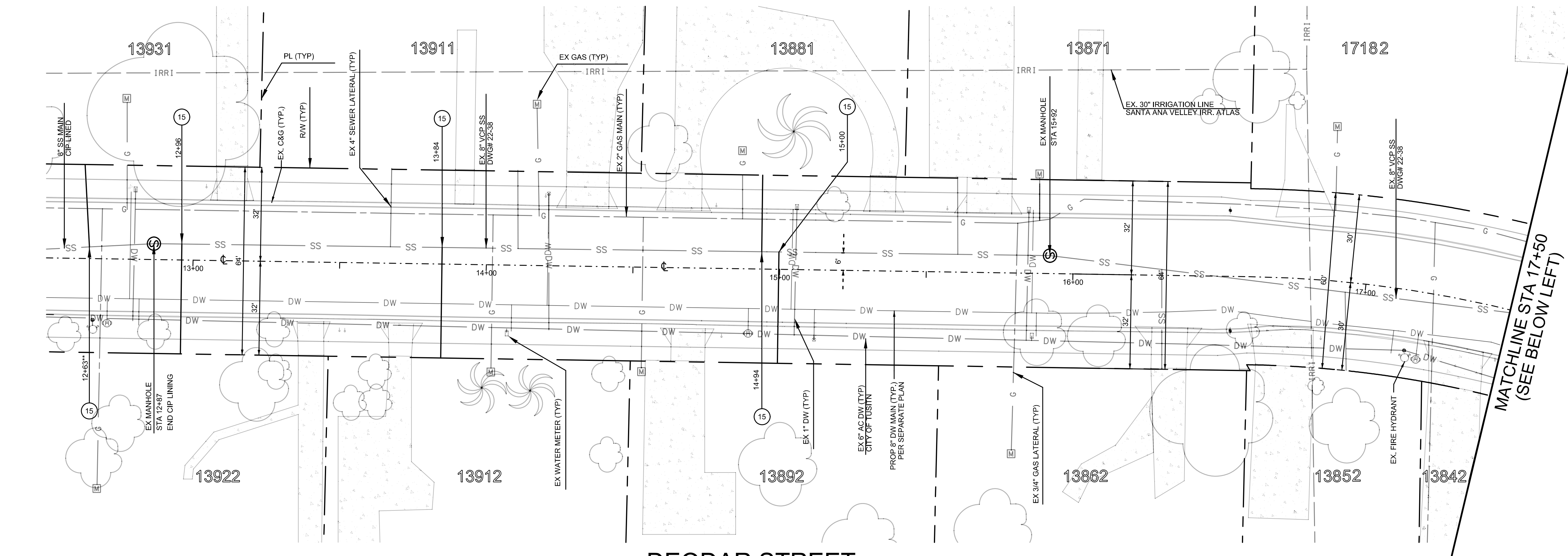
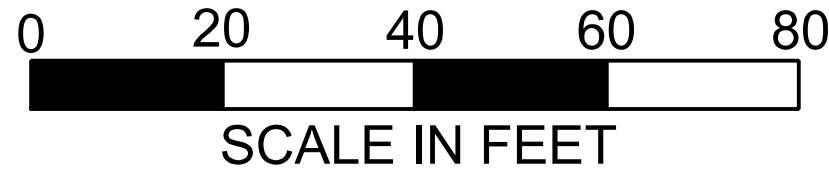
SEWER CONSTRUCTION NOTES:

- 15) CONSTRUCT 4" P.V.C. SDR 26 SEWER LATERAL FROM SEWER MAIN TO P.L. PER STD. PLAN NO. 1204. SEE NOTE.
**SEWER LATERAL CONNECTIONS TO ACCOUNT FOR CIP SEWER MAIN LINING, WYE JOINTS TO EXISTING CLAYLINER MAY NEED TO BE SEALED

NOTE:
CONTRACTOR TO WORK WITH PROPERTY OWNER TO LOCATE BEST POSSIBLE LOCATION FOR SEWER LATERAL AT PROPERTY OWNER'S REQUEST. FINAL LOCATION TO BE DETERMINED BY THE ENGINEER OR HIS DESIGNEE.

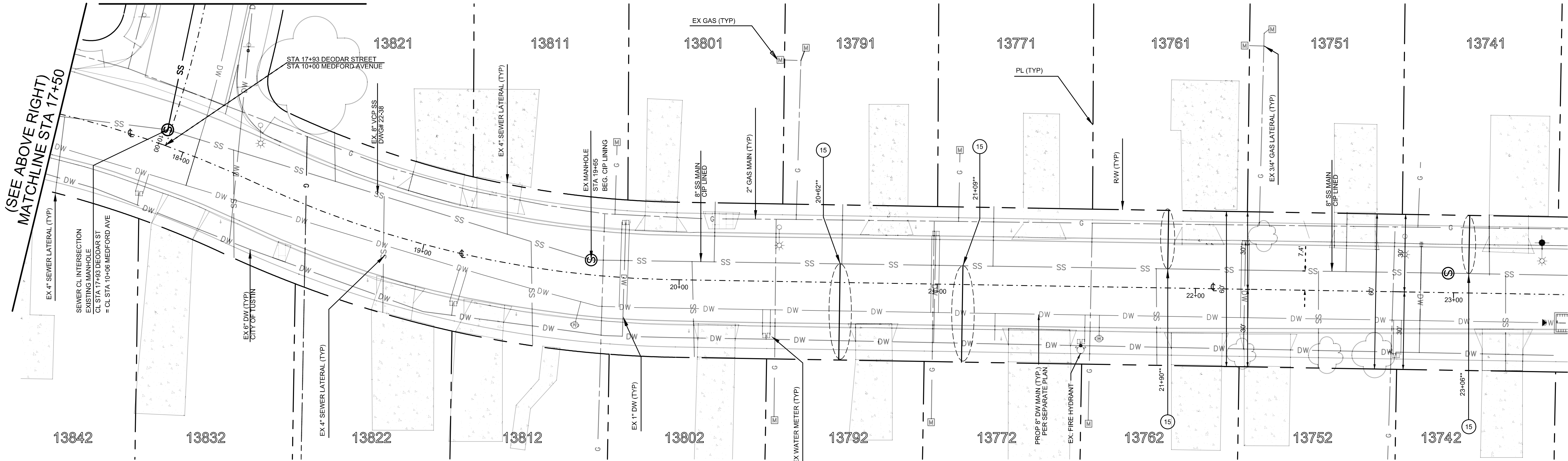


(SCALE : 1" = 20')



MEDFORD AVE
(SEE SHEET 03)

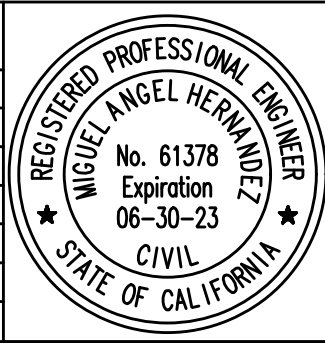
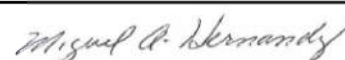
DEODAR STREET



(SEE ABOVE RIGHT)
MATCHLINE STA 17+50

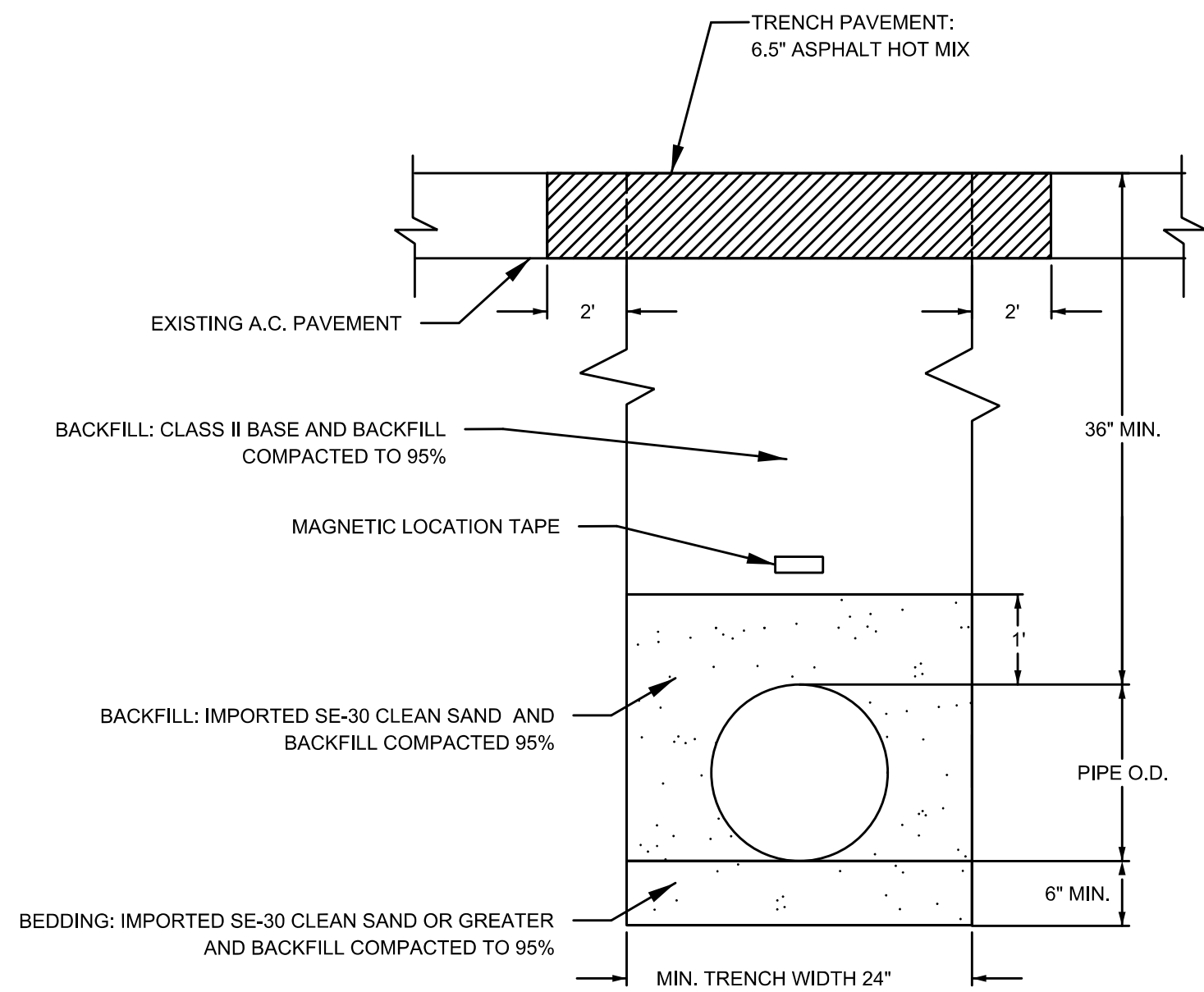
DEODAR STREET

SHEET 5 OF 15

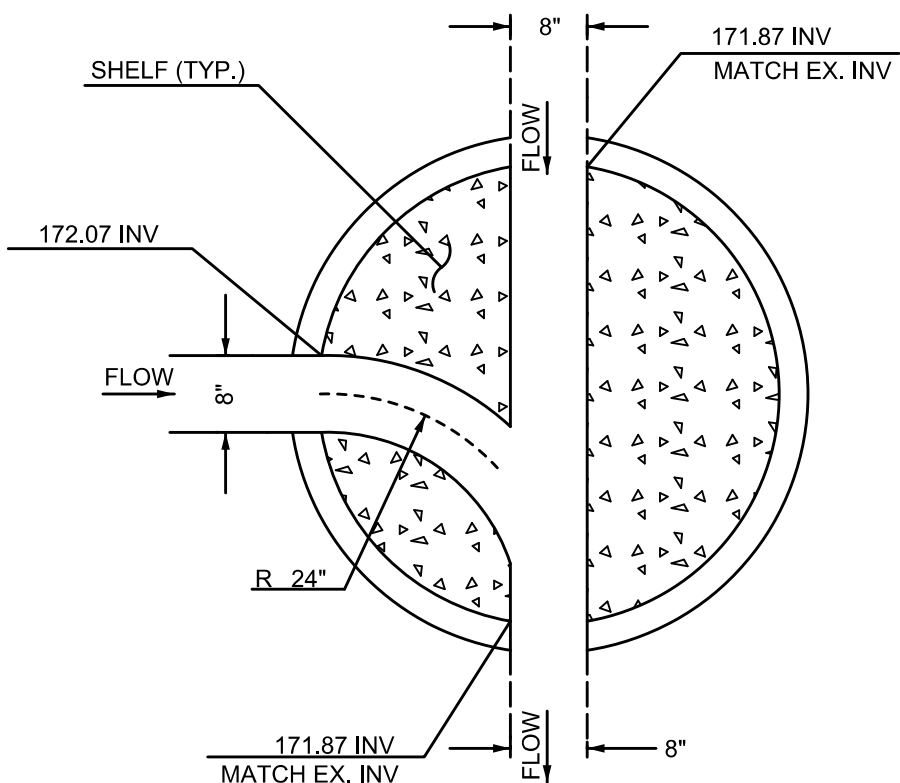
FILE NO. WA-06874 SE-06873	CONSTRUCTION COMPLETED:				REVISIONS				REFERENCES					PREPARED UNDER THE SUPERVISION OF: MIGUEL A. HERNANDEZ DESIGNED: SB REVIEWED FOR CONSTRUCTABILITY: JASON GABRIEL RECOMMENDED FOR CONSTRUCTION: ARMANDO FERNANDEZ	 ENGINEER OF RECORD DRAWN: SB CHECKED: MH RCE NO.: 62968 RCE NO.: 87111	DATE 06/02/2023	SEWER IMPROVEMENTS: DEODAR STREET FROM STA. 12+50 TO STA. 23+50 PUBLIC WORKS AGENCY CITY OF SANTA ANA
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPROVED		WATER ATLAS & SEWER ATLAS	BENCH MARK #	3C-26-06	ELEV.	157.55 NAVD88					

BAR MEASURES 1 INCH

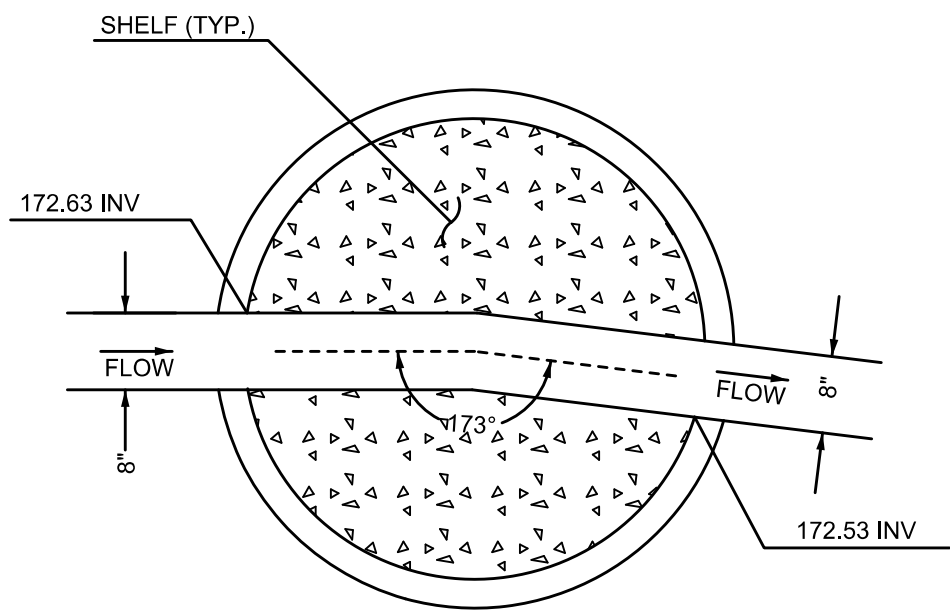
SS-121, W-464



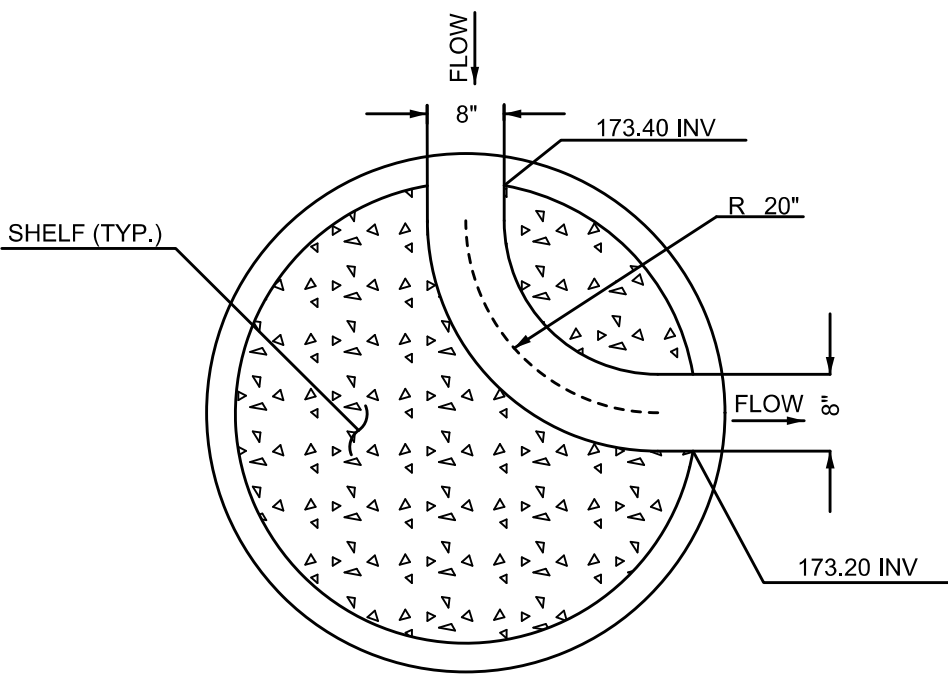
SEWER MAIN TRENCH DETAIL



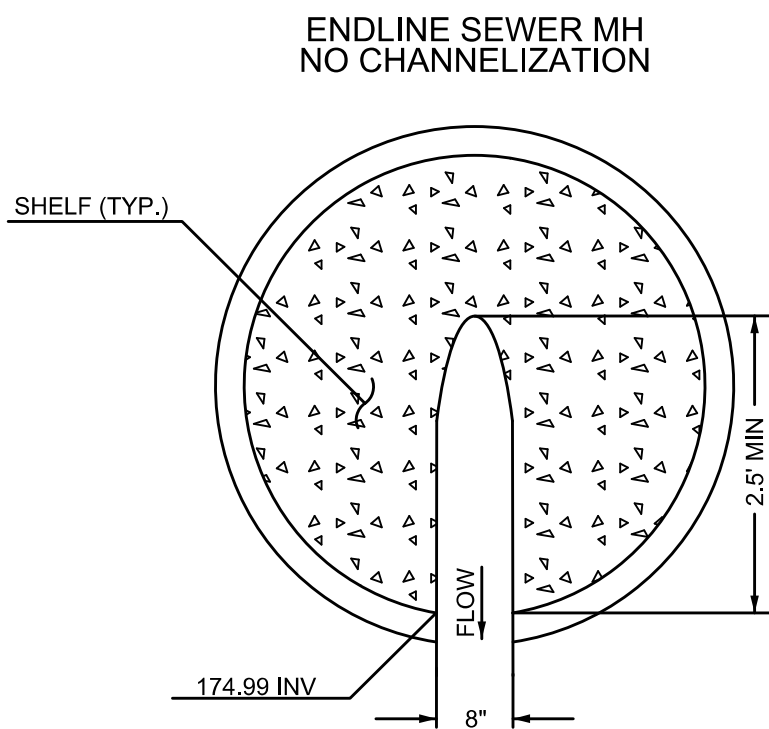
SEWER CHANNELIZATION DETAIL





SEWER CHANNELIZATION DETAIL



SEWER CHANNELIZATION DETAIL

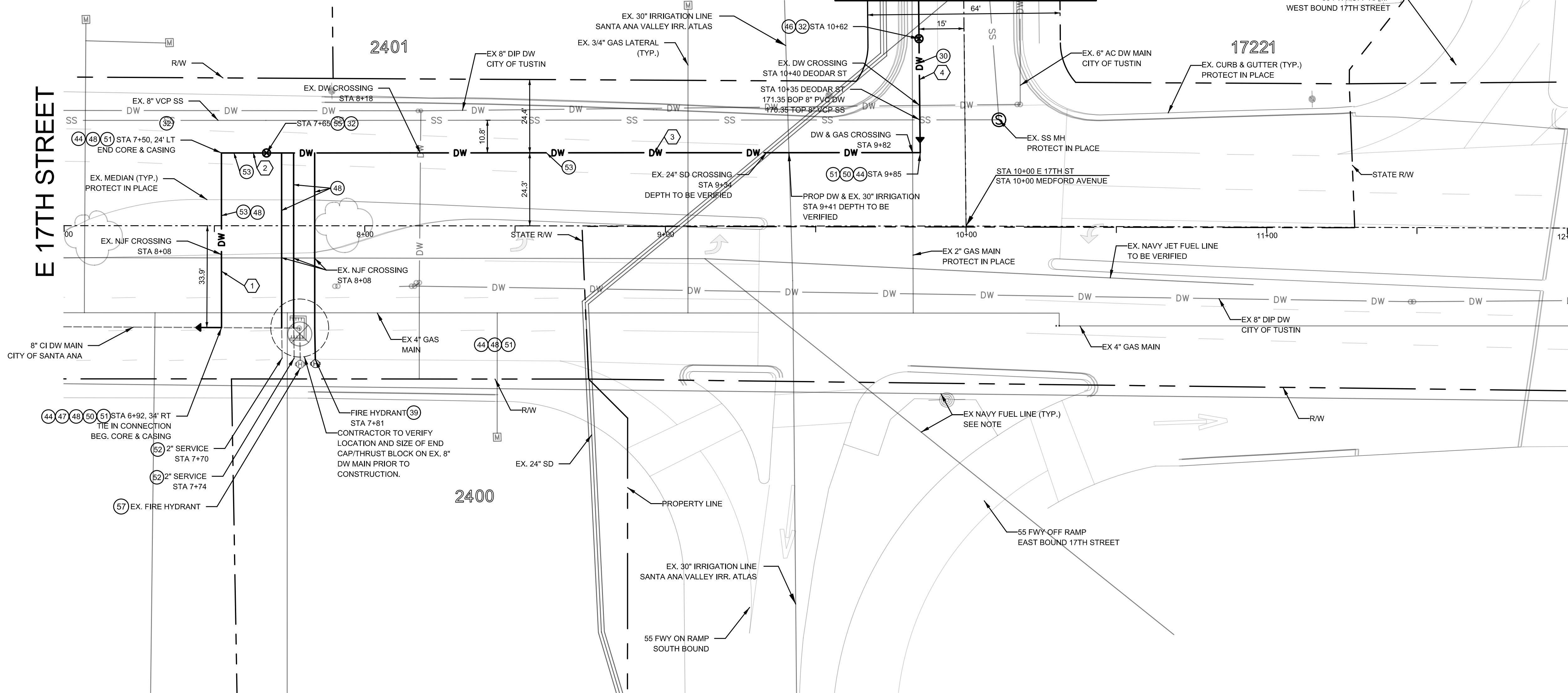


SEWER CHANNELIZATION DETAIL

FILE NO. WA-06874 SE-06873	CONSTRUCTION COMPLETED:					REVISIONS					REFERENCES						PREPARED UNDER THE SUPERVISION OF:		DATE 06/02/2023	SEWER IMPROVEMENTS: SEWER DETAILS & SEWER CHANNELIZATION PUBLIC WORKS AGENCY CITY OF SANTA ANA
	NUMBER	DATE	INITIALS			DESCRIPTIONS	APPRVD	WATER ATLAS & SEWER ATLAS	BENCH MARK #	3C-26-06	ELEV.	157.56' NAVD88	ENGINEER OF RECORD							
													DESIGNED: SB	DRAWN: SB	CHECKED: MH					
													REVIEWED FOR CONSTRUCTABILITY:							
													JASON GABRIEL		RCE NO. : 62968					
													PRINCIPAL CIVIL ENGINEER							
													RECOMMENDED FOR CONSTRUCTION:							
												ARMANDO FERNANDEZ		RCE NO. : 87111						

BAR MEASURES 1 INCH

DEODAR STREET
MATCHLINE STA 10+75
(SHEET 08)



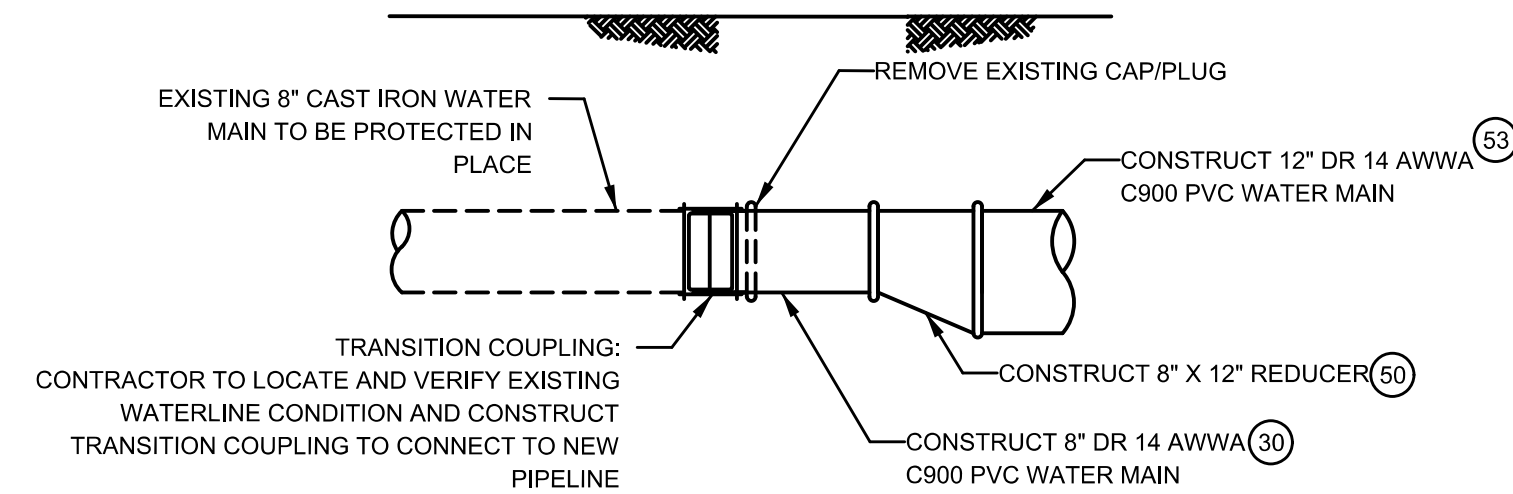
WATER CONSTRUCTION NOTES:

- 30 CONSTRUCT 8" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN. PER DETAIL ON SHEET 11.
- 32 CONSTRUCT 8" GATE VALVE (MJ X MJ) PER CITY STD. PLAN 1410.
- 39 CONSTRUCT NEW FIRE HYDRANT ASSEMBLY PER CITY STD. PLAN NO. 1405.
- 44 CONSTRUCT THRUST BLOCK PER CITY STD. PLAN NO. 1412.
- 46 CONSTRUCT VALVE ANCHOR PER CITY STD. PLAN NO. 1419.
- 47 SEE TYPICAL CONNECTION PER DETAIL HEREON.
- 48 FURNISH AND INSTALL STEEL CASING PER CITY STD. PLAN NO. 1429. STEEL CASING LIMITS PER PLAN.
- 50 CONSTRUCT 8" X 12" REDUCER (MJ X MJ).
- 51 CONSTRUCT 12" 90° BEND (MJ X MJ).
- 52 CONSTRUCT 2" WATER SERVICE PER CITY STD PLAN NO. 1402. FROM NEW WATER MAIN TO EXISTING WATER METER. RESET METER AND RECONNECT TO CUSTOMER LINE.
- 53 CONSTRUCT 12" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN. PER DETAIL ON SHEET 11.
- 55 CONSTRUCT 12" GATE VALVE (MJ X MJ) PER CITY STD. PLAN 1410.
- 57 REMOVE AND SALVAGE EXISTING FIRE HYDRANT FROM BURY. TRANSPORT TO CITY YARD.

LINE DATA		
#	LENGTH	COURSE
1	58.05'	N01°27'37"E
2	14.99'	N88°32'23"W
3	217.34'	N88°32'23"W
4	196.70'	N00°53'53"E

REFERENCE

DWG. NO. 1-017-26 STORM DRAIN & STREET IMPROVEMENT PLAN
SANTA ANA VALLEY IRRIGATION ATLAS
DWG. NO. 22-38 SANITARY SEWER PLAN & PROFILE



WATERLINE CONNECTION DETAIL

N.T.S.

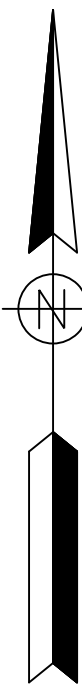
NOTE:

NAVY JET FUEL LINE TO BE FIELD VERIFIED. USE EXTREME CAUTION. (SEE PROJECT NO. 1729 DE-03) CONTRACTOR TO CONTACT APEX COMPANIES MICHAEL NEWELL AT (562) 588-5045 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION AND 72 HOURS PRIOR TO INSPECTION.

CONTRACTOR TO POTHOLE AND VERIFY LOCATION OF NAVY JET FUEL LINE PRIOR TO JACK AND BORE BENEATH MEDIAN.

CONTRACTOR TO REBUILD LATERALS AT CONNECTION POINT IF SERVICES ARE TOO CLOSE TO EXISTING CAP.

HOT TAP EXISTING 8" CAST IRON WATER MAIN AT NEAREST UPSTREAM VALVE CONNECTION TO PROVIDE CONTINUOUS SERVICE.



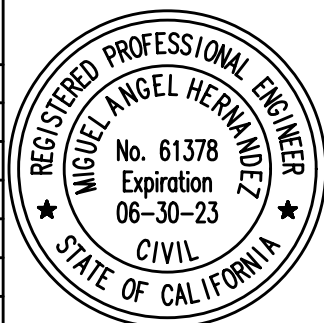
(SCALE : 1" = 20')



SCALE IN FEET

SHEET 7 OF 15

FILE NO.	CONSTRUCTION COMPLETED:				REVISIONS				REFERENCES				DATE	WATER IMPROVEMENTS:
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPROVED			WATER ATLAS & SEWER ATLAS	BENCH MARK #	3C-26-06	ELEV.	06/02/2023	
WA-06874 SE-06873														E 17TH STREET FROM STA. 7+00 TO STA. 12+00 PUBLIC WORKS AGENCY CITY OF SANTA ANA SS-121, W-464



PREPARED UNDER THE SUPERVISION OF:
MIGUEL A. HERNANDEZ
REVIEWED FOR CONSTRUCTABILITY:
JASON GABRIEL
RECOMMENDED FOR CONSTRUCTION:
ARMANDO FERNANDEZ

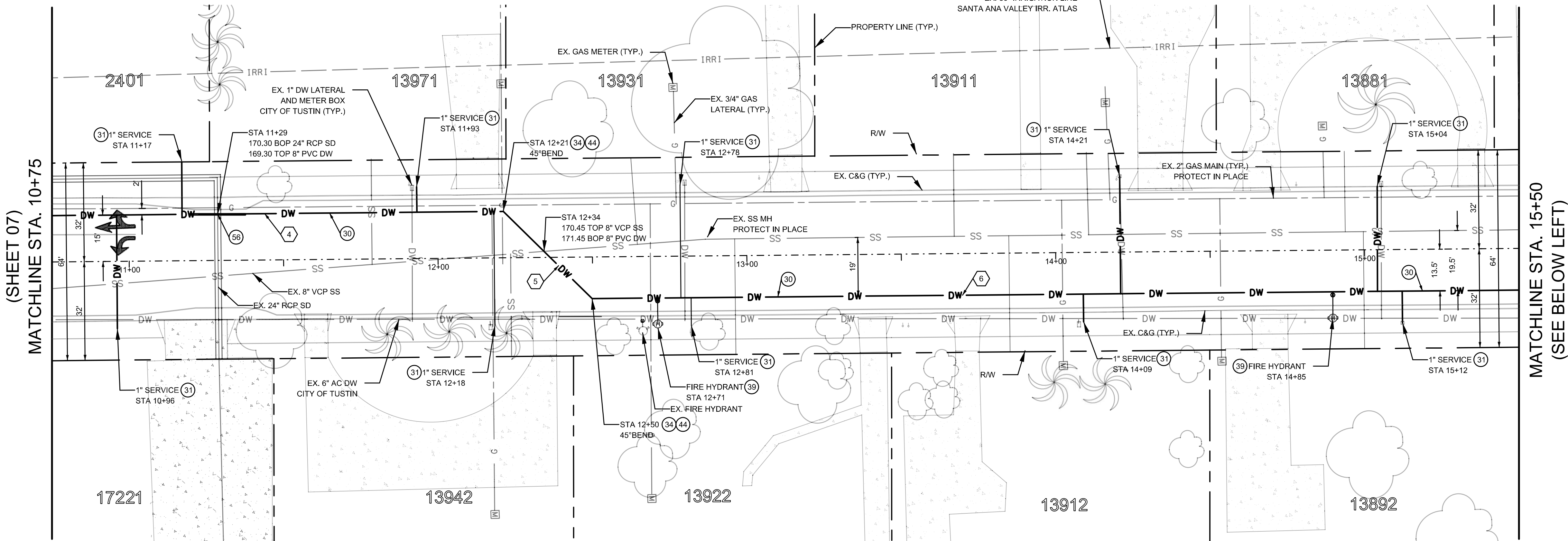
ENGINEER OF RECORD
DESIGNED: SB
DRAWN: SB
CHECKED: MH
PRINCIPAL CIVIL ENGINEER
RCE NO.: 62968
PRINCIPAL CIVIL ENGINEER
RCE NO.: 87111

BAR MEASURES 1 INCH

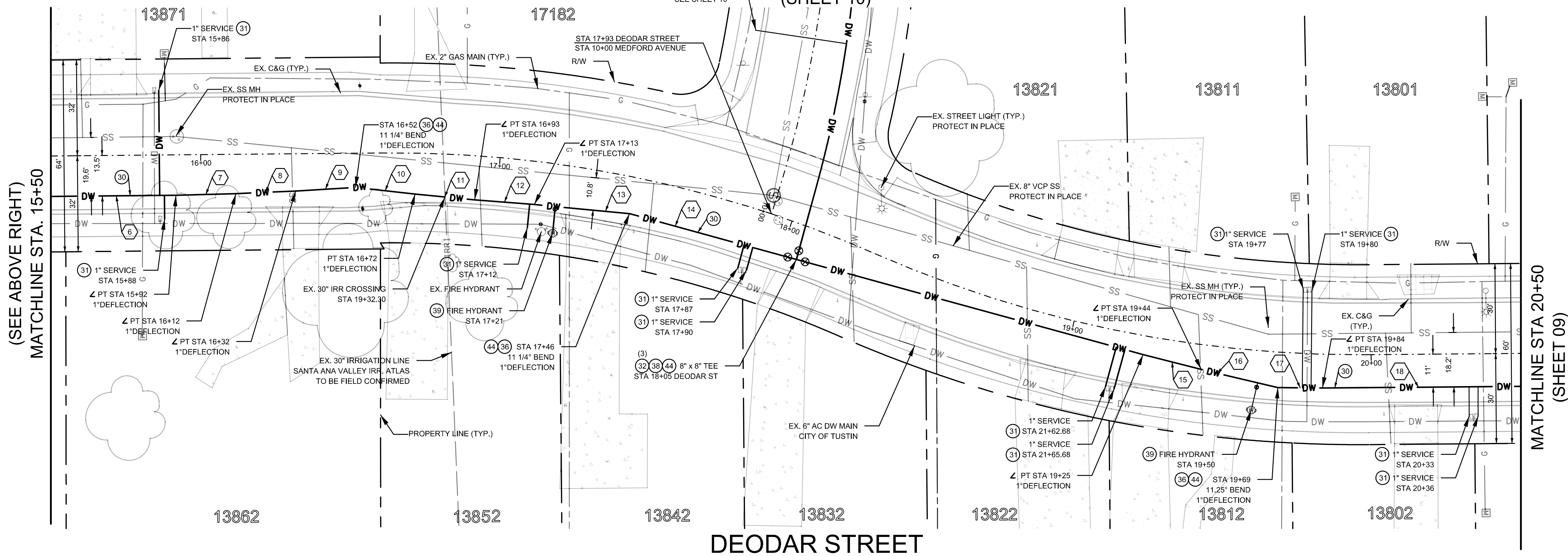
DEODAR STREET

WATER CONSTRUCTION NOTES:

- (30) CONSTRUCT 8" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN. PER DETAIL ON SHEET 11.
- (31) CONSTRUCT NEW 1" WATER SERVICE PER CITY STD. PLAN NO. 1401 NEXT TO EXISTING SERVICE AND CONTRACOR WILL TIE OVER AFTER CITY INSTALLS NEW METER.
- (32) CONSTRUCT 8" GATE VALVE (MJ X MJ) PER CITY STD. PLAN 1410.
- (34) CONSTRUCT 8" 45° BEND (MJ X MJ).
- (36) CONSTRUCT 8" 11 1/2° BEND (MJ X MJ).
- (38) CONSTRUCT 8" X 8" TEE (FLG X FLG).
- (39) CONSTRUCT NEW FIRE HYDRANT ASSEMBLY PER CITY STD. PLAN NO. 1405.
- (44) CONSTRUCT ANCHOR VALVE PER CITY STD. PLAN NO. 1412.
- (56) CONSTRUCT TYPE 2 VERTICAL OFFSET PER CITY STD. PLAN NO. 1413B.

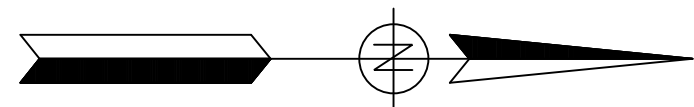


MEDFORD AVENUE
(SHEET 10)

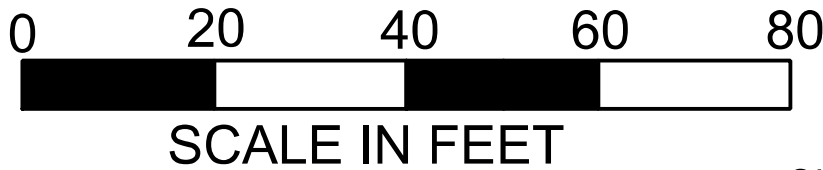


LINE DATA		
#	LENGTH	COURSE
4	196.70'	N00°53'53\"E
5	40.32'	N45°52'18\"E
6	341.83'	N00°53'53\"W
7	20.00'	N00°06'07\"W
8	20.00'	N01°06'07\"W
9	20.00'	N02°06'07\"W
10	20.00'	N07°53'53\"E
11	20.00'	N06°53'53\"E
12	20.00'	N05°53'53\"E
13	31.89'	N06°53'53\"E
14	177.77'	N16°45'27\"E
15	20.00'	N15°45'27\"E
16	26.31'	N14°45'27\"E
17	14.89'	N01°57'12\"E
18	357.69'	N00°57'12\"E

NOTE:
EXISTING CITY OF TUSTIN WATER SERVICES SHALL REMAIN IN PLACE. CONSTRUCT NEW WATER SERVICES AND METER BOXES SEPARATE FROM THE EXISTING CITY OF TUSTIN WATER SERVICES.



(SCALE : 1" = 20')



SHEET 8 OF 15

FILE NO.	CONSTRUCTION COMPLETED:				REVISIONS		REFERENCES		DATE	WATER IMPROVEMENTS:
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPROVD	WATER ATLAS & SEWER ATLAS	BENCH MARK # 3C-26-06		
WA-06874 SE-06873										DEODAR STREET FROM STA. 10+75 TO STA. 20+50 PUBLIC WORKS AGENCY CITY OF SANTA ANA



PREPARED UNDER THE SUPERVISION OF:	DATE	06/02/2023
MIGUEL A. HERNANDEZ	ENGINEER OF RECORD	
DESIGNED: SB	DRAWN: SB	CHECKED: MH
REVIEWED FOR CONSTRUCTABILITY:	PRINCIPAL CIVIL ENGINEER	RCE NO. : 62968
JASON GABRIEL	RECOMMENDED FOR CONSTRUCTION:	
ARMANDO FERNANDEZ	PRINCIPAL CIVIL ENGINEER	RCE NO. : 87111

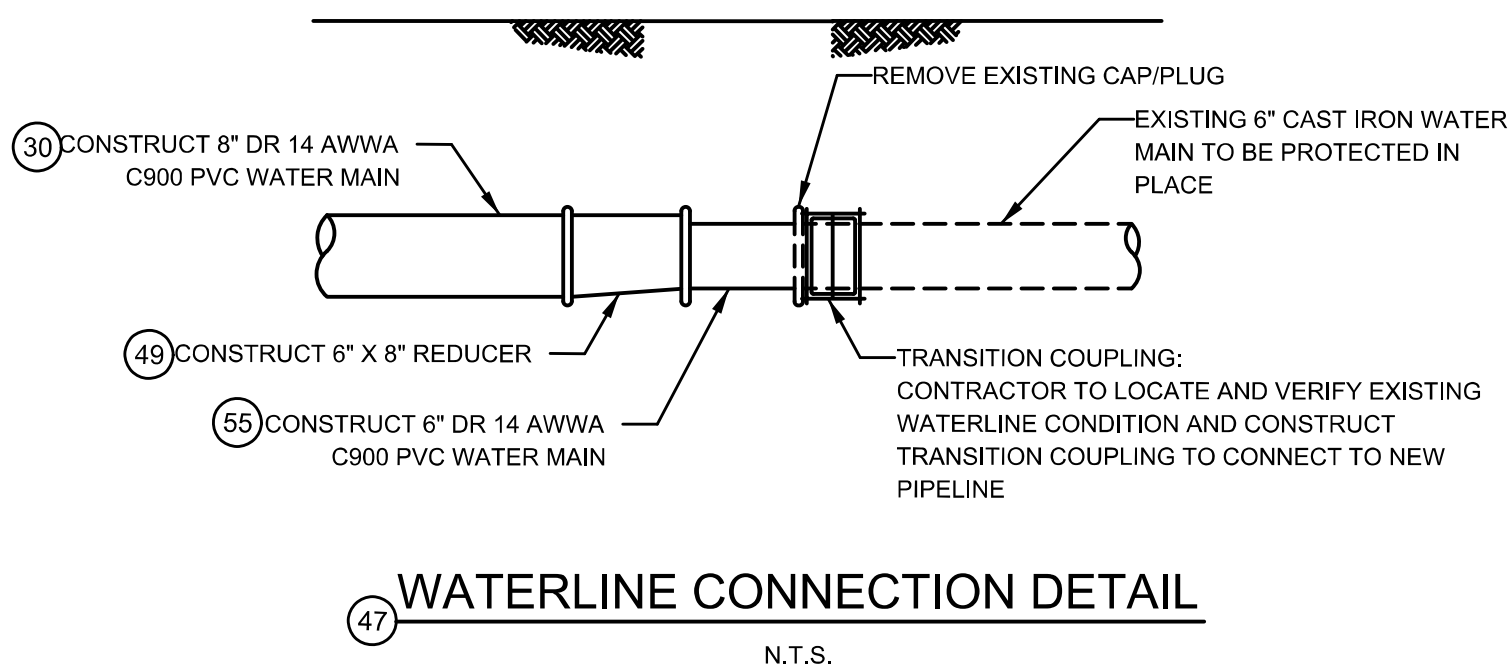
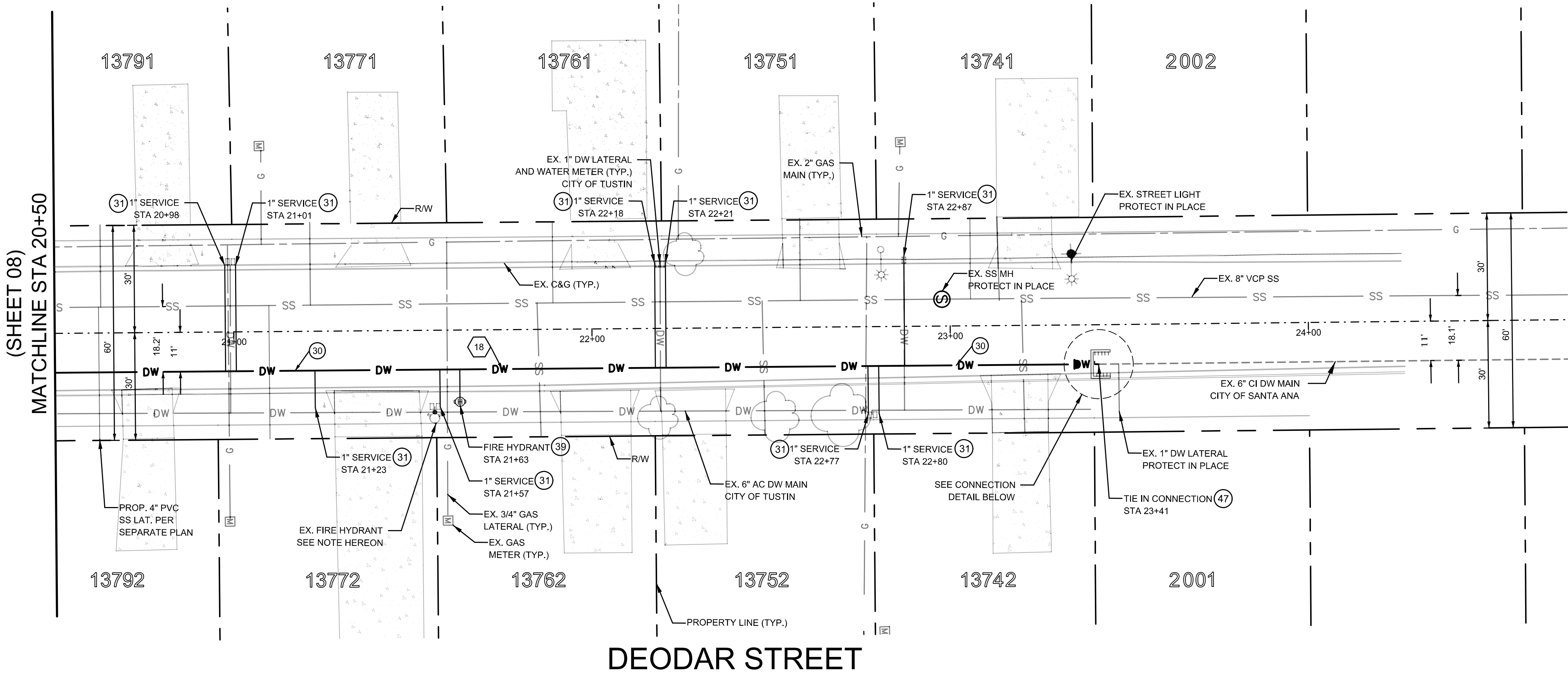
BAR MEASURES 1 INCH

SS-121, W-464

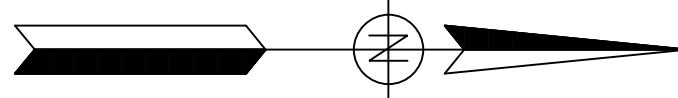
WATER CONSTRUCTION NOTES:

- (30) CONSTRUCT 8" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN. PER DETAIL ON SHEET 11.
- (31) CONSTRUCT NEW 1" WATER SERVICE PER CITY STD. PLAN NO. 1401 NEXT TO EXISTING SERVICE. CONTRACTOR TO TIE OVER AFTER CITY INSTALLS NEW METER.
- (39) CONSTRUCT NEW FIRE HYDRANT ASSEMBLY PER CITY STD. PLAN NO. 1405.
- (47) SEE TYPICAL CONNECTION PER DETAIL HEREON.
- (49) CONSTRUCT 6" X 8" REDUCER (MJ X MJ).
- (55) CONSTRUCT 6" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN. PER DETAIL ON SHEET 11.

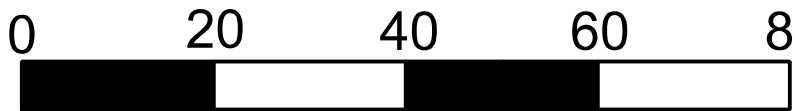
LINE DATA		
#	LENGTH	COURSE
18	357.69'	N00°57'12"E



NOTE:
EXISTING CITY OF TUSTIN WATER SERVICES SHALL REMAIN IN PLACE. CONSTRUCT NEW WATER SERVICES AND METER BOXES SEPARATE FROM THE EXISTING CITY OF TUSTIN WATER SERVICES.



(SCALE : 1" = 20')



SCALE IN FEET

SHEET 9 OF 15

FILE NO.	CONSTRUCTION COMPLETED:				REFERENCES		PREPARED UNDER THE SUPERVISION OF:	ENGINEER OF RECORD:	DATE	WATER IMPROVEMENTS:
	NUMBER	DATE	INITIALS	DESCRIPTIONS	APPROVD	WATER ATLAS & SEWER ATLAS				
WA-06874 SE-06873										DEODAR STREET FROM STA. 20+50 TO STA. 25+00 PUBLIC WORKS AGENCY CITY OF SANTA ANA



PREPARED UNDER THE SUPERVISION OF:
MIGUEL A. HERNANDEZ
REVIEWED FOR CONSTRUCTABILITY:
JASON GABRIEL
RECOMMENDED FOR CONSTRUCTION:
ARMANDO FERNANDEZ

ENGINEER OF RECORD:
DESIGNED: SB DRAWN: SB CHECKED: MH
PRINCIPAL CIVIL ENGINEER RCE NO.: 62968
PRINCIPAL CIVIL ENGINEER RCE NO.: 87111

DATE
06/02/2023

WATER IMPROVEMENTS:

DEODAR STREET
FROM STA. 20+50 TO STA. 25+00

PUBLIC WORKS AGENCY
CITY OF SANTA ANA

BAR MEASURES 1 INCH

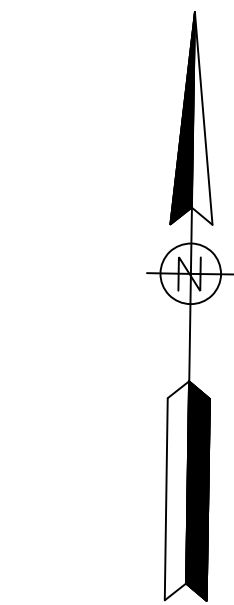
SS-121, W-464

WATER CONSTRUCTION NOTES:

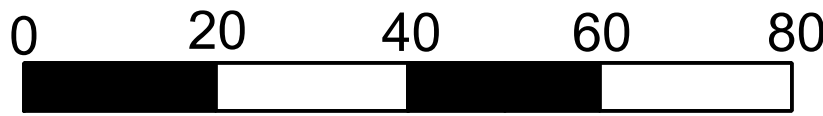
- (30) CONSTRUCT 8" CLASS 305 (DR14), AWWA C900, P.V.C. WATER MAIN. PER DETAIL ON SHEET 11.
(31) CONSTRUCT NEW 1" WATER SERVICE PER CITY STD. PLAN NO. 1401 NEXT TO EXISTING SERVICE AND CONTRACTOR WILL TIE OVER AFTER CITY INSTALLS NEW METER.
(32) CONSTRUCT 8" GATE VALVE (MJ X MJ) PER CITY STD. PLAN 1410.
(33) CONSTRUCT 8" 90° BEND (MJ X MJ).
(38) CONSTRUCT 8" TEE (FLG X FLG).
(39) CONSTRUCT NEW FIRE HYDRANT ASSEMBLY PER CITY STD. PLAN NO. 1405.
(44) CONSTRUCT THRUST BLOCK PER CITY STD. PLAN NO. 1412.
(45) CONSTRUCT 8" CAP WITH 2" BLOW OFF PER CITY STD. PLAN NO. 1414.

LINE / CURVE DATA				
#	LENGTH	RADIUS	DELTA/COURSE	TANGENT
19	25.59'	---	N73°14'33"W	---
20	106.34'	400'	15°14'	53.48'
21	140.37'	---	N88°28'26"W	---
22	394.00'	---	N00°52'48"E	---

NOTE:
EXISTING CITY OF TUSTIN WATER SERVICES SHALL REMAIN IN PLACE. CONSTRUCT NEW WATER SERVICES AND METER BOXES SEPARATE FROM THE EXISTING CITY OF TUSTIN WATER SERVICES.



(SCALE : 1" = 20')



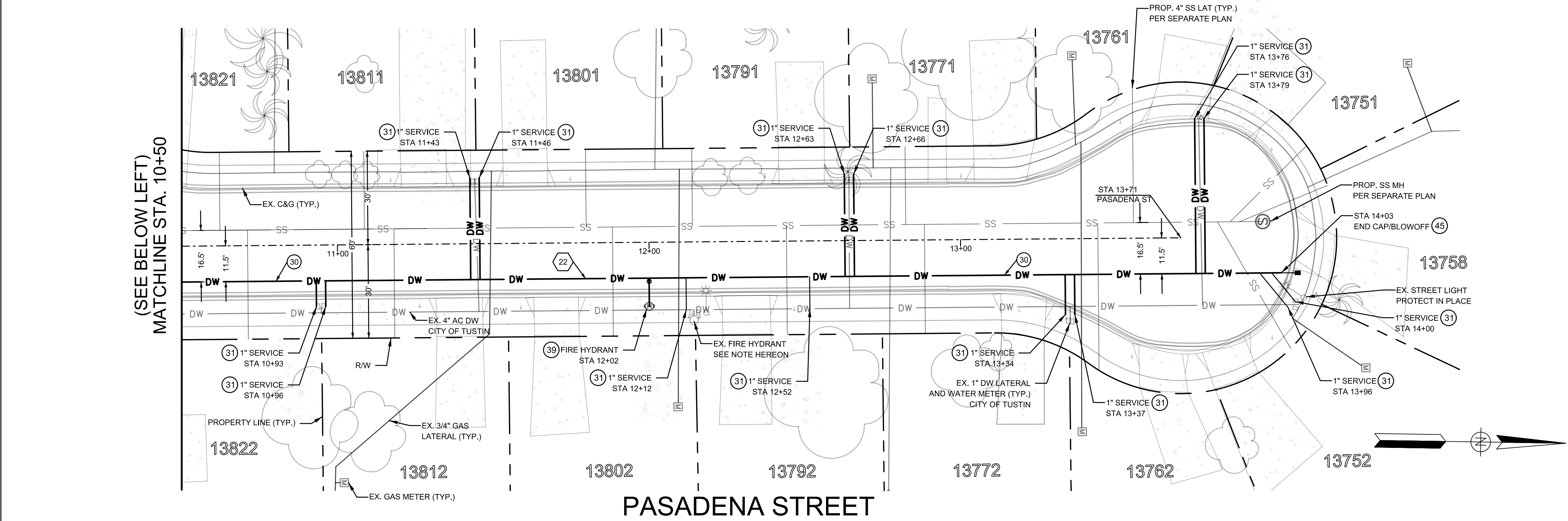
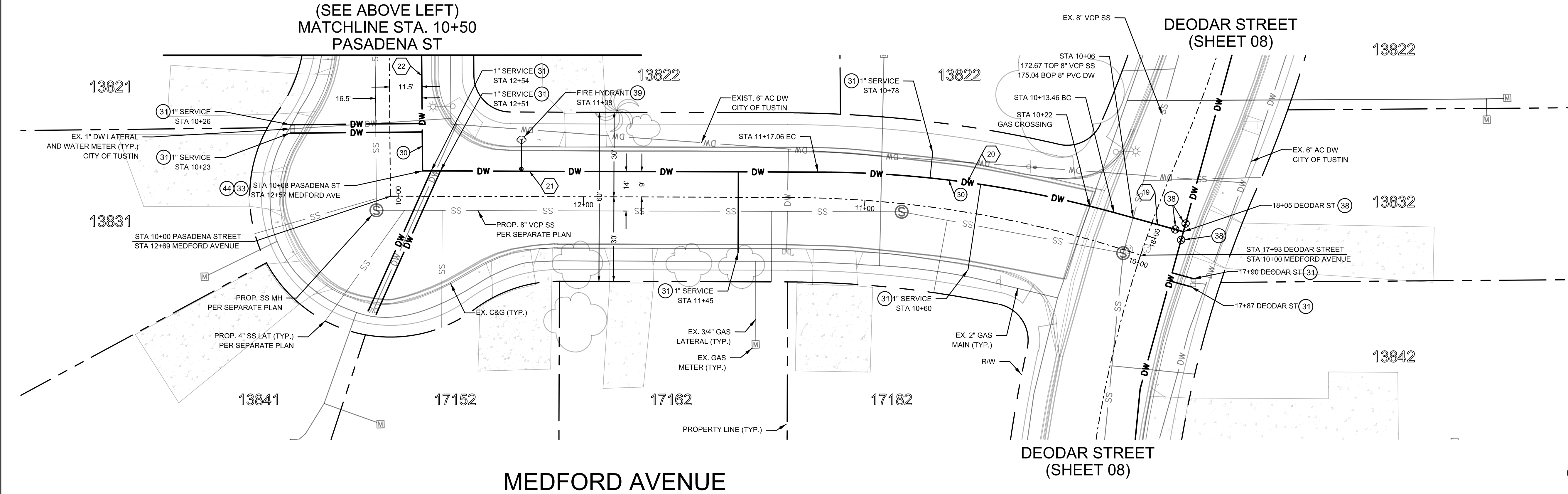
SCALE IN FEET SHEET 10 OF 15

WATER IMPROVEMENTS:

MEDFORD AVENUE / PASADENA STREET
STA 10+00 TO STA 12+69 / STA 10+00 TO STA 13+71

PUBLIC WORKS AGENCY
CITY OF SANTA ANA

SS-121, W-464

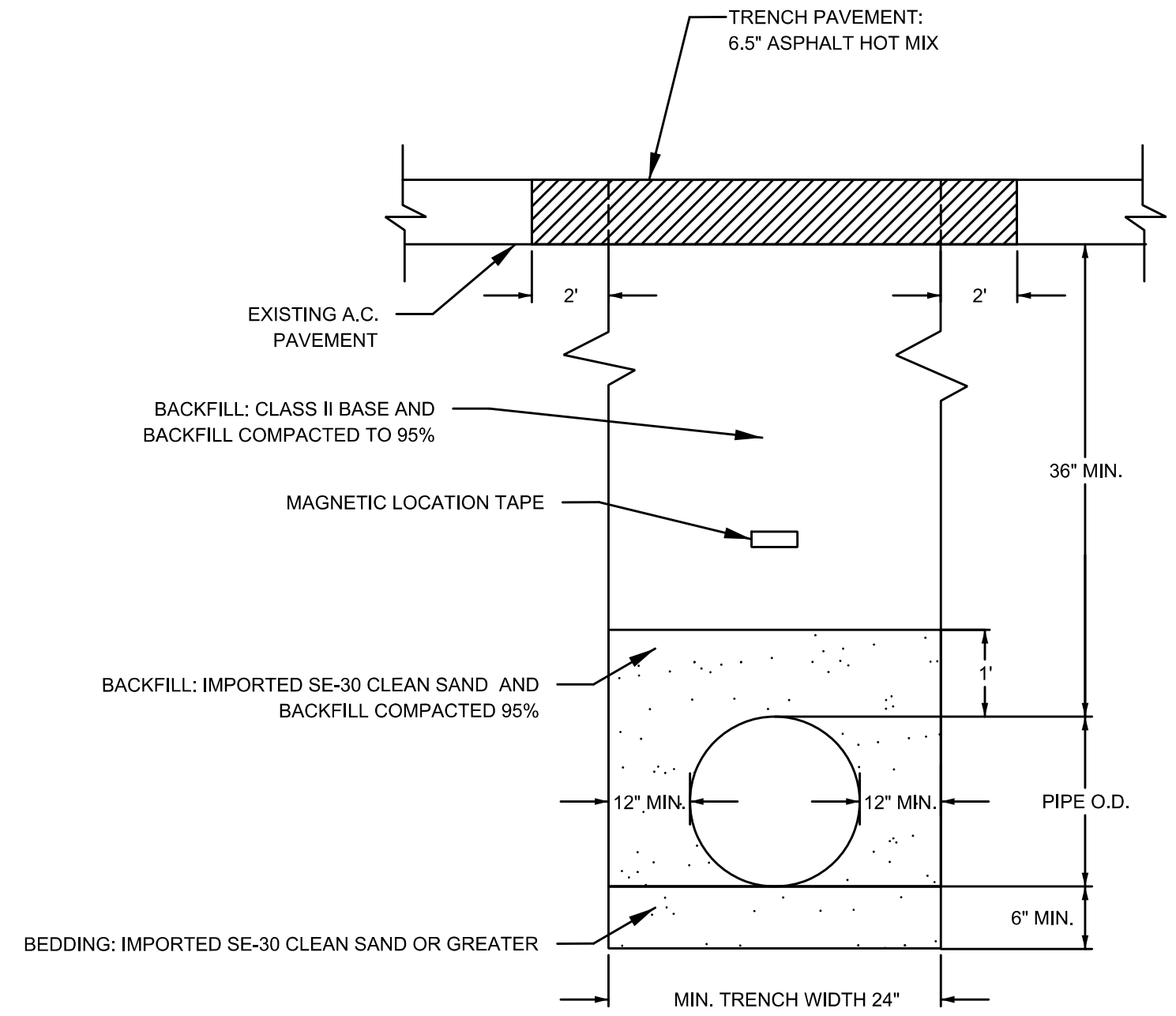


FILE NO.	CONSTRUCTION COMPLETED:				REVISIONS				REFERENCES			
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPROVD			WATER ATLAS & SEWER ATLAS	BENCH MARK #	3C-26-06	ELEV. 157.56' NAVD88
WA-06874 SE-06873												

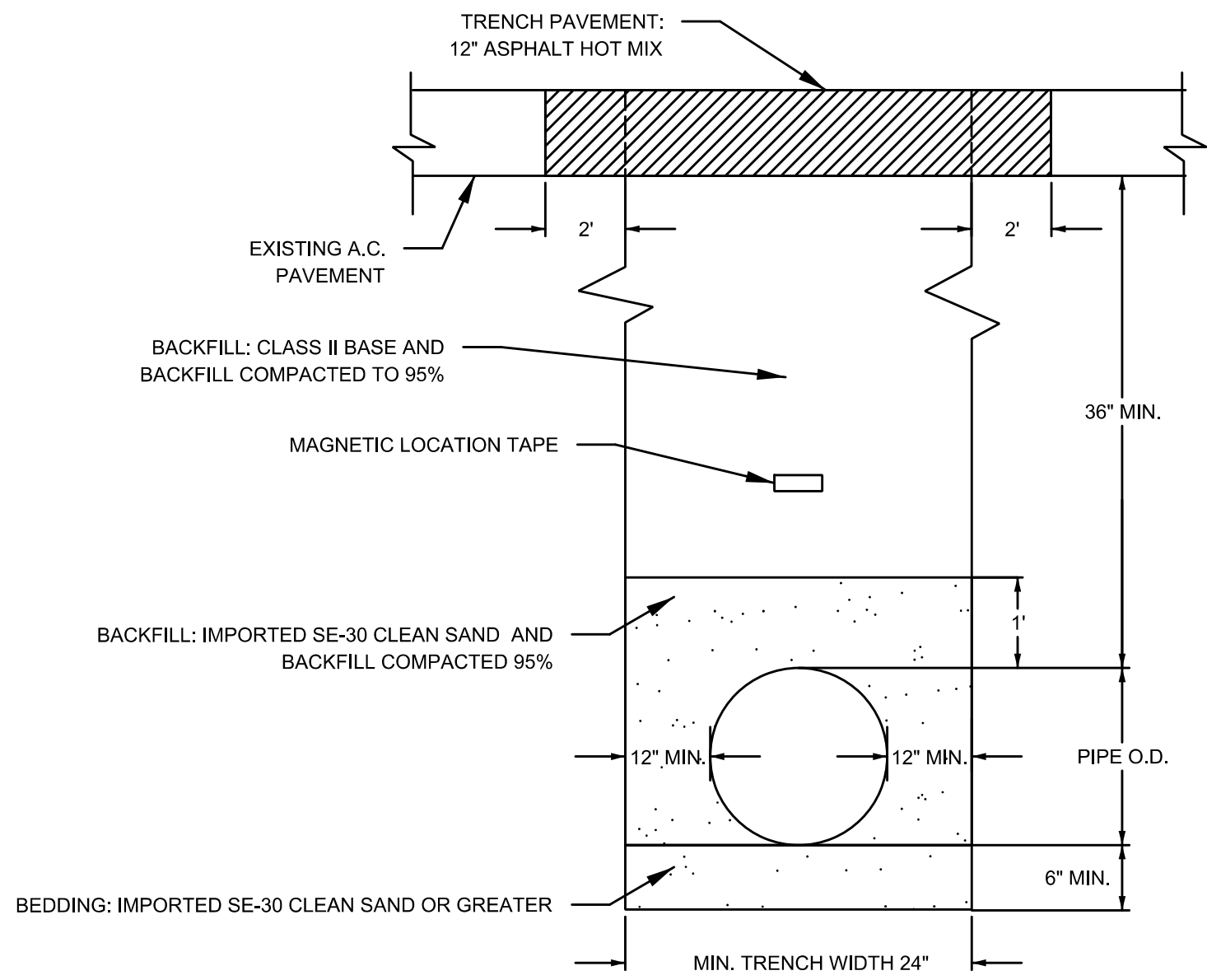


PREPARED UNDER THE SUPERVISION OF:	DATE	06/02/2023
MIGUEL A. HERNANDEZ	ENGINEER OF RECORD	
DESIGNED: SB	DRAWN: SB	CHECKED: MH
REVIEWED FOR CONSTRUCTABILITY:		
JASON GABRIEL	PRINCIPAL CIVIL ENGINEER	RCE NO. : 62968
RECOMMENDED FOR CONSTRUCTION:		
ARMANDO FERNANDEZ	PRINCIPAL CIVIL ENGINEER	RCE NO. : 87111

BAR MEASURES 1 INCH



WATER MAIN TRENCH DETAIL (RESIDENTIAL)



WATER MAIN T-TRENCH DETAIL (17TH ST.)

FILE NO. WA-06874 SE-06873	CONSTRUCTION COMPLETED:				REFERENCES				<div><div>REGISTERED PROFESSIONAL ENGINEER</div><div>MIGUEL ANGEL HERNANDEZ</div><div>No. 61378</div><div>Expiration 06-30-23</div><div>CIVIL</div><div>STATE OF CALIFORNIA</div></div>	PREPARED UNDER THE SUPERVISION OF: MIGUEL A. HERNANDEZ REVIEWED FOR CONSTRUCTABILITY: JASON GABRIEL RECOMMENDED FOR CONSTRUCTION: ARMANDO FERNANDEZ	DESIGNED: SB DRAWN: SB CHECKED: MH RCE NO.: 62968 RCE NO.: 87111	DATE 06/02/2023
	NUMBER	DATE	INITIALS	DESCRIPTIONS								

WATER IMPROVEMENTS:	
WATER DETAILS	
PUBLIC WORKS AGENCY CITY OF SANTA ANA	

BAR MEASURES 1 INCH

SS-121, W-464

E 17TH STREET
(SHEET 15)

MATCHLINE STA 15+00
(SEE BELOW LEFT)

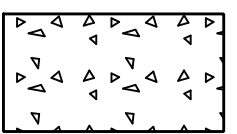
CONSTRUCTION NOTES:

- 1 SAWCUT AND REMOVE EXISTING DRIVEWAY APPROACH AND CONSTRUCT DRIVEWAY APPROACH PER CITY OF SANTA ANA STD. 1112. CASE PER PLAN. T=6"
- 2 REMOVE EXISTING SIDEWALK AND CONSTRUCT P.C.C. SIDEWALK (CASE 1) PER CITY OF SANTA ANA STD. 1104 (A-2-6). W PER PLAN.
- 3 REMOVE EXISTING CURB AND GUTTER. CONSTRUCT A-2-6 PER CITY OF SANTA ANA STD. 1101.
- 5 COLDMILL 2" AC AND CONSTRUCT ASPHALT RUBBER HOT MIX 2" MIN.
- 7 ADJUST MANHOLE TO GRADE PER CITY OF SANTA ANA STD 1201.
- 8 CONSTRUCT TRANSITION SIDEWALK PANEL TO MATCH EXISTING
- 12 INSTALL WHITE TURN ARROW TYPE VII (R) PER CALTRANS STD A24A
- 14 INSTALL DOUBLE YELLOW LINE PER CITY OF SANTA ANA STD 1125B
- 15 INSTALL 6" DIAMETER LOOP DETECTOR, FIRST LOOP BEHIND STOP BAR SHALL BY TYPE D, ALL OTHER LOOPS SHALL BE TYPE E PER CALTRANS STD PLAN ES-5B. REPLACING EXISTING IN KIND.
- 16 ADJUST VALVE TO GRADE
- 57 INSTALL ENVIROPOD LITTATRAPP FILTER IN CATCH BASINS.

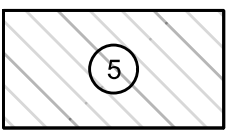
DISPOSITION NOTES:

- A PROTECT IN PLACE.

LEGEND:



CONSTRUCT PCC AS SHOWN ON PLANS



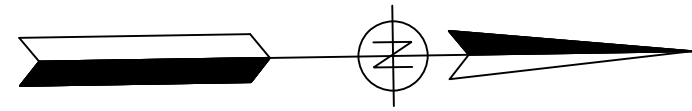
COLDMILL EXISTING PAVEMENT AND RECONSTRUCT AS SHOWN ON PLANS

DEODAR STREET

MEDFORD AVENUE
(SHEET 14)

DEODAR STREET

MATCHLINE STA 19+00
(SEE SHEET 13)



(SCALE : 1" = 20')



SCALE IN FEET

SHEET 12 OF 15

FILE NO.	CONSTRUCTION COMPLETED:				REVISIONS		REFERENCES			DATE	STREET IMPROVEMENTS:
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPRVD	WATER ATLAS & SEWER ATLAS	BENCH MARK #	ELEV.		
WA-06874 SE-06873								3C-26-06	157.56 NAVD88	06/02/2023	DEODAR STREET STA. 10+00 TO STA. 19+00 PUBLIC WORKS AGENCY CITY OF SANTA ANA



PREPARED UNDER THE SUPERVISION OF:	DATE
MIGUEL A. HERNANDEZ	06/02/2023
DESIGNED: SB	ENGINEER OF RECORD
REVIEWED FOR CONSTRUCTABILITY: JASON GABRIEL	DRAWN: SB
RECOMMENDED FOR CONSTRUCTION: ARMANDO FERNANDEZ	CHECKED: MH
	PRINCIPAL CIVIL ENGINEER
	RCE NO.: 62968
	PRINCIPAL CIVIL ENGINEER
	RCE NO.: 87111

BAR MEASURES 1 INCH

SS-121, W-464

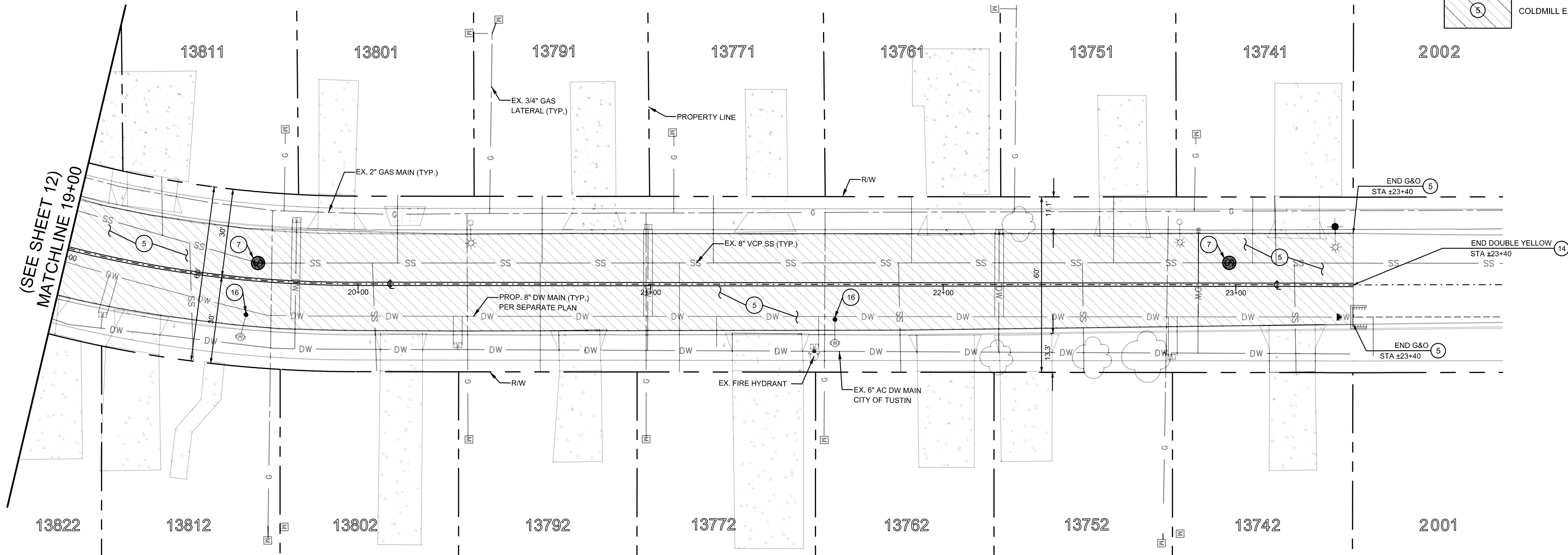
NE ANNEXATION WATER & SEWER MAIN IMPROVEMENTS

PROJECT NOS. 21-0453 & 21-6619

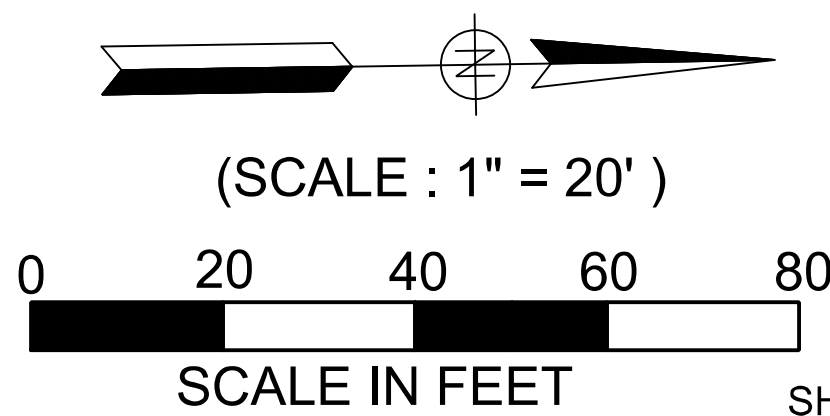
CONSTRUCTION NOTES:

- 5 COLDMILL 2" AC AND CONSTRUCT ASPHALT RUBBER HOT MIX 2" MIN.
- 7 ADJUST MANHOLE TO GRADE PER CITY OF SANTA ANA STD 1201.
- 14 INSTALL DOUBLE YELLOW LINE PER CITY OF SANTA ANA STD 1125B
- 16 ADJUST VALVE TO GRADE

LEGEND:



DEODAR STREET



FILE NO. WA-06874 SE-06873	CONSTRUCTION COMPLETED:				REVISIONS				REFERENCES					PREPARED UNDER THE SUPERVISION OF: MIGUEL A. HERNANDEZ REVIEWED FOR CONSTRUCTABILITY: JASON GABRIEL RECOMMENDED FOR CONSTRUCTION: ARMANDO FERNANDEZ	 ENGINEER OF RECORD DESIGNED: SB DRAWN: SB CHECKED: MH PRINCIPAL CIVIL ENGINEER RCE NO.: 62968 PRINCIPAL CIVIL ENGINEER RCE NO.: 87111	DATE 06/02/2023	STREET IMPROVEMENTS: DEODAR STREET STA. 19+00 TO STA. 24+00 PUBLIC WORKS AGENCY CITY OF SANTA ANA
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPROVD		WATER ATLAS & SEWER ATLAS	BENCH MARK #	3C-26-06	ELEV.	157.56 NAVD88					

BAR MEASURES 1 INCH

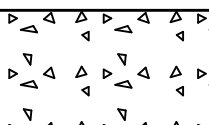
CONSTRUCTION NOTES:

- 1 SAWCUT AND REMOVE EXISTING DRIVEWAY APPROACH AND CONSTRUCT DRIVEWAY APPROACH PER CITY OF SANTA ANA STD. 1112. CASE PER PLAN. T=6"
- 2 REMOVE EXISTING SIDEWALK AND CONSTRUCT P.C.C. SIDEWALK (CASE 1) PER CITY OF SANTA ANA STD. 1104 (A-2-6). W PER PLAN.
- 3 REMOVE EXISTING CURB AND GUTTER. REPLACE PER CITY OF SANTA ANA STD. 1101.
- 5 COLDMILL 2" AC AND CONSTRUCT ASPHALT RUBBER HOT MIX 2" MIN.
- 6 REMOVE TOP 2" OF SOIL AND RECOMPACT TO 90%
- 7 ADJUST MANHOLE TO GRADE PER CITY OF SANTA ANA STD 1201.
- 8 CONSTRUCT TRANSITION SIDEWALK PANEL TO MATCH EXISTING.
- 16 ADJUST VALVE TO GRADE

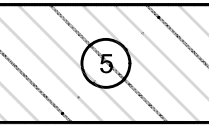
DISPOSITION NOTES:

- A PROTECT IN PLACE.

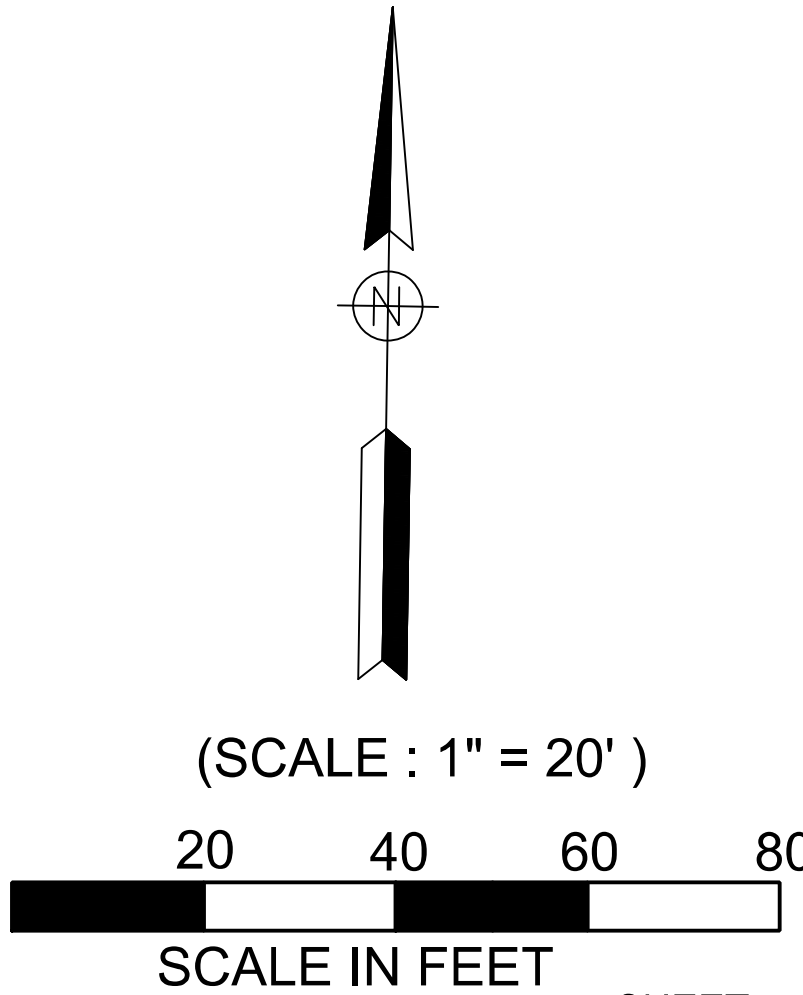
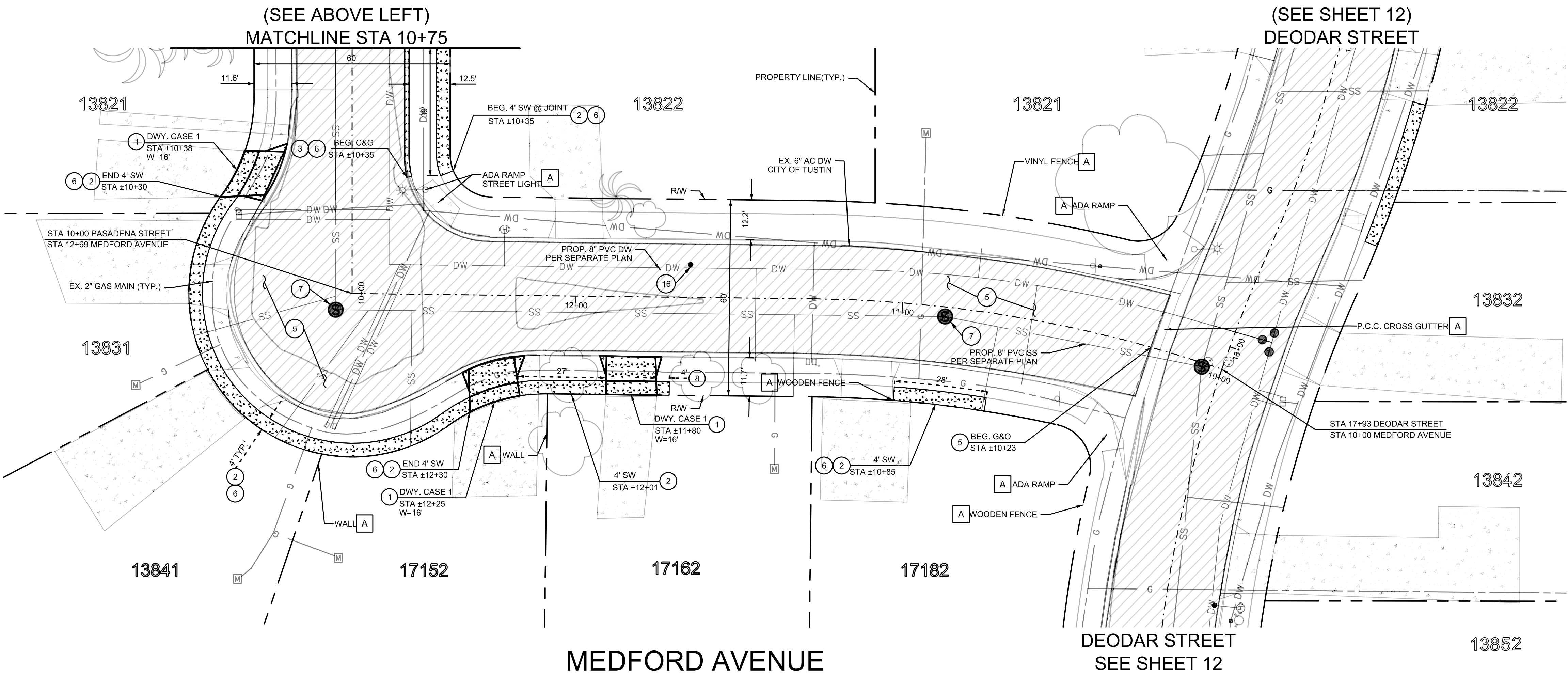
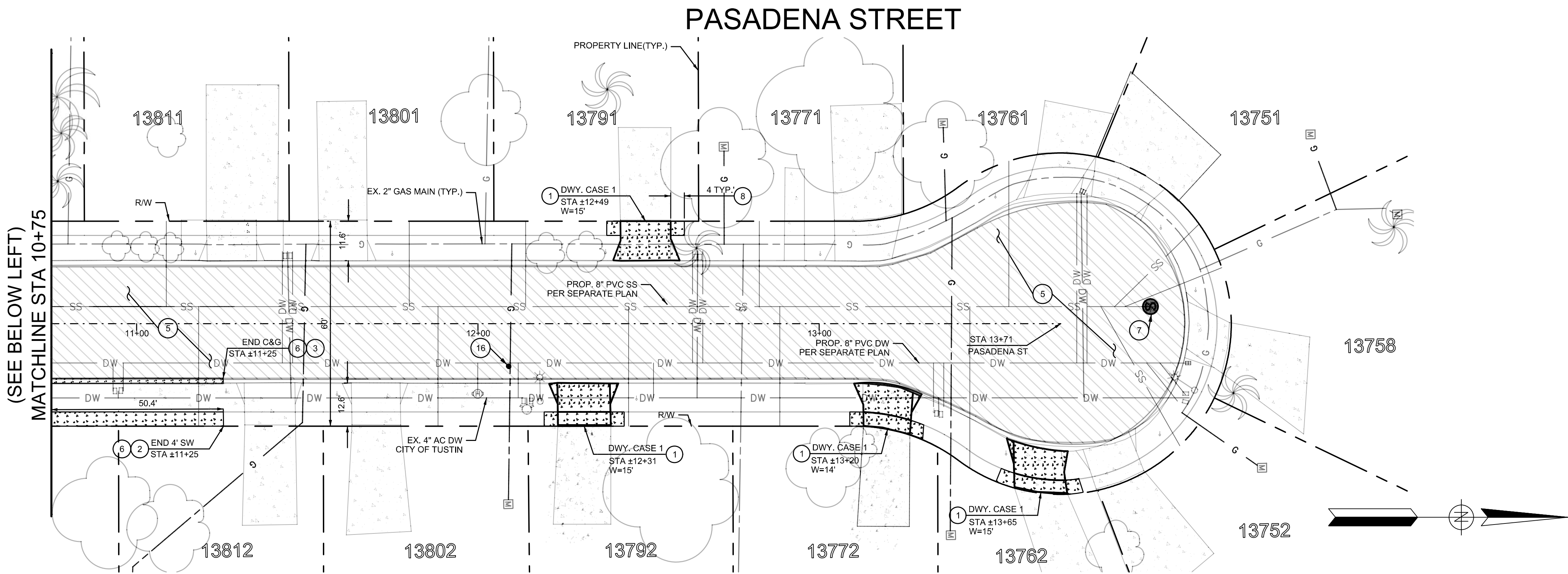
LEGEND:



CONSTRUCT PCC AS SHOWN ON PLANS



COLDMILL EXISTING PAVEMENT AND RECONSTRUCT AS SHOWN ON PLANS



FILE NO.	CONSTRUCTION COMPLETED:				REVISIONS		REFERENCES		DESIGNED	REVIEWED FOR CONSTRUCTABILITY	RECOMMENDED FOR CONSTRUCTION	DATE
	NUMBER	DATE	INITIALS		DESCRIPTIONS	APPROVD	WATER ATLAS & SEWER ATLAS	BENCH MARK #				
WA-06874 SE-06873												

STREET IMPROVEMENTS:			
MEDFORD AVENUE / PASADENA STREET			
STA 10+00 TO STA 12+69 / STA 10+00 TO STA 13+71			
PUBLIC WORKS AGENCY CITY OF SANTA ANA			

SS-121, W-464

BAR MEASURES 1 INCH



SS-121, W-464