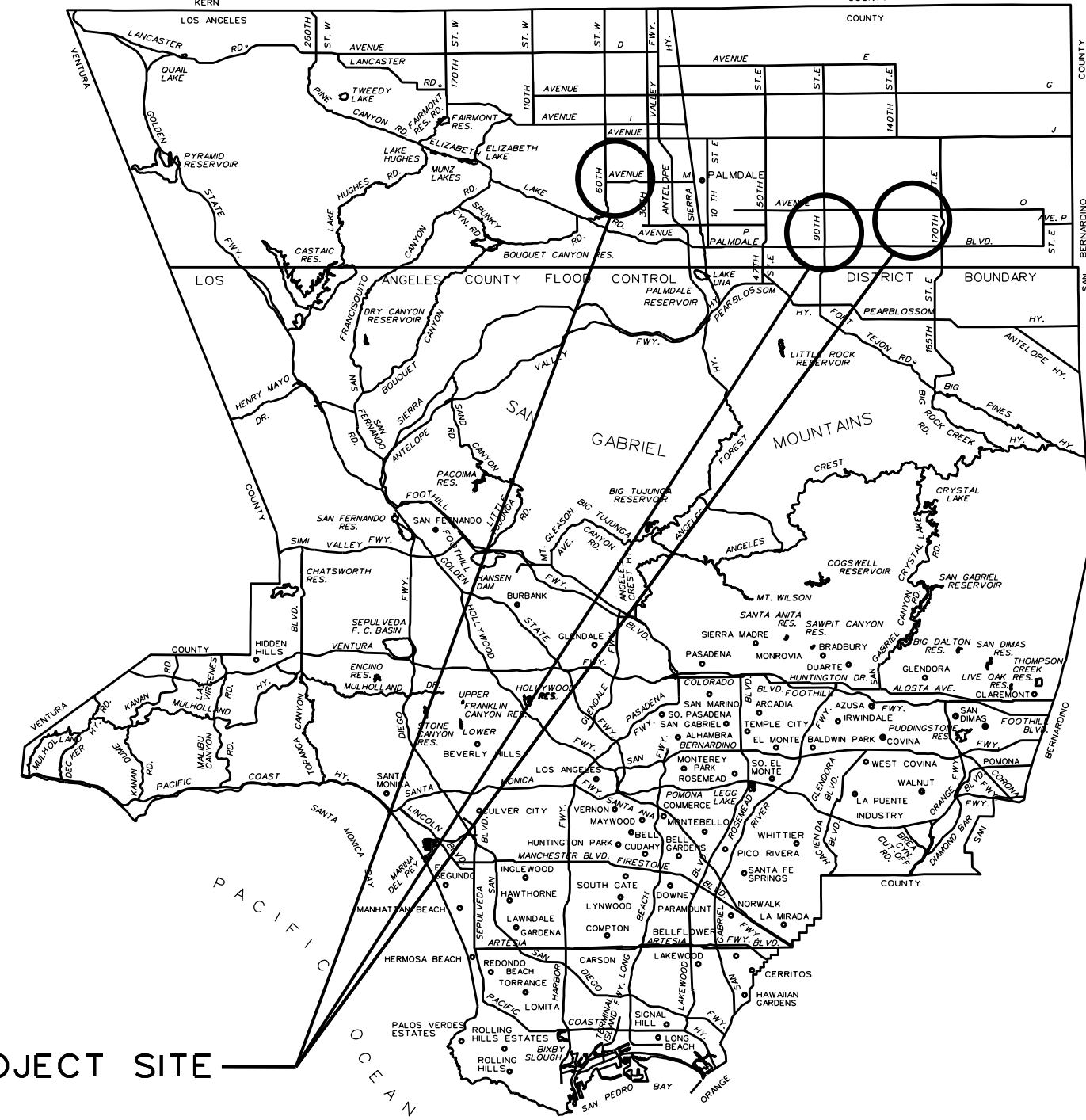


# COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

## NORTH COUNTY BUS STOP IMPROVEMENTS TOTAL LENGTH 0.91 MILES

### INDEX

SHEET 1	TITLE SHEET
SHEET 2	KEY MAP
SHEET 3	CONSTRUCTION LEGEND AND NOTES
SHEET 4-7	PLAN, SECTION, & DETAIL
PLAN SP	STRIPING PLAN



PROJECT SITE

LOCATION MAP

- T. G. 4104 - H7  
4109 - E7  
4197 - J7  
4198 - A7, B7, C7  
4199 - E1, F1, H1  
4287 - J5  
4288 - C3, E2
- R. D. 551, 555, 558

### PROJECT LIMITS

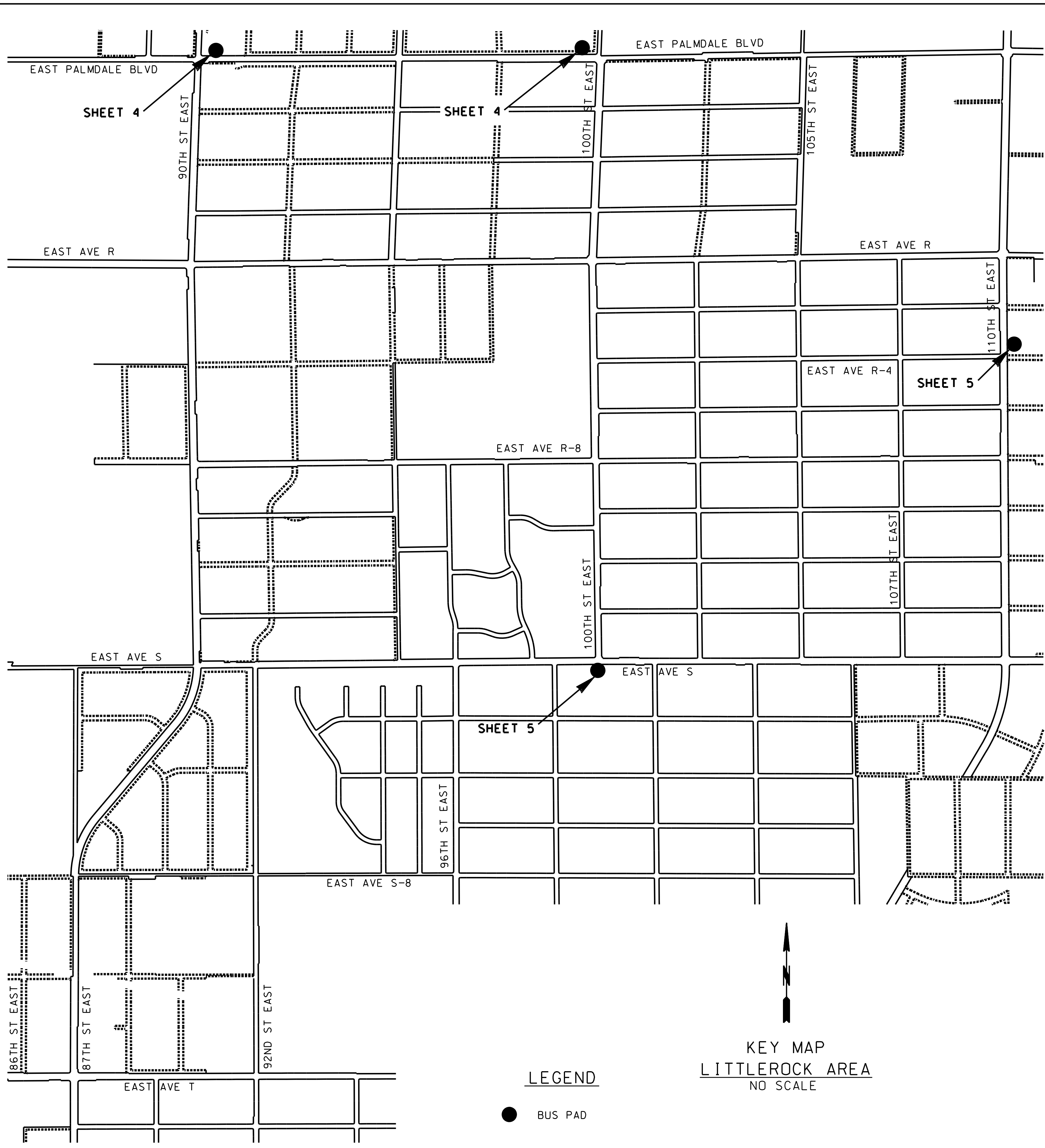
- 50TH STREET WEST N/O WEST AVENUE M-8
- 110TH STREET EAST N/O EAST AVENUE R-4
- EAST AVENUE N-8 W/O 158TH STREET EAST
- EAST AVENUE N-8 W/O 162ND STREET EAST
- EAST AVENUE N-8 W/O 170TH STREET EAST
- EAST AVENUE N W/O 158TH STREET EAST
- EAST PALMDALE BOULEVARD E/O 90TH STREET EAST
- EAST PALMDALE BOULEVARD W/O 100TH STREET EAST
- INTERSECTION OF EAST AVENUE S AND 100TH STREET EAST

CADD PROJECT FILE NAME  
 TRN0000019-PLAN-RD-DGN  
 CHECKER  
 M. ORELLANA  
 DESIGNER  
 J. NOORPARVAR  
 DRAFTER  
 K. MORALES

ASBUILT

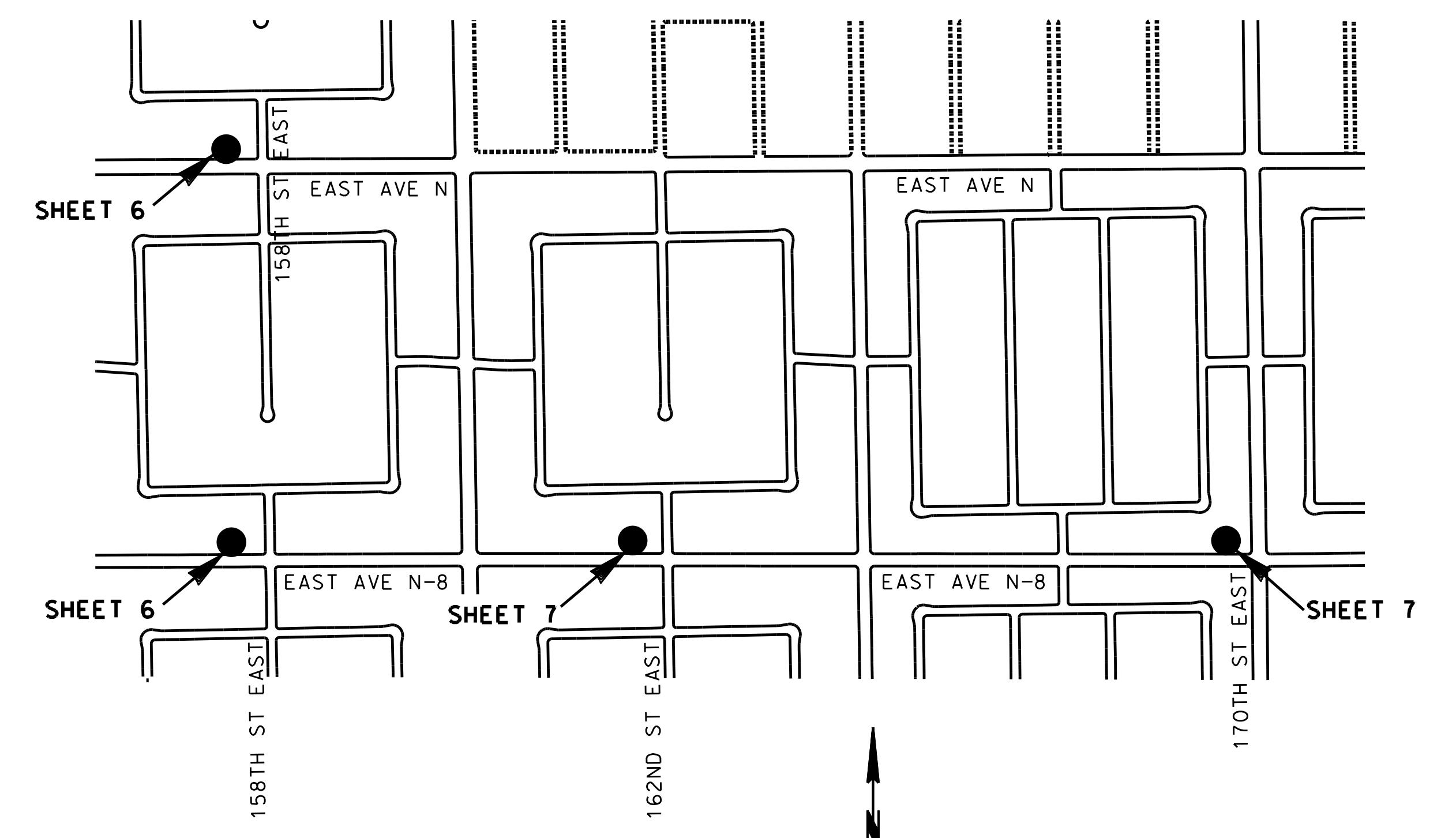
TWO DAYS BEFORE YOU DIG CALL USA TOLL FREE 1-800-227-2600		APPROVED GAIL FARBER, DIRECTOR OF PUBLIC WORKS BY <i>[Signature]</i> 9/7/16 DEPUTY DIRECTOR DATE			COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS <b>NORTH COUNTY BUS STOP IMPROVEMENTS</b> TITLE SHEET PROJECT ID NO. TRN0000019	
		RECOMMENDED BY <i>[Signature]</i> 9/7/16 ASSISTANT DEPUTY DIRECTOR DATE				
		SUBMITTED BY <i>[Signature]</i> 8/10/2016 HIGHWAY # DATE			PROJECT ENGINEER <i>[Signature]</i> 8-10-16 DATE	
		DATE MK DESCRIPTION REVISIONS		PCAX3003267A DWG PH086078 SHEET 1 OF 7		

DRAFTER: K. MORALES  
 DESIGNER: J. NOORPARVAR  
 CHECKER: M. ORELLANA  
 CADD PROJECT FILE NAME: TRN0000019-PLAN-RD-DGN  
 REVIEWED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_

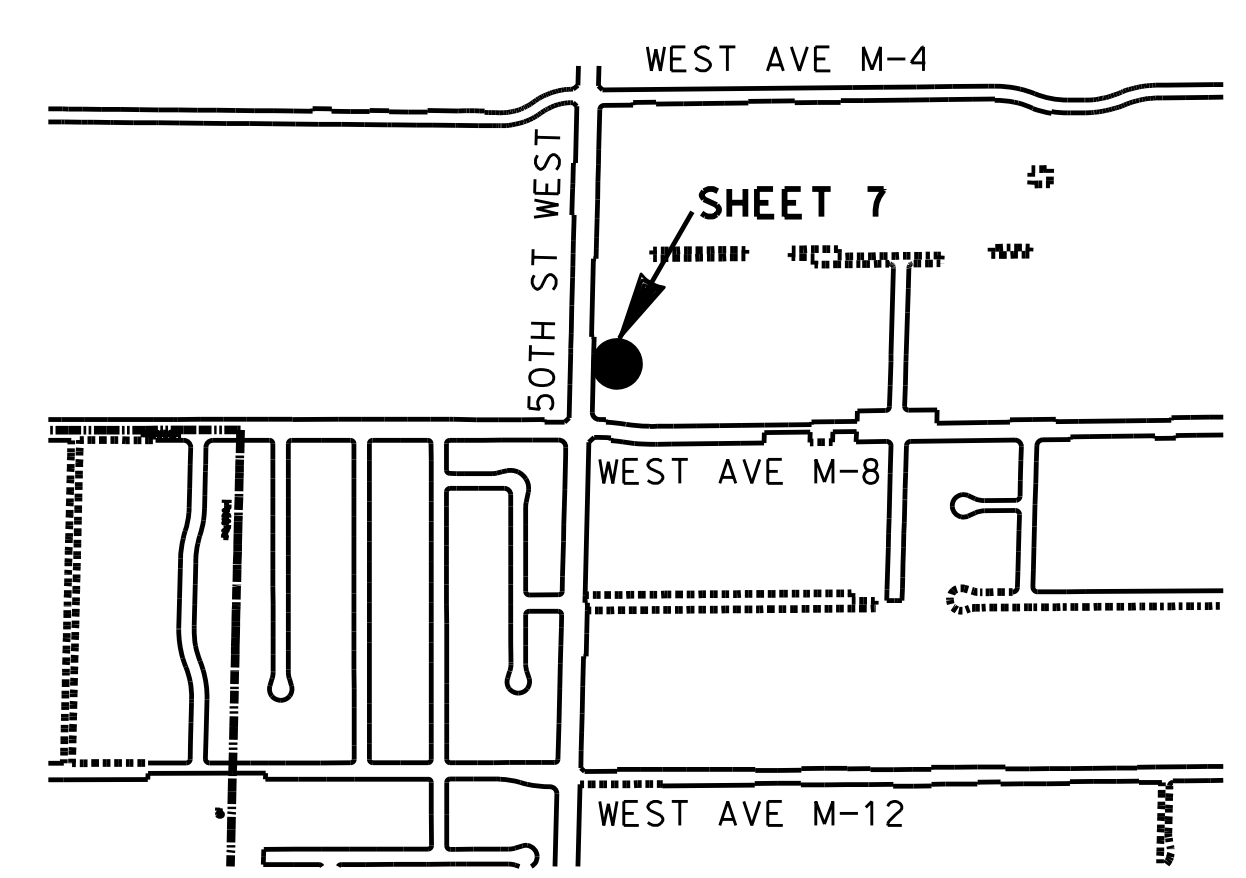


**LEGEND**  
 ● BUS PAD

KEY MAP  
 LITTLEROCK AREA  
 NO SCALE



KEY MAP  
 LAKE LOS ANGELES AREA  
 NO SCALE

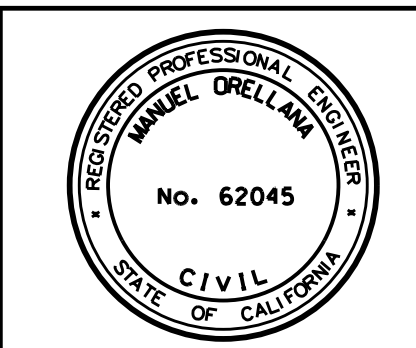


KEY MAP  
 QUARTZ HILL AREA  
 NO SCALE

ASBUILT

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

NORTH COUNTY  
 BUS STOP IMPROVEMENTS  
 KEY MAP  
 PROJECT ID NO. TRN0000019



PROJECT ENGINEER: *Manuel Orellana*  
 DATE: 8-10-16

DATE	MK	DESCRIPTION

PCA    DWG    PH086078    SHEET 2 OF 7

**CONSTRUCTION LEGEND**

ITEMS UNDERLINED TO BE CONSTRUCTED

- ① PORTLAND CEMENT CONCRETE CURB AND GUTTER
- ② PORTLAND CEMENT CONCRETE CURB
- ③ ASPHALT CONCRETE CURB
- ④ PORTLAND CEMENT CONCRETE LONGITUDINAL GUTTER
- ⑤ PORTLAND CEMENT CONCRETE SIDEWALK, 4" THICK
- ⑥ PORTLAND CEMENT CONCRETE SIDEWALK, 6" THICK
- ⑦ PORTLAND CEMENT CONCRETE PAVEMENT ON BASE MATERIAL
- ⑧ ASPHALT CONCRETE PAVEMENT
- ⑨ ASPHALT CONCRETE PAVEMENT ON BASE MATERIAL
- ⑩ ASPHALT CONCRETE PAVEMENT, VARIABLE THICKNESS
- ⑪ STABILIZATION GEOTEXTILE
- ⑫ SLURRY SEAL
- ⑬ COLD MILL ASPHALT CONCRETE PAVEMENT
- ⑭ DRIVEWAY, TYPE B, Y= VAR UNLESS OTHERWISE SHOWN
- ⑮ ALLEY INTERSECTION (ON 6" CMB)
- ⑯ CROSS GUTTER (ON 6" CMB)
- ⑰ RETAINING STRUCTURE
- ⑱ DRAINAGE SYSTEM AS SHOWN ON SHEET INDICATED
- ⑲ REINFORCED CONCRETE STAIRWAY
- ⑳ CURB RAMP, CASE B, SECTION B-B, UNLESS OTHERWISE SHOWN
- ㉑ CONCRETE BUS PAD
- ㉒ RUBBERIZED ASPHALT CONCRETE (RBAC) OR ASPHALT RUBBER HOT MIX (ARHM)
- ㉓ RUBBERIZED ASPHALT CONCRETE (RBAC), VARIABLE THICKNESS OR ASPHALT RUBBER HOT MIX (ARHM), VARIABLE THICKNESS
- ㉔ FURNISH AND PLANT TREE (PER CONSTRUCTION NOTE 6)
- ㉕ DROP CROTCH TRIM AND ROOT PRUNE TREE. FURNISH AND INSTALL ROOT CONTROL BARRIER
- ㉖ ADJUST MANHOLE
- ㉗ DOUBLE ADJUST MANHOLE
- ㉘ RECONSTRUCT MANHOLE
- ㉙ TREE WELL COVERS, TYPE \_\_\_\_\_, CASE \_\_\_\_\_
- ㉚ CURB DRAIN, CASE \_\_\_\_\_, N = \_\_\_\_\_
- ㉛ PARKWAY DRAIN, INLET TYPE \_\_\_\_\_, S = \_\_\_\_\_
- ㉜ RUBBERIZED EMULSION AGGREGATE SLURRY
- ㉝ CHAIN LINK FENCE AND GATES, H= \_\_\_\_\_ UNLESS OTHERWISE SHOWN
- ㉞ METAL BEAM GUARD RAIL
- ㉟ TERMINAL SYSTEM END TREATMENT (TYPE AS SHOWN)
- ㊱ TRENCH BACKFILL SLURRY (270-E-500)
- ㊲ ADJUST SWING GATE

**CONSTRUCTION NOTES**

CHECKED BOXES ARE FOR ITEMS APPLICABLE TO THIS PROJECT

- 1. PRIME CONTRACTOR LICENSE REQUIRED: CLASS A OR C12.
- 2. STANDARD PLANS REFERENCED ARE PER THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (SPPWC) UNLESS OTHERWISE NOTED.
- 3. PRIOR TO RESURFACING WITH RBAC OR ARHM, FILL ALL HOLES AND CRACKS WIDER THAN 1/4" WITH SS-1h EMULSIFIED ASPHALT AND SAND. PAYMENT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR RUBBERIZED ASPHALT CONCRETE OR ASPHALT RUBBER HOT MIX
- 4. PRIOR TO RESURFACING WITH AC, FILL ALL HOLES AND CRACKS WITH SS-1h EMULSIFIED ASPHALT AND SAND. PAYMENT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE FOR AC PAVEMENT.
- 5. REPLACE AND RELOCATE TRAFFIC SIGNAL AND STREET LIGHTING PULL BOXES AFFECTED BY CURB RAMP AND SIDEWALK CONSTRUCTION. PAYMENT WILL BE MADE AT THE CONTRACT UNIT PRICE FOR NO. 6 PULL BOX.
- 6. FURNISH AND PLANT 15 GALLON TREE, PER STD PLAN 520-2 CASE \_\_\_\_\_, DOUBLE STAKING PER STD PLAN 518-2.
- 7. ELEVATIONS SHOWN ARE IN FEET BASED ON LLAND 2012, BASELINE 2010, AND PALMDALE 2010 ADJUSTMENT, NAVD 1988 DATUM.
- 8. ELEVATIONS SHOWN ARE IN FEET ABOVE MEAN SEA LEVEL BASED ON \_\_\_\_\_ ADJUSTMENT, NGVD 1929 DATUM.
- 9. CONSTRUCT KEYWAY ON PROPOSED CURB AND GUTTER ADJACENT TO BUS PAD PER STD PLAN 131-2

**STANDARD PLANS**

- SPPWC, 2012 EDITION
- 110-2 DRIVEWAY APPROACHES
- 120-2 CURB AND GUTTER - BARRIER
- 122-2 CROSS AND LONGITUDINAL GUTTERS
- 131-2 CONCRETE BUS PAD
- RSP A88A STATE OF CALIFORNIA, 2010 EDITION
- CURB RAMP DETAILS

**CONVENTIONAL SYMBOLS**

	EXISTING TOPOGRAPHY	PROPOSED IMPROVEMENTS
CURB	---	=====
CURB AND GUTTER	-----/	=====
GUTTER	-----	=====
PAVEMENT CONCRETE	-----	=====
AC	-----	=====
CURB RAMP		
BUILDING		
BARRICADE	=====	=====
FENCE	-----	-----
GUY POLE	⊙	⊙
DRIVEWAY		
FIRE HYDRANT	⊙	
GUARDRAIL	-----	-----
GUY WIRE	⊕	
MANHOLE	⊙	⊙
PIPE	-----	=====
CONNECTOR PIPE	-----	=====
MAIN LINE	-----	=====
POLE	⊙	
PROPERTY LINE	-----	-----
R/W LINE	-----	-----
PULL BOX	⊕	
RAILROAD	-----	-----
RR XING PROTECTION	⊗	
SHRUB		
SIDEWALK	-----	=====
SIGNAL CONTROL BOX	⊕	
SIGNAL FLASHING	⊕	
TRAFFIC LOOP	⊕	
STREET LIGHT	⊕	
PALM TREE		
OAK TREE		
OTHER TREE		
VALVE	⊕	
VAULT	⊕	
BRICK (BLOCK) WALL	-----	=====
CONCRETE WALL	-----	=====
STONE WALL	-----	=====
TOP OF SLOPE	-----	-----
TOE OF SLOPE	-----	-----
STAND PIPE	⊕	

**NON-STANDARD ABBREVIATIONS**

COM	COMMERCIAL
RES	RESIDENTIAL
BW	BACK OF WALK
DEP	DEPRESS
LACDPW	LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS
PWFB	PUBLIC WORKS FIELD BOOK
PWLB	PUBLIC WORKS LEVEL BOOK

**REFERENCES**

- 1. PRELIMINARY MATERIALS TEST REPORT, LAB NO. 37433, DATED JULY 15, 2015
- 2. PWFB 3129 PAGES 406 - 408
- PWFB 3130 PAGES 822 - 825
- PWFB 3229 PAGES 429
- PWFB 3230 PAGES 396 - 397, 822 - 823
- PWFB 3333 PAGES 331 - 336
- PWFB 3421 PAGES 851
- PWFB 3422 PAGES 1597 - 1600
- PWFB 3433 PAGES 256 - 259

**CONSTRUCTION SYMBOLS**

- (NO) INDICATES WORK PER CONSTRUCTION LEGEND
- (Lr) CURVE DATA SHOWN IN TABLE ON PLAN
- 2" P4 ABOVE LINE: INDICATES THE TYPE OF STANDARD OR THICKNESS OF SURFACE MATERIAL IN INCHES; STD PLAN VARIABLES; CURB RAMP CASE, TYPE, SECTION AND DETAIL; OR TREE PLANTING CASE
- 5" CMB BELOW LINE: REFERENCE TO DETAIL OR THICKNESS OF BASE MATERIAL IN INCHES OR TREE WELL CASE
- 5 x b / 4" CMB ABOVE LINE: a = LENGTH PARALLEL TO CURB, b = LENGTH PERPENDICULAR TO CURB
- R REMOVE TREE
- 14 a, b / 2" P4 ABOVE LINE: a = WIDTH OF DRIVEWAY BEHIND APRON, b = DISTANCE BACK OF APRON
- RES OR COM BELOW LINE: THICKNESS AND TYPE OF SURFACE MATERIALS BEHIND APRON
- STA LEFT OF LINE: STA OF THE DRIVEWAY APRON
- W RIGHT OF LINE: DRIVEWAY WIDTH "W" OF APRON
- 19 C, L, S, R, T ABOVE LINE: STD PLAN VARIABLES
- LEFT OF LINE: STA OF THE STAIRWAY
- RIGHT OF LINE: STAIRWAY WIDTH AND TYPE
- MT W L MEDIAN TAPER PER STD PLAN 140-2
- MF W L MEDIAN FLARE PER STD PLAN 141-1
- RU UTILITY TO BE RELOCATED BY OWNER

**AC PAVEMENT CLASS AND GRADE LEGEND**

P1 C2 - PG 70-10	P3 B - PG 70-10
B - PG 70-10	
P2 C2 - PG 70-10	P4 D2 - PG 70-10

**ASBUILT**

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

**NORTH COUNTY  
BUS STOP IMPROVEMENTS  
CONSTRUCTION LEGEND AND NOTES  
PROJECT ID NO. TRN000019**

DATE	BY	DESCRIPTION
2/13/2019	AS-BUILT	
REVISIONS		

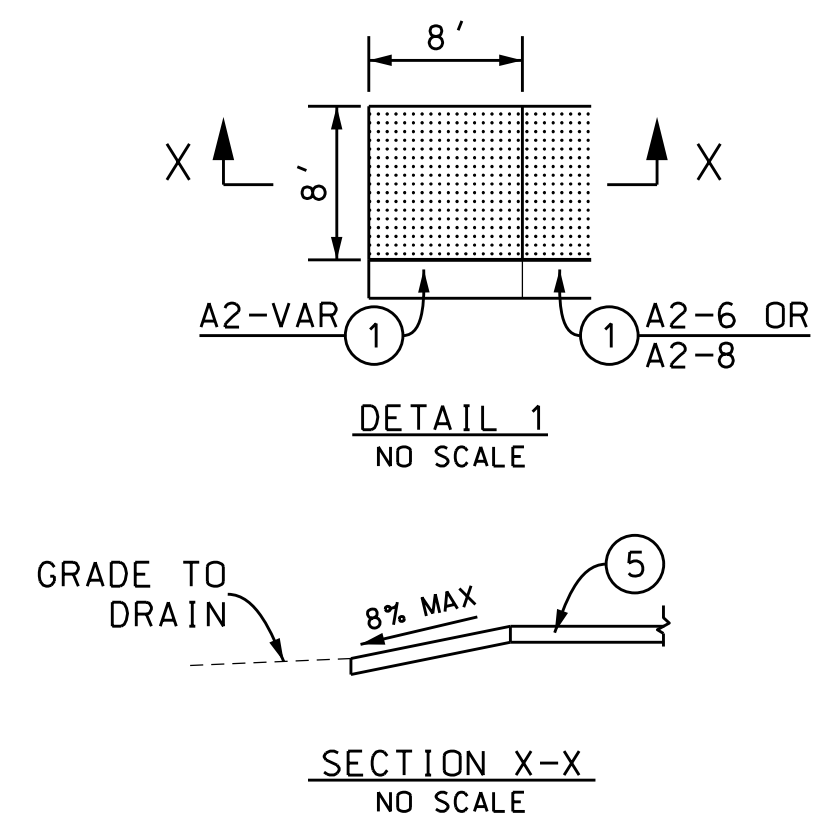
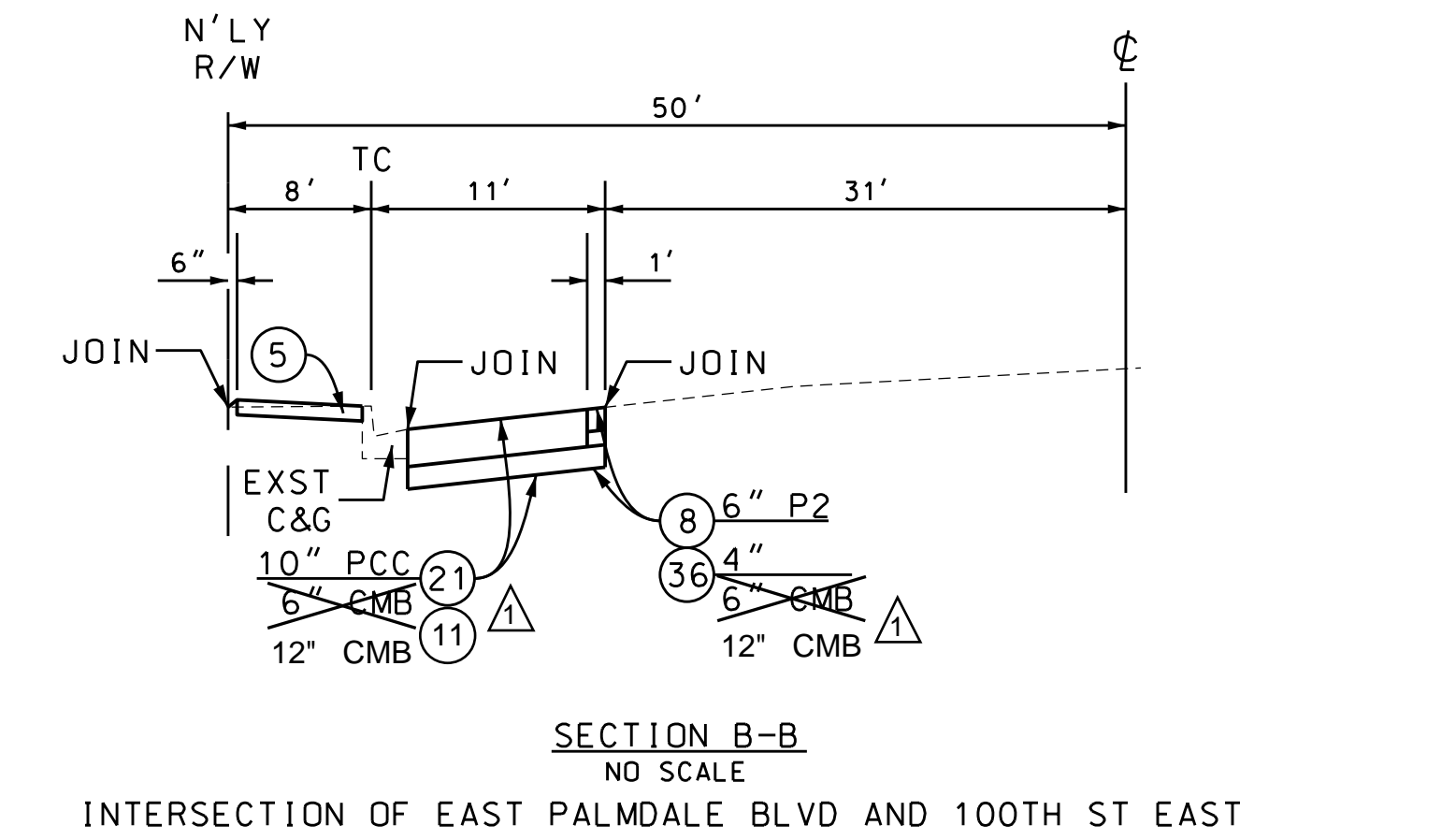
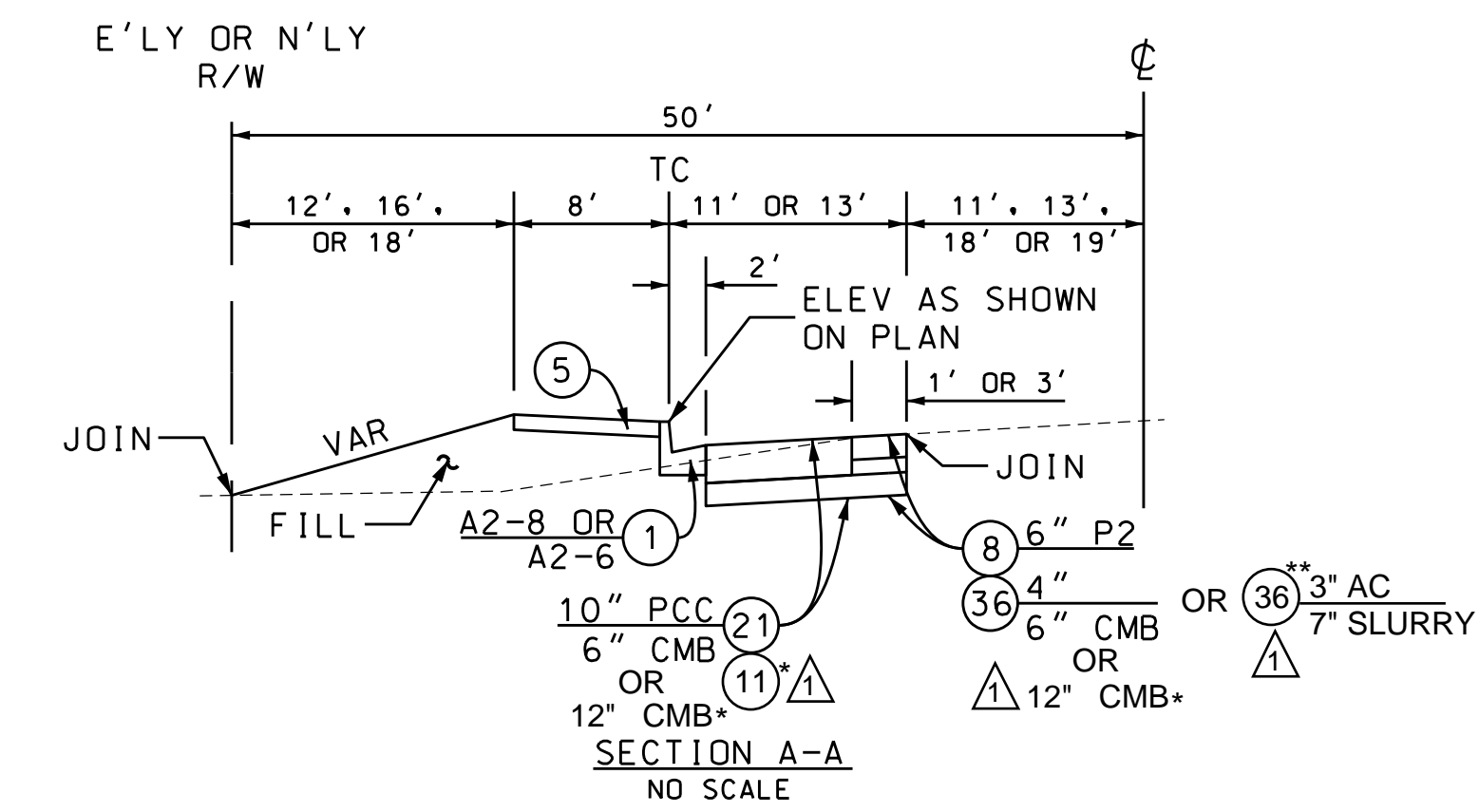
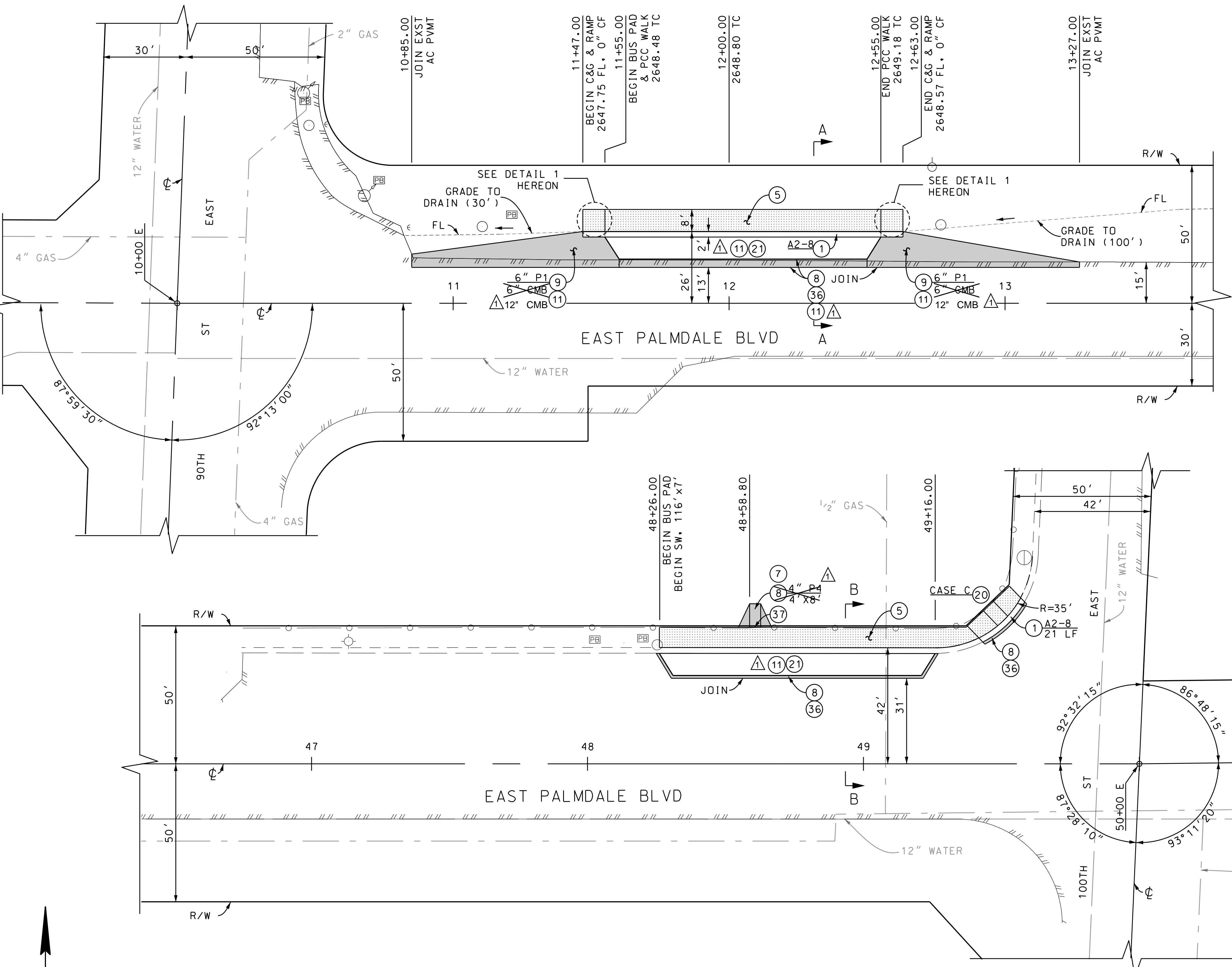


PROJECT ENGINEER Manuel Orellana 8-10-16 DATE

PCA	DWG	PH086078	SHEET 3 OF 7
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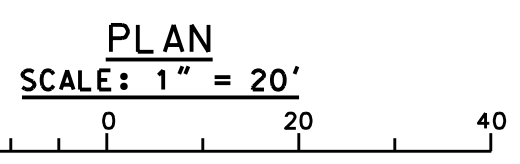
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 CHECKER: M. ORELLANA  
 DESIGNER: J. NOORPARVAR  
 DRAFTER: K. MORALES

DATE: \_\_\_\_\_  
 REVIEWED BY: \_\_\_\_\_  
 CAD PROJECT FILE NAME: TRN0000019-PLAN-RD-DGN  
 CHECKER: M. ORELLANA  
 DESIGNER: J. NOORPARVAR  
 DRAFTER: K. MORALES

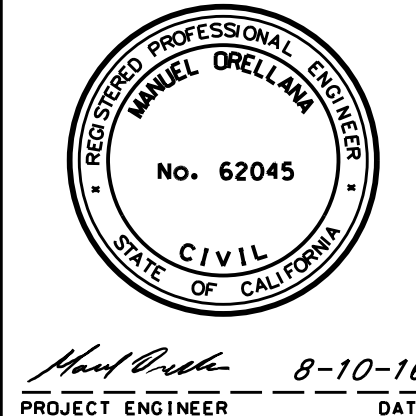


BENCHMARK PT# 7000  
 PWFB 3230, PAGE 396  
 INT PALMDALE BLVD & 100TH ST E.  
 1/4 COR SEC 29-30, T6N, R10W FD C.S. MON  
 ELEV= 2668.70 NAVD'88 (LLAND 2012)

BENCHMARK PT# 8000  
 PWFB 3229, PAGE 429  
 INT PALMDALE BLVD AND 90TH ST E.  
 1/4 COR SEC 29-30, T6N, R10W CO ENGR MON  
 ELEV= 2646.88 NAVD'88 (LLAND 2012)



DATE	BY	REVISIONS
2/13/2019	AS-BUILT	



ASBUILT

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

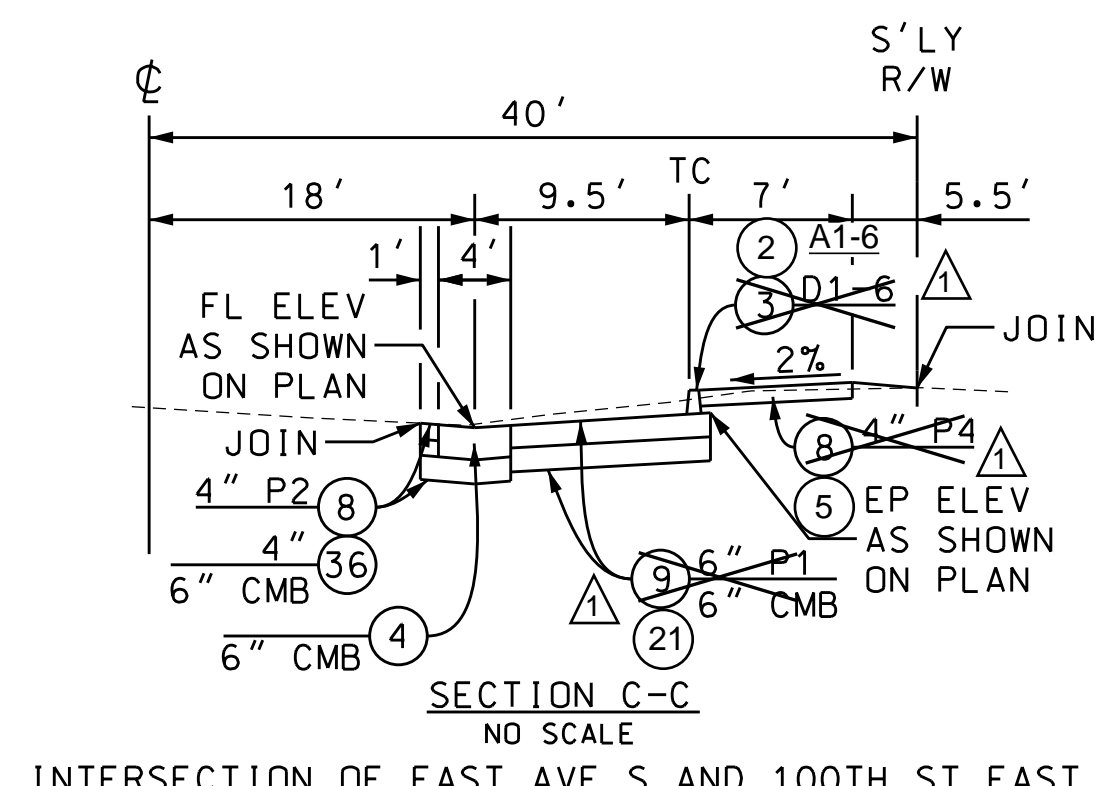
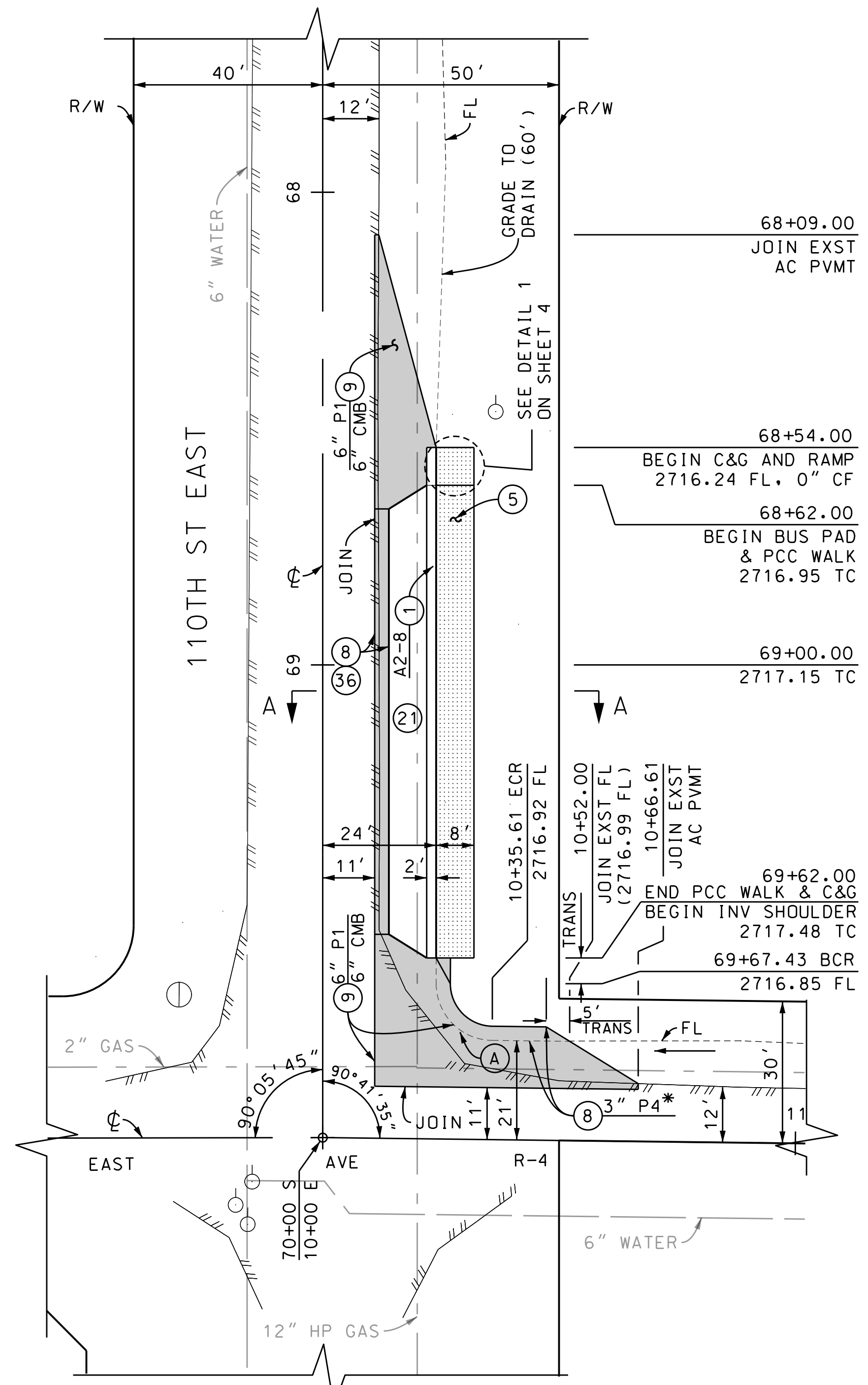
**NORTH COUNTY  
 BUS STOP IMPROVEMENTS  
 PLAN**

PROJECT ID NO. TRN0000019

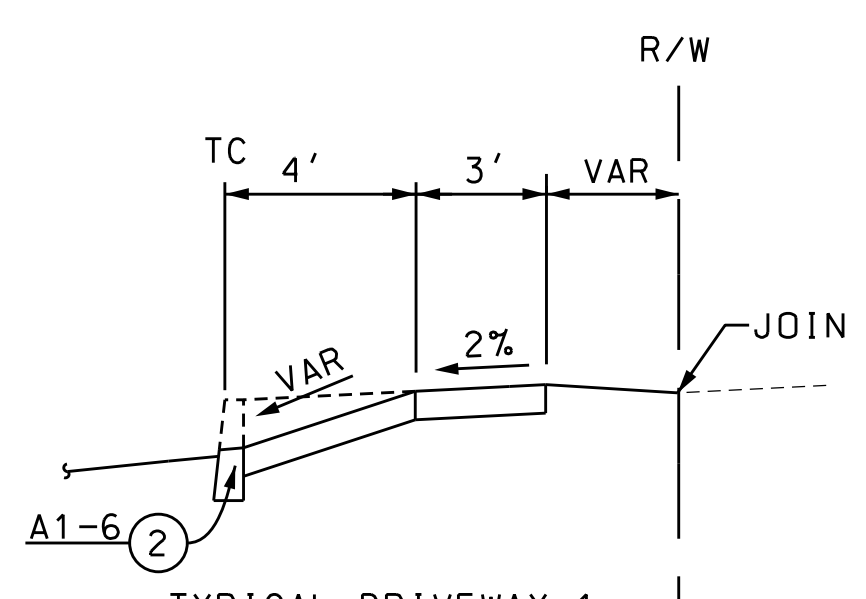
PCA DWG PH086078 SHEET 4 OF 7

SEE SECTION A-A ON SHEET 4

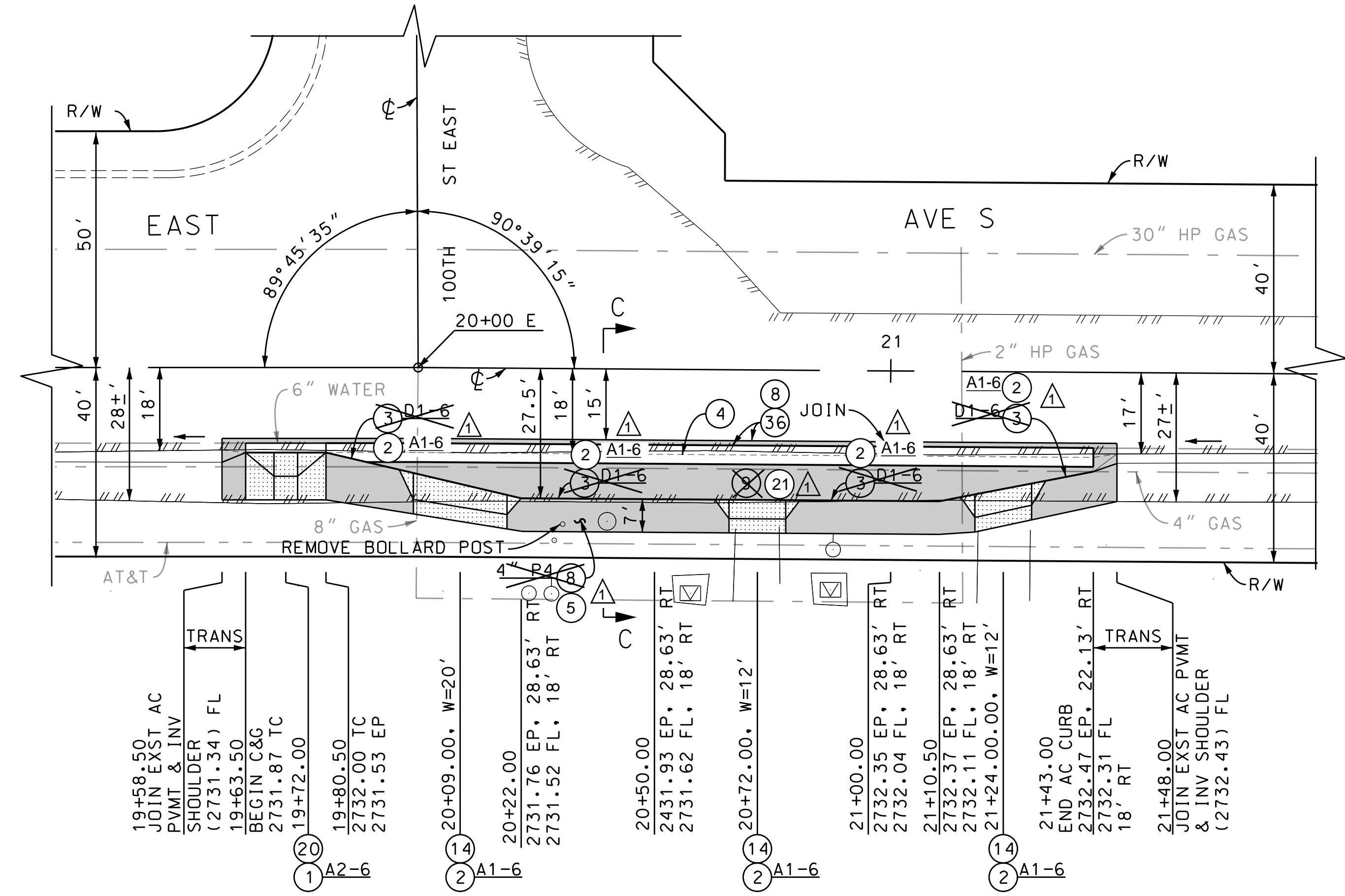
\* SEE TYPICAL AC INVERTED SHOULDER SECTION ON SHEET 6



INTERSECTION OF EAST AVE S AND 100TH ST EAST



INTERSECTION OF EAST AVE S AND 100TH ST EAST

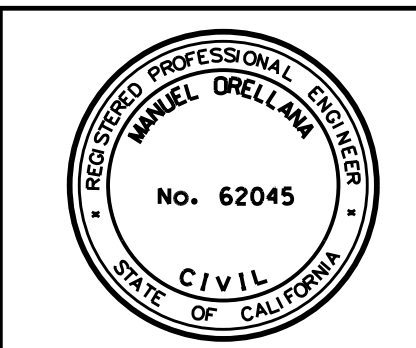


BENCHMARK PT# 9002  
 PWFB 3130, PAGE 825  
 FD BT SPK & W DN 2"  
 @ INT 110TH ST E & AVENUE R-4  
 ELEV= 2717.85 NAVD'88 (LLAND 2012)

BENCHMARK PT# 2047  
 PWFB 3130, PAGE 824  
 FD LACO CE MON AT  
 @ INT AVENUE S & 100TH ST E  
 ELEV= 2730.45 NAVD'88 (BASELINE 2010)

CURVE DATA						
CURVE	RADIUS (FT)	CENTRAL ANGLE			LENGTH (FT)	TANGENT (FT)
		DEG	MIN	SEC		
(A)	12.00	89	18	25	18.70	11.86

DATE	BY	DESCRIPTION
2/13/2019	AS-BUILT	



**ASBUILT**

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

**NORTH COUNTY  
 BUS STOP IMPROVEMENTS  
 PLAN**

PROJECT ID NO. TRN0000019

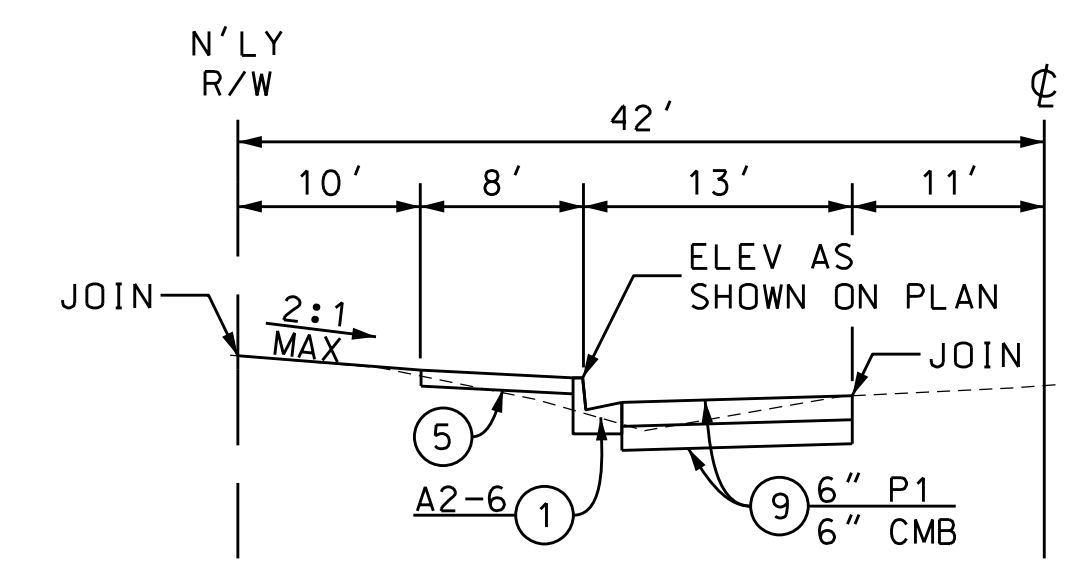
PROJECT ENGINEER: *Manuel Orellana* 8-10-16 DATE

PCA DWG PH086078 SHEET 5 OF 7

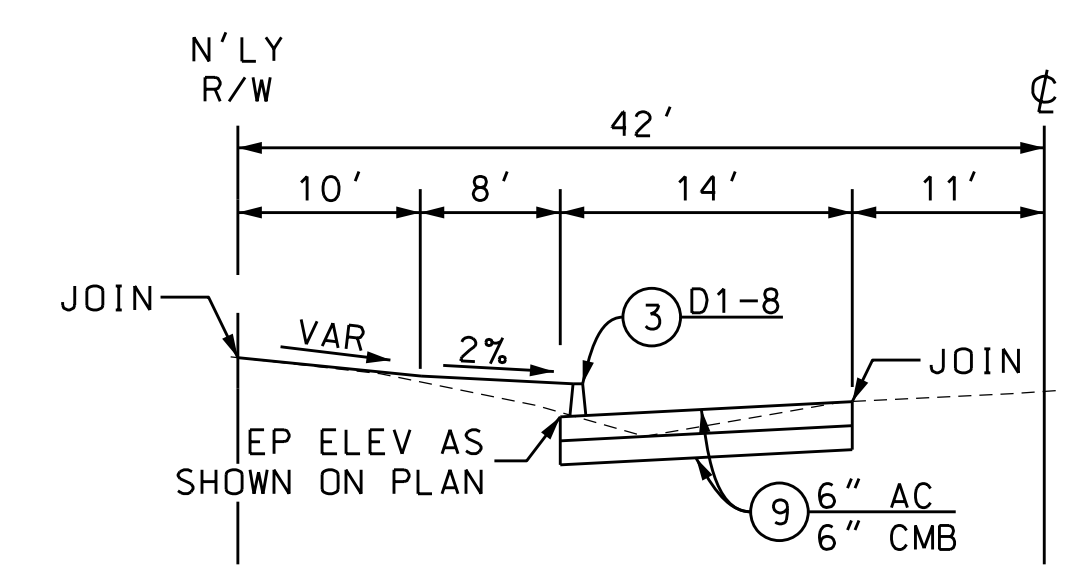
DRAFTER: K. MORALES  
 DESIGNER: J. NOORPARVAR  
 CHECKER: M. ORELLANA  
 CAD PROJECT FILE NAME: TRN0000019-PLAN-RD-DGN  
 REVIEWED BY: DATE:



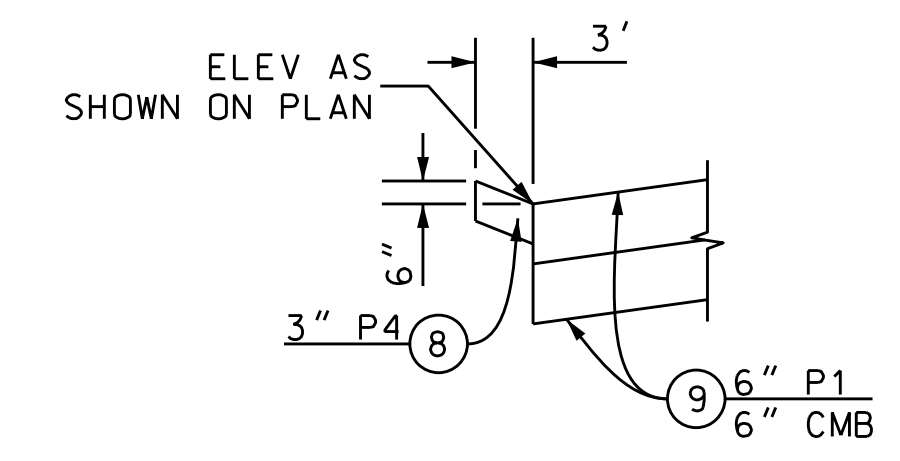
SEE SECTION A-A ON SHEET 4



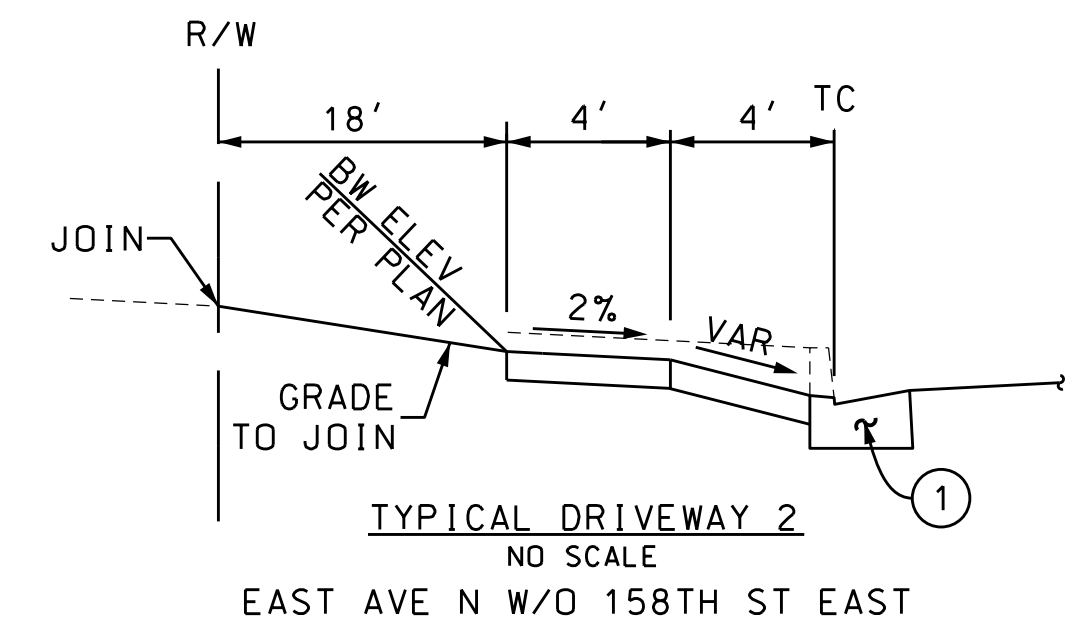
SECTION D-D  
NO SCALE  
INTERSECTION OF EAST AVE N-8 AND 158TH ST EAST  
INTERSECTION OF EAST AVE N-8 AND 162ND ST EAST  
INTERSECTION OF EAST AVE N-8 AND 170TH ST EAST



SECTION E-E  
NO SCALE  
INTERSECTION OF EAST AVE N-8 AND 158TH ST EAST  
INTERSECTION OF EAST AVE N-8 AND 162ND ST EAST  
INTERSECTION OF EAST AVE N-8 AND 170TH ST EAST

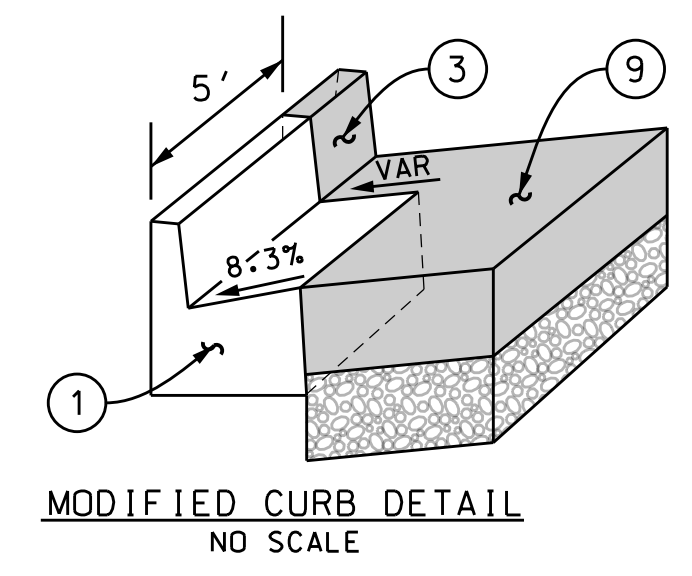


TYPICAL AC INVERTED SHOULDER SECTION  
NO SCALE  
INTERSECTION OF EAST AVENUE N AND 158TH ST EAST  
INTERSECTION OF EAST AVE N-8 AND 158TH ST EAST  
INTERSECTION OF EAST AVE N-8 AND 162ND ST EAST  
INTERSECTION OF EAST AVE N-8 AND 170TH ST EAST  
INTERSECTION OF 50TH ST WEST AND EAST AVE M-8

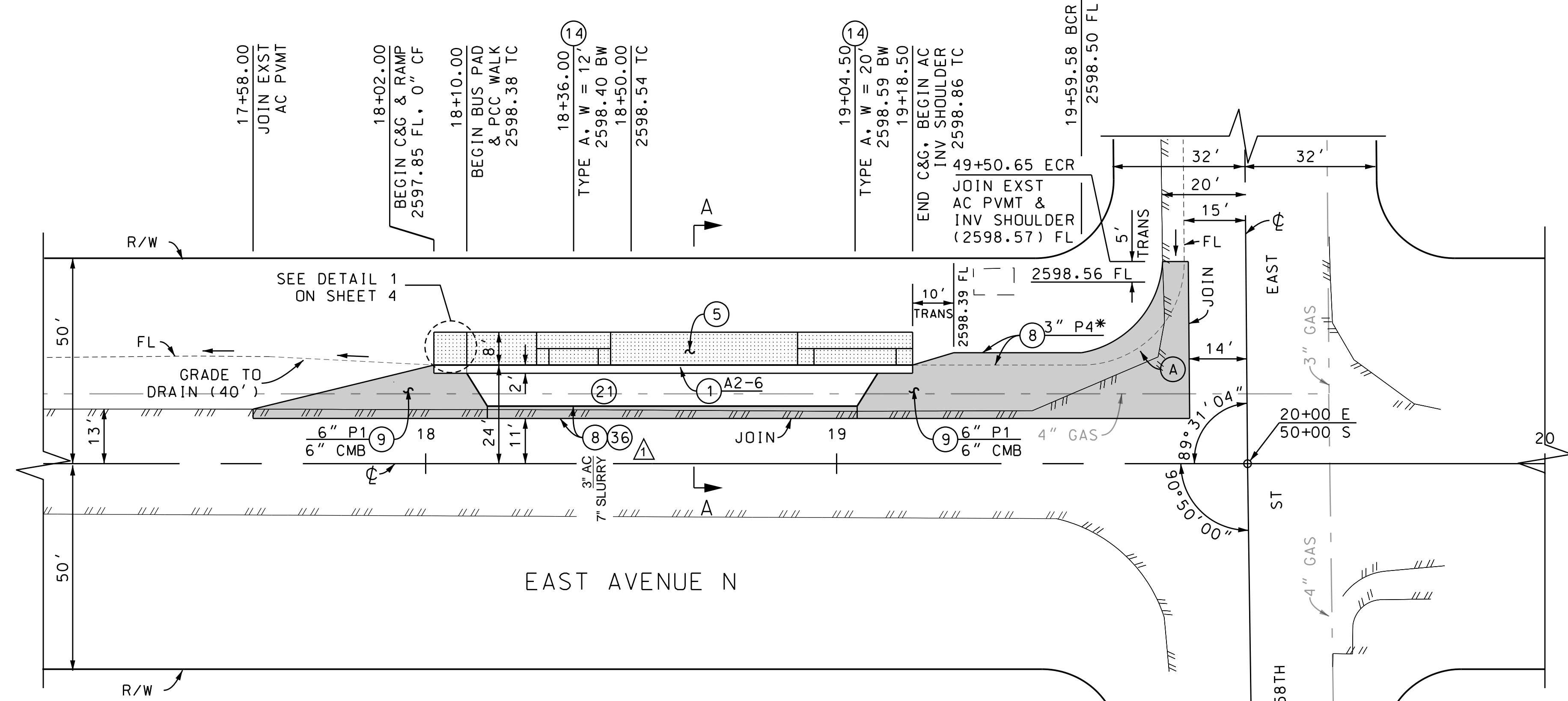


BENCHMARK PT# 2002  
PWFB 3333, PAGE 334  
C INT AVE N-8 & 158TH ST EAST  
CO ENG WELL MON DN 18"  
ELEV= 2611.94 NAVD'88 (LLANO 2012)

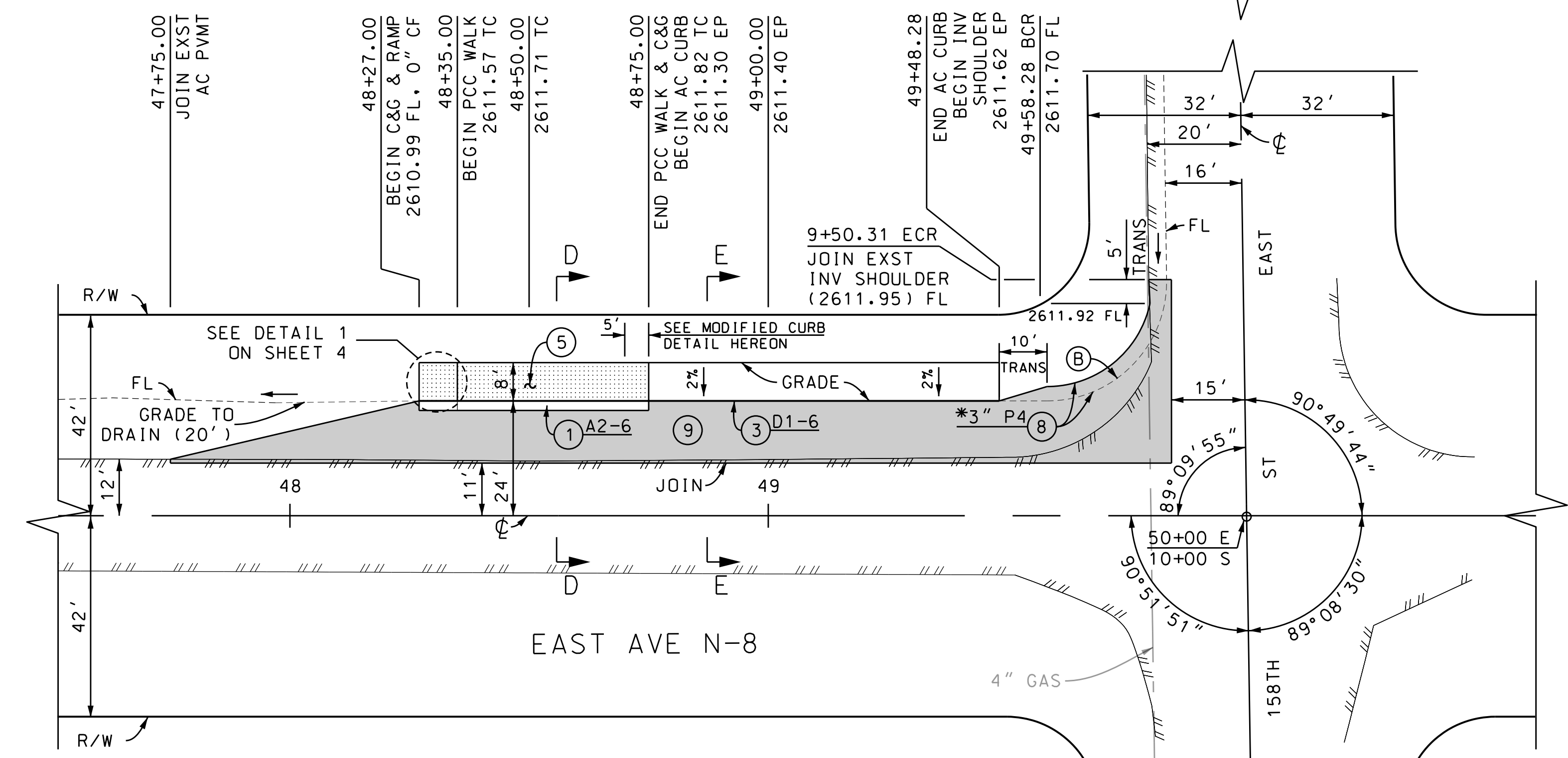
BENCHMARK PT# 1000  
PWFB 3433, PAGE 259  
C INT AVE N & 158TH ST EAST  
2" IP & TAG ILLEG DN 4"  
USED HIGH PT OF PIPE FOR ELEV.  
ELEV= 2599.15 NAVD'88 (LLANO 2012)



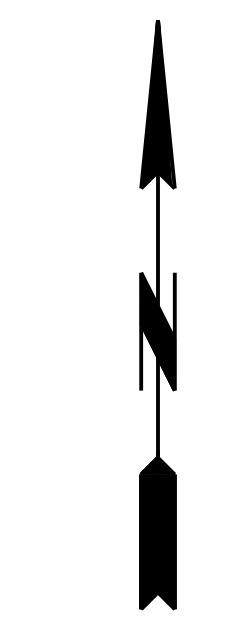
MODIFIED CURB DETAIL  
NO SCALE



\* SEE TYPICAL AC INVERTED SHOULDER SECTION HEREON



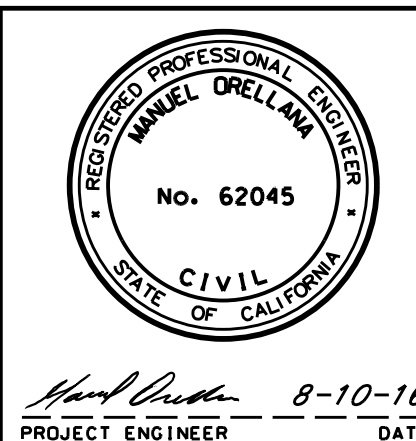
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REVIEWED BY  
CADD PROJECT FILE NAME  
TRN0000019-PLAN-RD.DGN  
CHECKER  
M. ORELLANA  
DESIGNER  
J. NOORPARVAR  
DRAFTER  
K. MORALES



PLAN  
SCALE: 1" = 20'

CURVE	RADIUS (FT)	CENTRAL ANGLE			LENGTH (FT)	TANGENT (FT)	ELEVATIONS (FL)		
		DEG	MIN	SEC			E'LY Δ/4	Δ/2	W'LY Δ/4
(A)	25.00	90	28	56	39.48	25.21	2598.52	2598.53	2598.55
(B)	25.00	90	50	05	39.63	25.37	2611.76	2611.83	2611.89

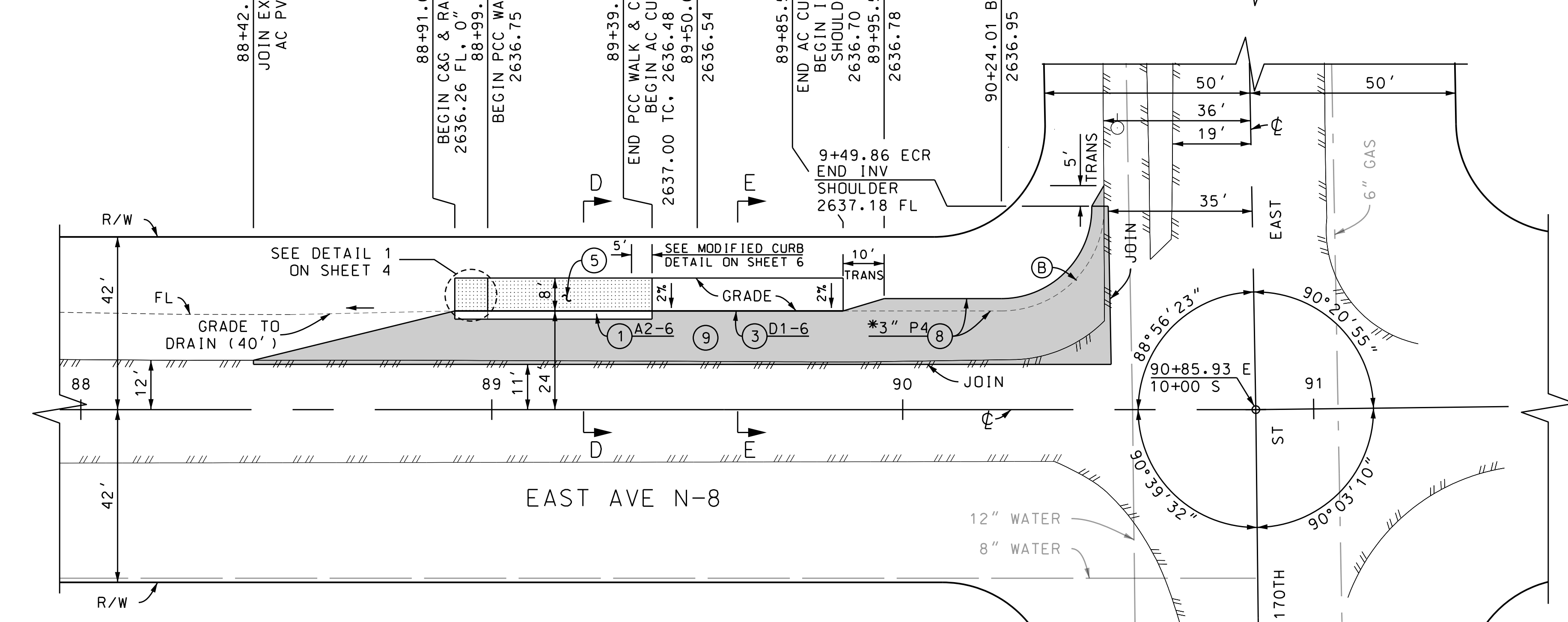
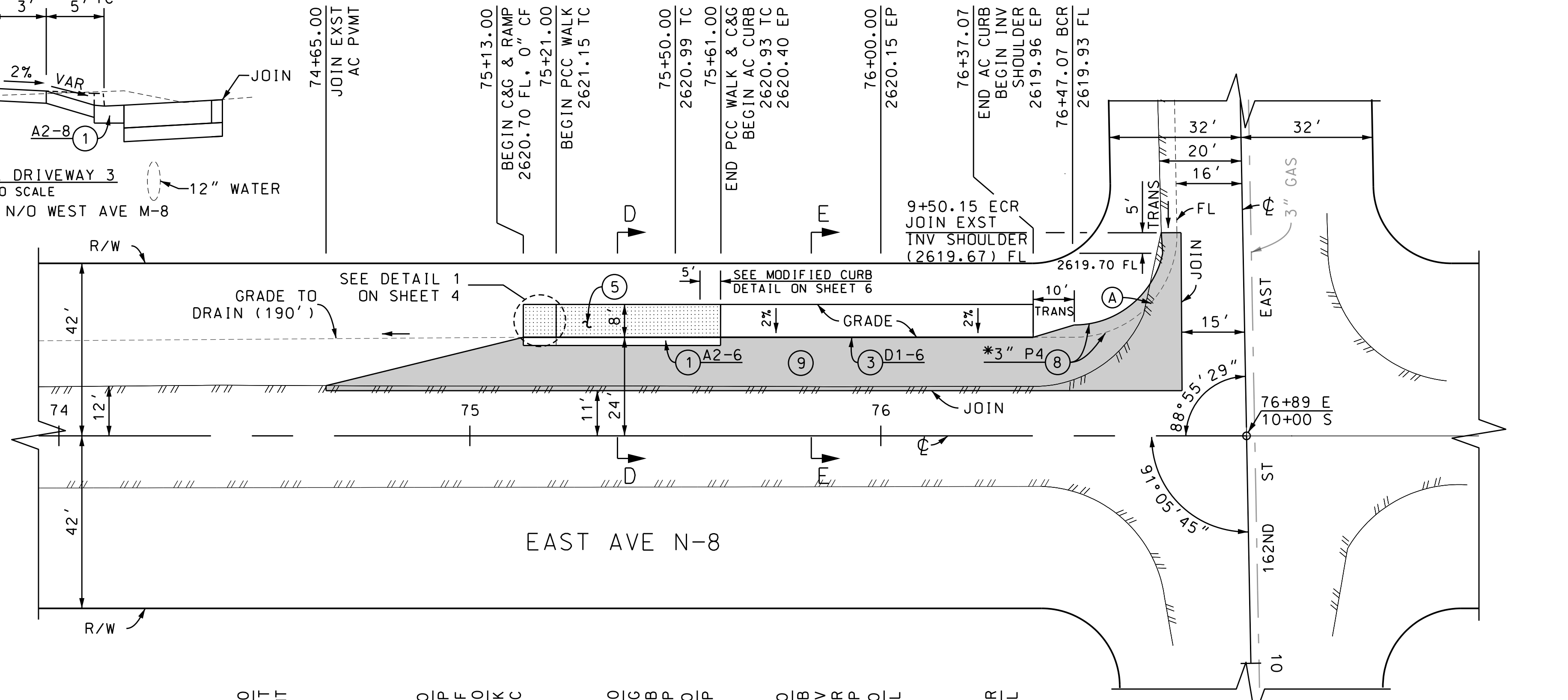
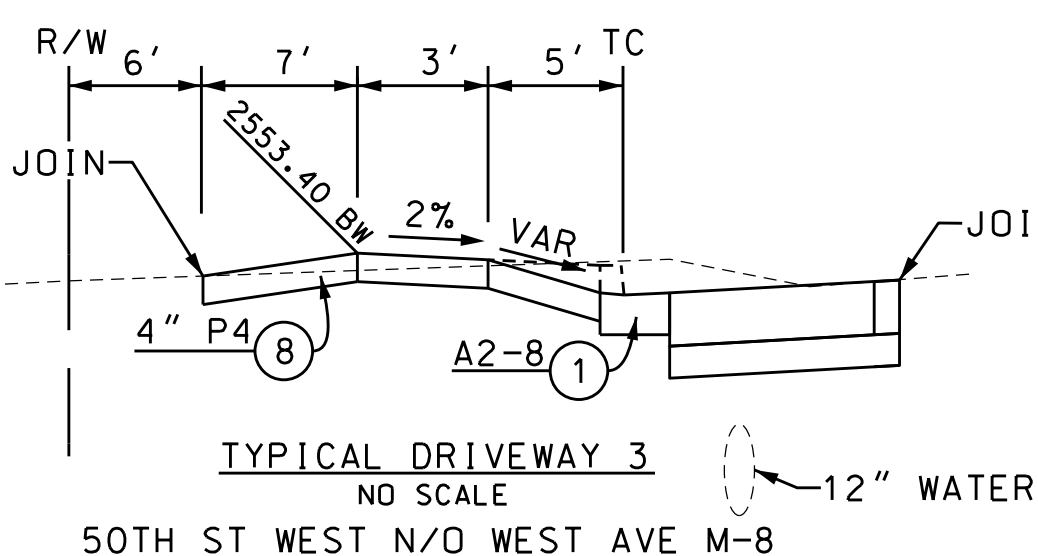
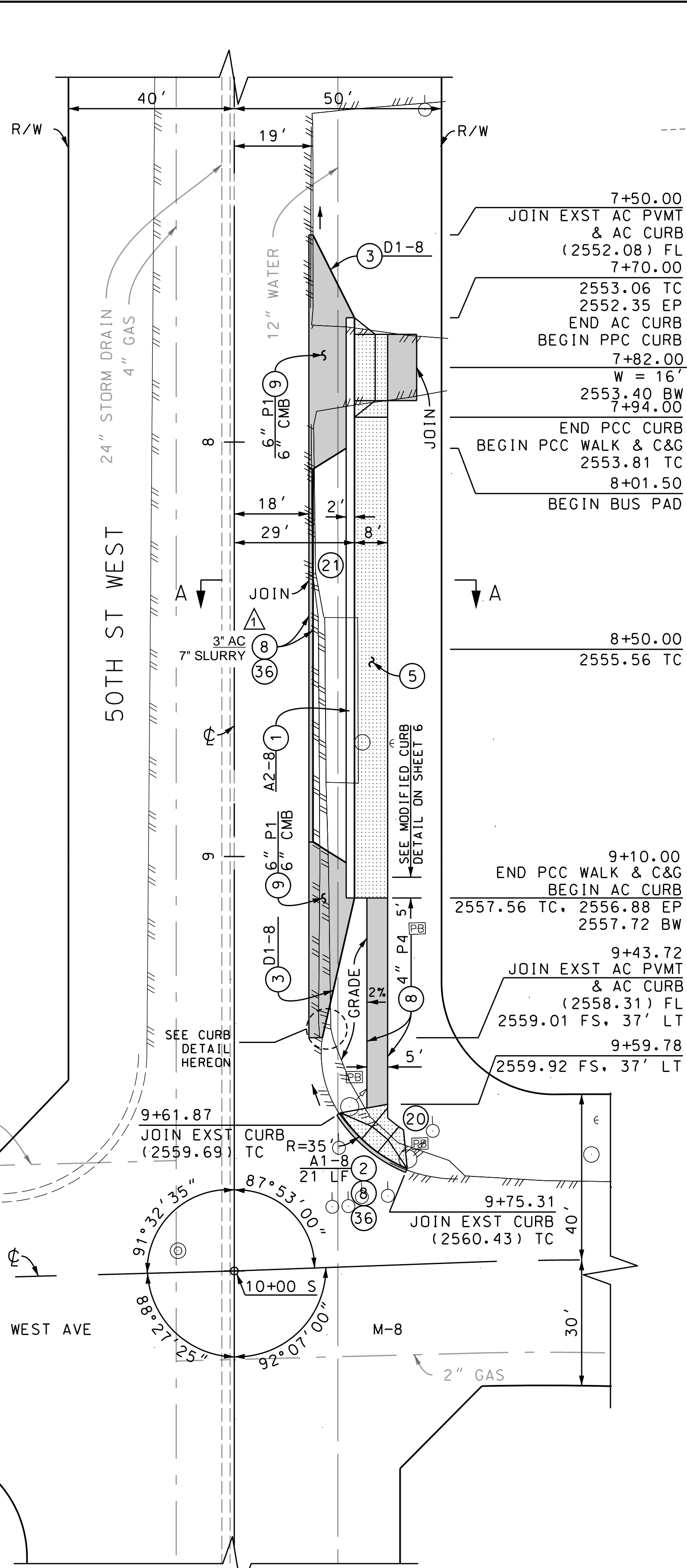
DATE	BY	DESCRIPTION
2/13/2019	AS-BUILT	



ASBUILT  
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
NORTH COUNTY  
BUS STOP IMPROVEMENTS  
PLAN  
PROJECT ID NO. TRN0000019  
PCA DWG PH086078 SHEET 6 OF 7

9+40.72  
2558.79 TC  
9+41.72  
2558.17 FL, 0" CF  
9+42.72  
2558.22 FL, 0" CF  
9+43.72  
(2558.94) TC  
JOIN EXST CURB

CURB DETAIL  
NO SCALE



BENCHMARK PT# 4000  
PWFB 3333, PAGE 336  
INT 170TH ST E & AVE N-8  
2" IP & CUT SPK IN WELL DN 24"  
ELEV= 2636.74 NAVD'88 (LLAND 2012)

BENCHMARK PT# 3000  
PWFB 3333, PAGE 334  
INT AVE N-8 & 162ND ST EAST  
CO ENG WELL MON DN 18"  
ELEV= 2619.14 NAVD'88 (LLAND 2012)

SEE SECTION A-A ON SHEET 4  
SEE SECTION D-D ON SHEET 6  
SEE SECTION E-E ON SHEET 6

\* SEE TYPICAL AC INVERTED SHOULDER SECTION ON SHEET 6

BENCHMARK PT# 10000  
PWFB 3422, PAGE 1599  
FD CO. ENG MON IN WELL INT 50TH W & AVE M-8 PER PWFB 3422-1536  
ELEV= 2559.76 NAVD'88 (PALMDALE 2010)

CURVE	RADIUS (FT)	CENTRAL ANGLE DEG MIN SEC	LENGTH (FT)	TANGENT (FT)	ELEVATIONS (FL)		
					E'LYΔ/4	Δ/2	W'LYΔ/4
(A)	25.00	91 04 31	39.74	25.47	2619.86	2619.78	2619.71
(B)	25.00	91 03 37	39.73	25.47	2637.01	2637.06	2637.12

DATE	BY	DESCRIPTION
2/13/2019	AS-BUILT	



PROJECT ENGINEER 8-10-16

ASBUILT  
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS  
NORTH COUNTY  
BUS STOP IMPROVEMENTS  
PLAN  
PROJECT ID NO. TRN0000019  
PCA DWG PH086078 SHEET 7 OF 7

DRAFTER: K. MORALES  
DESIGNER: J. NOORPARVAR  
CHECKER: M. ORELLANA  
CADD PROJECT FILE NAME: TRN0000019-PLAN-RD.DGN  
REVIEWED BY: [Signature]  
DATE: [Blank]