

Appendix A

Site Plans



CITY OF NORWALK

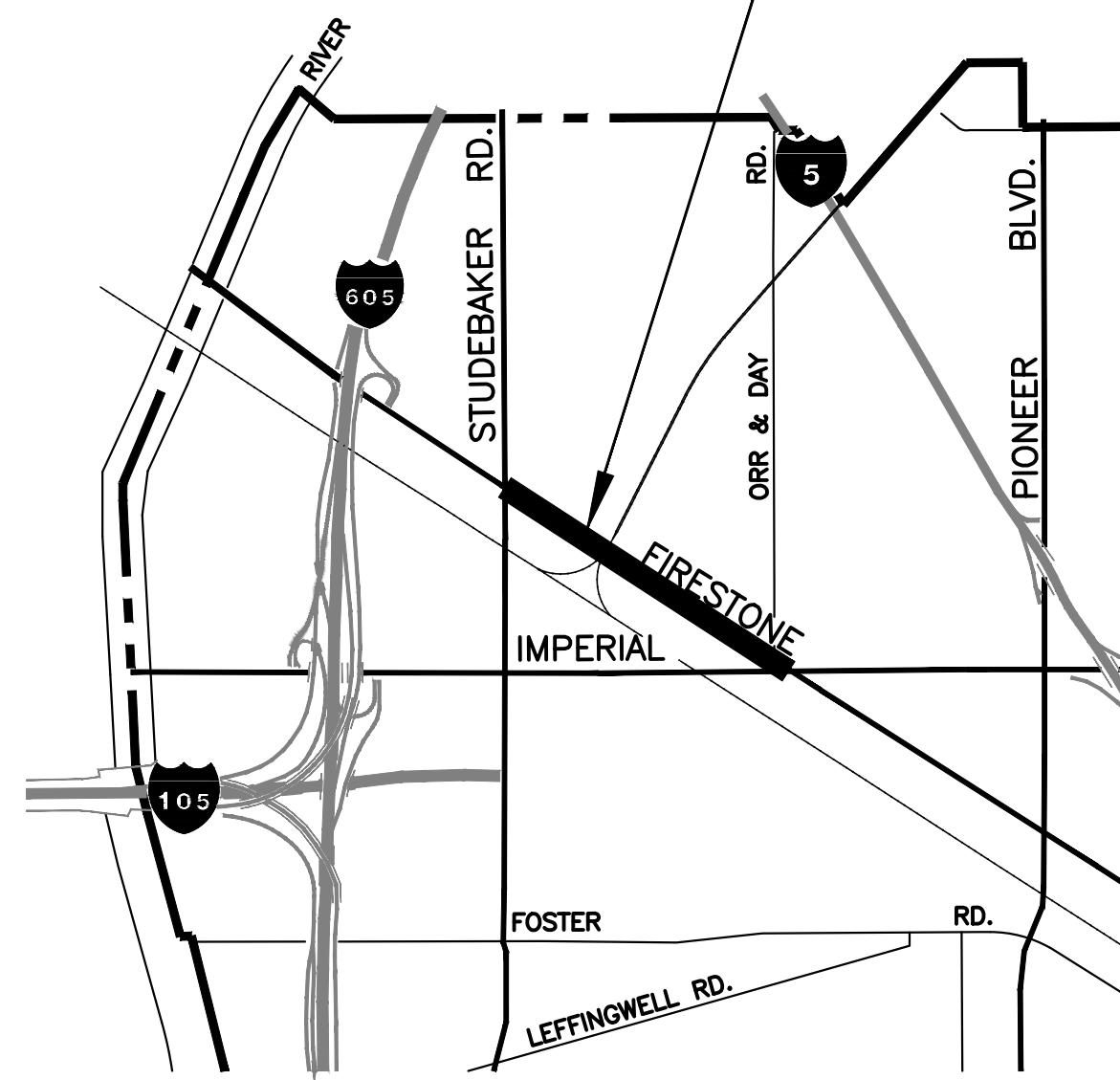
STREET IMPROVEMENTS

PROJECT NO. 7196.1

FIRESTONE BOULEVARD

STUDEBAKER ROAD TO IMPERIAL HIGHWAY

PROJECT 7196.1



LOCATION MAP



PLANS INDEX

SHEET	DESCRIPTION		
1	TITLE SHEET	40-44	LANDSCAPE
2	HORIZONTAL CONTROL	45	LANDSCAPING DETAILS
3	TYPICAL SECTIONS	46-50	IRRIGATION
4-5	DEMOLITION	51-53	IRRIGATION DETAILS
6-7	LAYOUT PLAN	54-58	STREET LIGHTING
8-10	STREET PROFILES	59-66	TRAFFIC SIGNALS
11-16	CONSTRUCTION DETAILS	67	BRIDGE PLANS
17-20	GRADING PLANS	69-75	RETAINING WALLS
21-24	DRAINAGE PLAN & PROFILES		
25	DRAINAGE DETAILS		
26	DRAINAGE DETAILS BMP		
27-28	UTILITY LAYOUTS		
29-30	SIGNING & STRIPING		
31	CONSTRUCTION AREA SIGNS		
32-37	STAGE CONSTRUCTION/TC 1, 2, & 3		
38-39	TEMPORARY EROSION CONTROL		

GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2015), CITY OF NORWALK STANDARD PLANS, STATE OF CALIFORNIA STANDARD PLANS AND SPECIFICATIONS (2015), AND W.A.T.C.H. MANUAL (2015), AND SHALL BE THE LATEST EDITION OR REVISION THEREOF IN EFFECT.
- THE CONTRACTOR SHALL CONTACT THE CITY OF NORWALK, ENGINEERING DIVISION AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO STARTING CONSTRUCTION. TEL (562) 929-5723.
- ARROW BOARDS SHALL BE USED ON ANY LANE CLOSURES ON ARTERIAL STREETS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR AND COORDINATE THE RELOCATION OF ANY EXISTING UTILITIES DEEMED NECESSARY BY THE PROPOSED IMPROVEMENT.
- ALL FINISH SURFACES SHALL BE CONSTRUCTED TO MAINTAIN POSITIVE DRAINAGE.
- BEFORE STARTING WORK THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE CITY OF NORWALK, ENGINEERING DIVISION (NO FEE).
- HARD HATS, ORANGE VESTS, AND OTHER REQUIRED SAFETY EQUIPMENT SHALL BE WORN AT ALL TIMES WHEN WORKING ON THIS PROJECT.
- THE CONTRACTOR SHALL COMMUNICATE DIRECTLY WITH THE UTILITY COMPANIES WHEN REQUESTING FACILITIES TO BE LOCATED, MARKED OR REPAIRED, NO EXCAVATIONS ARE PERMITTED UNTIL ALL UTILITIES ARE MARKED.
- SAFETY IS STRESSED. ANY OPERATIONS OR SITUATION THAT THREATENS THE SAFETY OF WORKERS OR THE PUBLIC, INCLUDING IMPROPER TRAFFIC CONTROL, WILL CAUSE THE SUSPENSION OF WORK UNTIL CORRECTIONS ARE MADE, AND NO ADDITIONAL WORKING DAYS WILL BE ALLOWED.
- APPROVAL OF THIS PLAN BY CITY ENGINEER DOES NOT CONSTITUTE A REPRESENTATION OF THE ACCURACY OF THE LOCATION OF, OR THE EXISTENCE OR NON-EXISTENCE OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES WITHIN THE LIMITS OF THE PROJECT. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE TRUE LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES, AND FOR MAINTAINING SERVICE TO ANY INDIVIDUAL PROPERTY WHOSE UTILITY SERVICE MAY BE DAMAGED BY THE CONTRACTOR IN THE PERFORMANCE OF THE WORK.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES (BY POTHOLING OR OTHER MEANS). CONTRACTORS SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) 800/422-4133 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO LOCATE EXISTING UTILITIES. ABBREVIATIONS AND TERMS, OR PRONOUNS IN PLACE OF THEM SHALL BE INTERPRETED AS FOLLOWS:
- NO BACKFILL MATERIAL, PAVING MATERIAL OR EQUIPMENT MAY BE STORED OVERNIGHT IN PUBLIC RIGHT-OF-WAY OF STREETS NOT UNDER CONSTRUCTION.
- ALL STRIPING SHALL BE PAINTED WITH TWO (2) COATS OF PAINT.
- AREAS ADJACENT TO THE CONSTRUCTION SITE SHALL BE KEPT CLEAN AT ALL TIMES. ALL SWEEPING PERFORMED BY CITY CREWS WILL BE CHARGED TO THE CONTRACTOR AT OVERTIME RATES.
- STATIONING REFERS TO CONSTRUCTION LINE OF STREET.
- LANE CLOSURES ON MAJOR ARTERIAL HIGHWAYS ARE PERMITTED ONLY BETWEEN 8:30 A.M. AND 3:30 P.M. AND ONE LANE OF TRAFFIC IN EACH DIRECTION SHALL REMAIN OPEN AT ALL TIMES.
- CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS AND AT CONTRACTOR'S EXPENSE, FOR CITY'S REVIEW AND APPROVAL BEFORE CONSTRUCTION BEGINS, WHERE DEVIATIONS FROM THESE PLANS ARE PROPOSED.
- CONSTRUCTION STAKING SHALL BE PERFORMED BY A REGISTERED SURVEYOR OR ENGINEER RETAINED AND PAID FOR BY THE CONTRACTOR. THE SURVEYOR OR ENGINEER SHALL CERTIFY ON THE FINAL CONSTRUCTION DRAWING THAT THE STAKING WAS PERFORMED ACCORDING TO APPROVED PLANS.

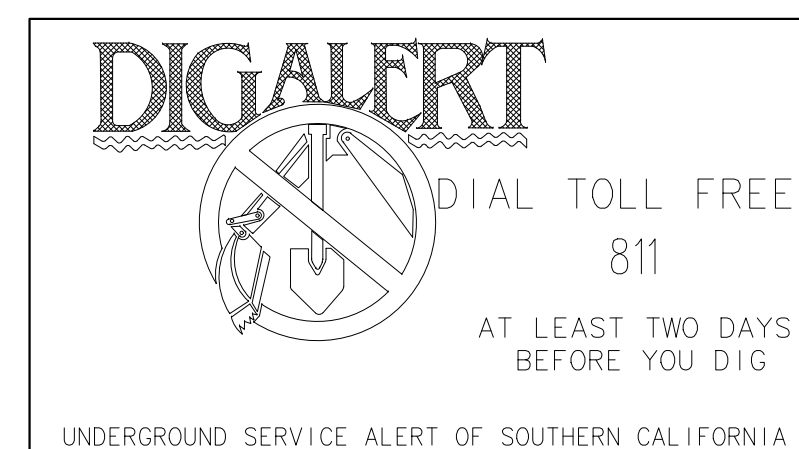
UTILITY

COMPANY/AGENCIES	CONTACT	TELEPHONE
S.C. EDISON COMPANY	AARON PIERSON	(562) 903-3186
S.C. GAS COMPANY	IMELDA NOON	(714) 634-3040
VERIZON COMPANY	RAY ROUNDTREE	(562) 903-7915
GOLDEN STATE WATER COMPANY	ROD TASHIMA	(562) 907-9200 EXT. 407
CHARTER COMMUNICATIONS	STEVE FEAR	(626) 430-3300
L.A.C. SANITATION DISTRICT	CALVIN CHEN	(310) 638-1161
CHEVRON OIL COMPANY	JERALD McCLELLAN	(213) 694-7641
SHELL PIPELINE COMPANY	UTILITY COORDINATOR	(310) 816-2000
NORWALK WATER SYSTEM	NOEL FORD	(562) 929-5599
NORWALK PUBLIC SERVICES	NOEL FORD	(562) 929-5511
PARK WATER COMPANY	DENNIS BROOKS	(562) 923-0711 EXT. 271
CALTRANS	ANDY BOTT	(626) 301-0742
TOSCO/UNICAL	MONA HERBERT	(562) 290-1519

ABBREVIATIONS

SHALL BE PER "GREENBOOK", SECTION 1-3, WITH THE LATEST EDITION OR REVISION THEREOF.

ABBREVIATION	WORD OR WORDS
AB	AGGREGATE BASE
AVE	AVENUE
BLVD	BOULEVARD
EW	EAST OF WEST
FR-AC	FORTA-FI REINFORCED ASPHALT CONCRETE
NS	NORTH OF SOUTH
FR-RHMA	FORTA-FI REINFORCED RUBBERIZED HOT MIX ASPHALT
SN	SOUTH OF NORTH
WE	WEST OF EAST



Prepared Under the Supervision of:
 ARTURO VVAR RCE C70076 DATE

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: TITLE SHEET FIRESTONE BOULEVARD STREET IMPROVEMENTS FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE BY	Approved	PROJECT NO. 7196.1
	CITY ENGINEER RCE 57908 DATE	DRAWING NO.
AS BUILT	Recommended	
FIELD BOOK REF.	DATE	
PLAN REF.	DATE	
	Drawn By P.B.	Checked By A.V. SHEET 1 OF 75

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 5, IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819; SAID BEARINGS ARE BASED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWING CALIFORNIA SPATIAL REFERENCE NETWORK, OR EQUIVALENT STATIONS: BLSA (NORTHING 2239163.452, EASTING 6021325.681, ELLIPSOID HEIGHT -73.476FT.) ALL DISTANCES SHOWN, UNLESS OTHERWISE NOTED, ARE IN TERMS OF THE U.S. SURVEY FOOT. DISTANCES SHOWN HEREON ARE LOCAL GROUND DISTANCES, TO APPROXIMATE GRID DISTANCES MULTIPLY DISTANCES BY THE COMBINATION FACTOR OF: 1.000026472505

BENCHMARK

THE ELEVATIONS SHOWN HEREON ARE BASED UPON THE COUNTY OF LOS ANGELES BENCH MARK NO. Y8698, (YEAR 2005).

RDBM TAG IN N CB 4M (13') W/O BCR @ NW COR FIRESTONE BLVD & IMPERIAL HWY.

ELEVATION 102.897'

SURVEYOR'S NOTES:

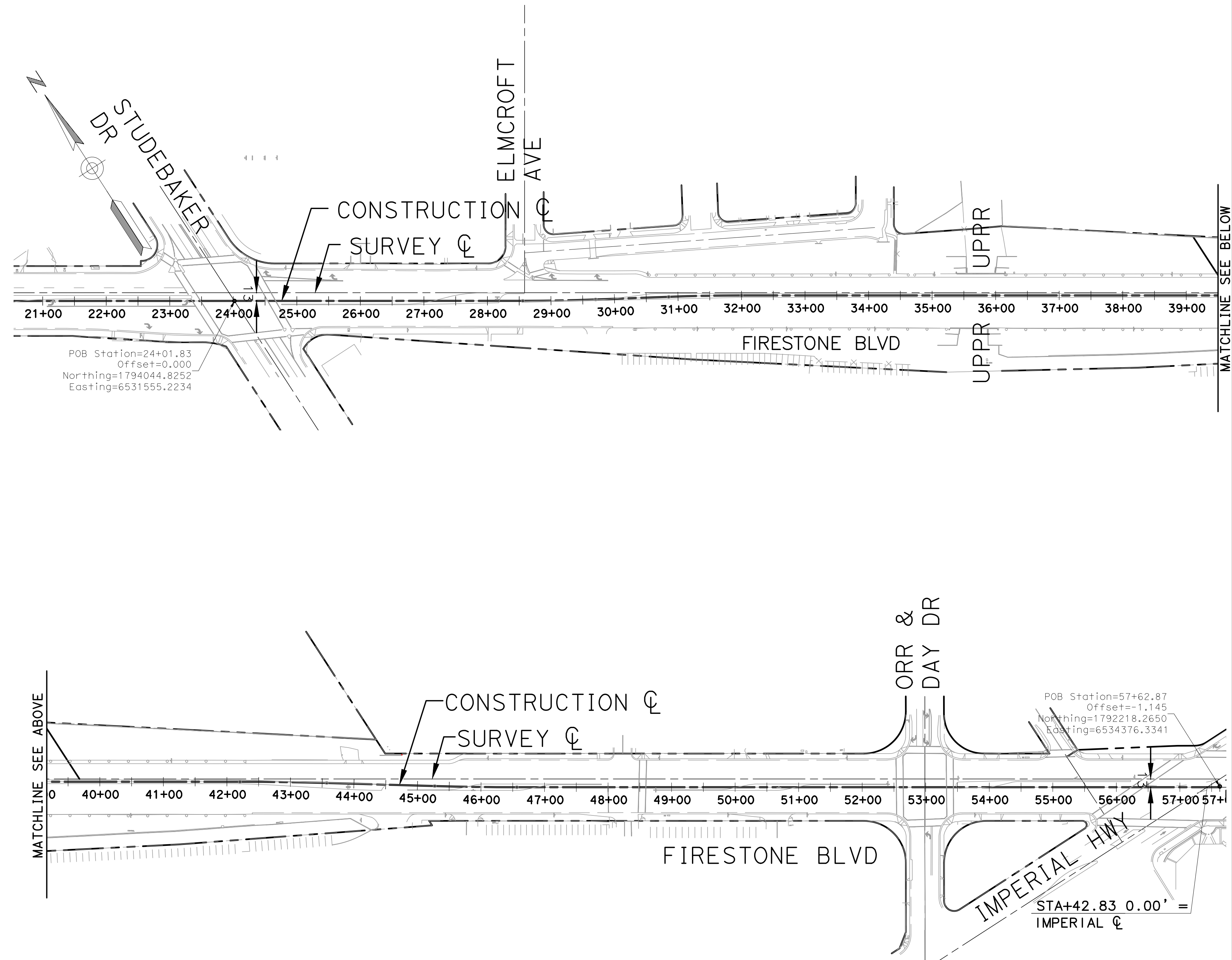
THE RIGHT OF WAY LINES SHOWN HEREON ARE BASED UPON THE RECORDED MAPS AVAILABLE AT THE LOS ANGELES COUNTY SURVEYOR'S OFFICE. NO BENEFIT OF TITLE REPORT TO VERIFY OTHER RIGHT OF WAY DEDICATIONS.

CONSTRUCTION NOTES:

- 1 CONSTRUCT 8" PCC CURB & GUTTER, TYPE A2, PER CITY OF NORWALK STD. PLAN NO. 105A
- 2 CONSTRUCT 8" PCC CURB, TYPE A1, PER CITY OF NORWALK STD. PLAN NO. 105A
- 3 CONSTRUCT ALLEY AND ALLEY APRON PER CITY OF NORWALK STD. PLAN NO. 100
- 4 CONSTRUCT 4" PCC PARKWAY (WIDTH PER PLAN) PER CITY OF NORWALK STD. PLAN NO. 104
- 5 CONSTRUCT DRIVEWAY APPROACH PER CITY OF NORWALK STD. PLAN NO. 102A, W PER PLAN
- 6 CONSTRUCT 0.20' FR-RHMA-G/ 0.30' FR-AC/ AB 0.85'/ REINFORCEMENT GRID
- 7 CONSTRUCT 0.20' FR-RHMA-G/ 0.20' FR-AC/ 0.60' AB
- 8 CONSTRUCT 0.5' AC OVER COMPACTED NATIVE SOIL
- 9 CONSTRUCT LOCAL DEPRESSION PER CITY STD. PLAN 307A. CASE PER PLAN
- 10 CONSTRUCT CURB RAMP, TYPE 2, CASE A PER CITY OF NORWALK STD. PLAN NO. 111-5
- 11 CONSTRUCT CURB RAMP TYPE 1 CASE B PER CITY OF NORWALK STD. PLAN NO. 111-5
- 12 CONSTRUCT CURB RAMP TYPE 2 CASE B PER CITY OF NORWALK STD. PLAN NO. 111-5
- 13 CONSTRUCT CURB RAMP TYPE 2 CASE D PER CITY OF NORWALK STD. PLAN NO. 111-5
- 14 CONSTRUCT PARKWAY DRAIN, RCP TYPE, PER CITY OF NORWALK STD. PLAN NO. 107A
- 15 CONSTRUCT PARKWAY DRAIN, CULVERT TYPE, PER CITY OF NORWALK STD. PLAN NO. 107B
- 16 CONSTRUCT CONCRETE BARRIER AND CUT OFF WALL PER DETAIL ON SHEET TBD
- 17 CONSTRUCT PAVEMENT CONFORM, MILL AND FR-AC OVERLAY, 0.2' MINIMUM
- 18 CONSTRUCT 8" FULL PAVEMENT CONFORM, MILL AND AC OVERLAY.
- 19 CONSTRUCT 36" RET WALL
- 20 CONSTRUCT 6" PCC RAMP CONFORM.
- 21 INSTALL DETAIL 12
- 22 INSTALL DETAIL 22
- 23 INSTALL DETAIL 27B
- 24 INSTALL DETAIL 29
- 25 INSTALL DETAIL 32
- 26 INSTALL DETAIL 38
- 27 INSTALL DETAIL 27B
- 28 INSTALL DETAIL 27B
- 29 INSTALL DETAIL 29
- 32 24" WHITE CROSSING CONTINENTAL X-WALK.
- 33 INSTALL DETAIL 26.
- 34 INSTALL OBJECT MARKER, TYPE 2 (OM2-2V)
- 38 INSTALL THERMOPLASTIC DETAIL 38
- 39 INSTALL THERMOPLASTIC DETAIL 39
- 40 INSTALL THERMOPLASTIC DETAIL 39A
- 41 INSTALL DETAIL 40
- 42 INSTALL DETAIL "A" WITH WHITE STRIPE AND TYPE A & G MARKERS
- 43 INSTALL THERMOPLASTIC HIGH VISIBILITY WITH CROSSWALK
- 44 INSTALL DETAIL "B" WITH WHITE STRIPE AND TYPE A & G MARKERS
- 45 INSTALL 12" THERMOPLASTIC WHITE LINE
- 46 PAINT PAVEMENT MARKING OR LEGEND AS SHOWN. ARROWS SHALL BE TYPE IV UNLESS OTHERWISE NOTED.

DISPOSITION NOTES:

- A PROTECT-IN-PLACE (ITEM AS NOTED)
- B REMOVE (ITEM AS NOTED)
- C RELOCATE (ITEM AS NOTED)
- D RELOCATE BY OTHERS
- E ADJUST TO GRADE BY OTHERS

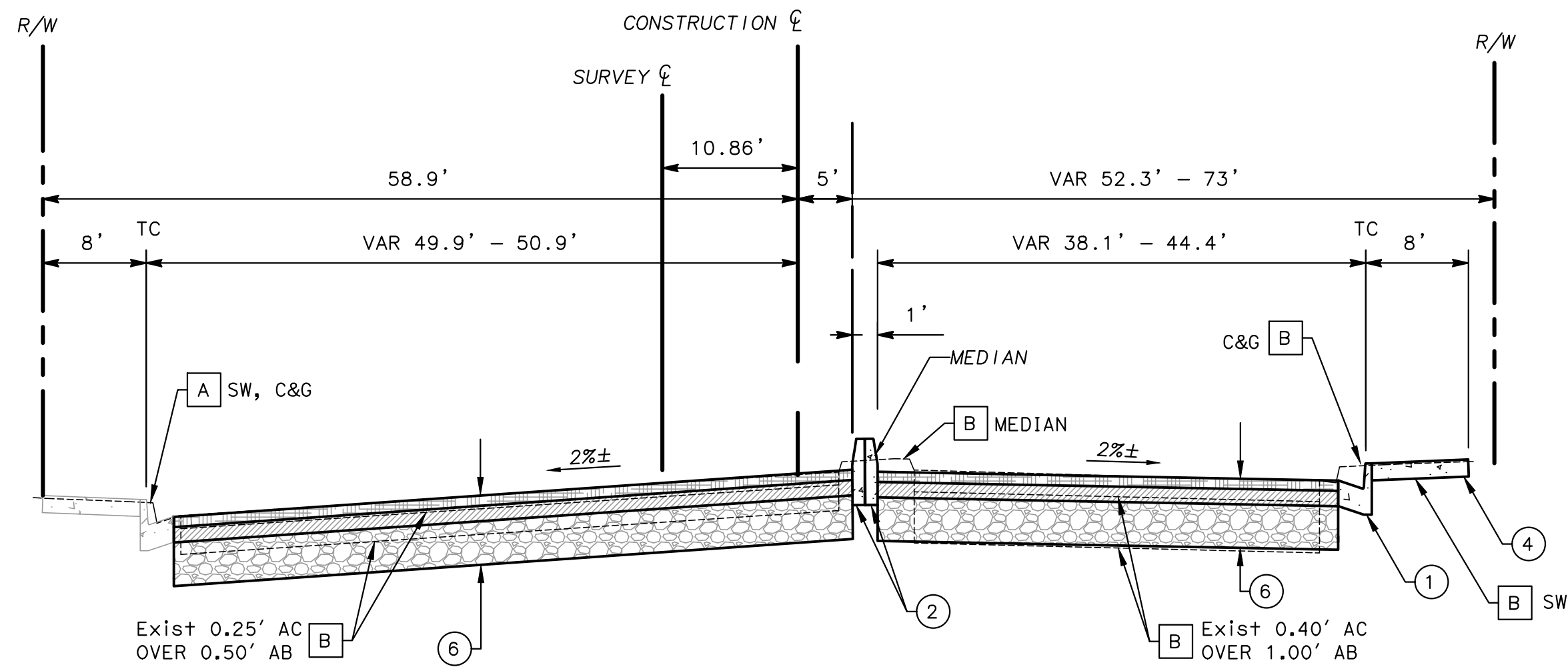


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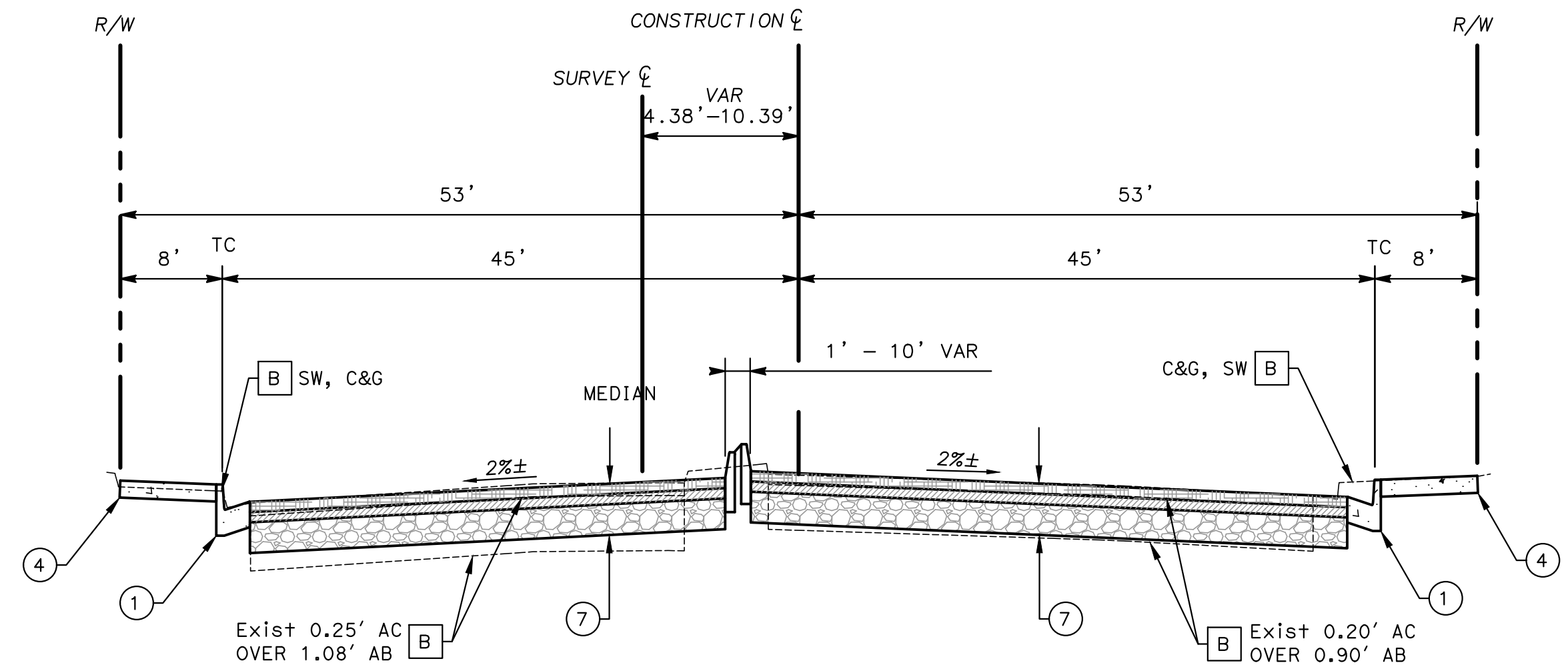
MARK THOMAS
 16795 VON KARMAN AVE., SUITE 240
 IRVINE, CA 92606
 (949) 477-9000



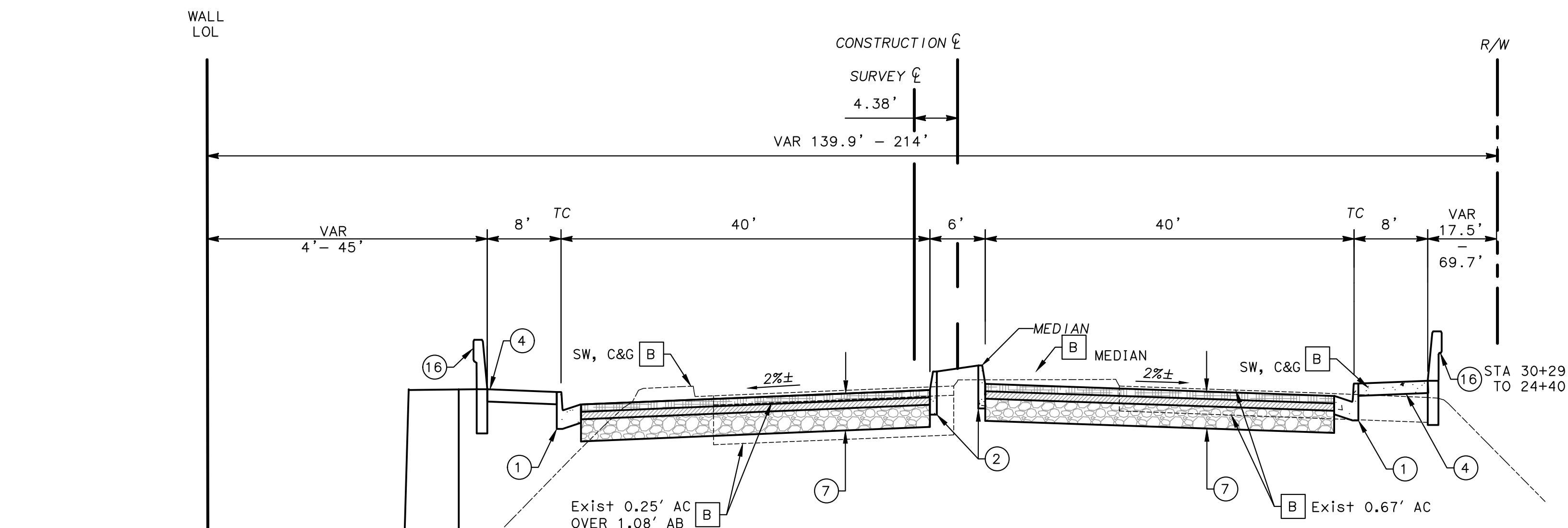
engineering division		CITY OF NORWALK	
REVISIONS		HORIZONTAL CONTROL AND CONSTRUCTION NOTES	
DATE	BY	FIRESTONE BOULEVARD WIDENING	
		FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
		Approved	PROJECT NO.
			7196.1
		Recommended	DRAWING NO.
FIELD BOOK REF.		CITY ENGINEER	
		RCE 20568	DATE
PLAN REF.			
		Drawn By P.B.	Checked By A.V.
			SHEET 2 OF 75



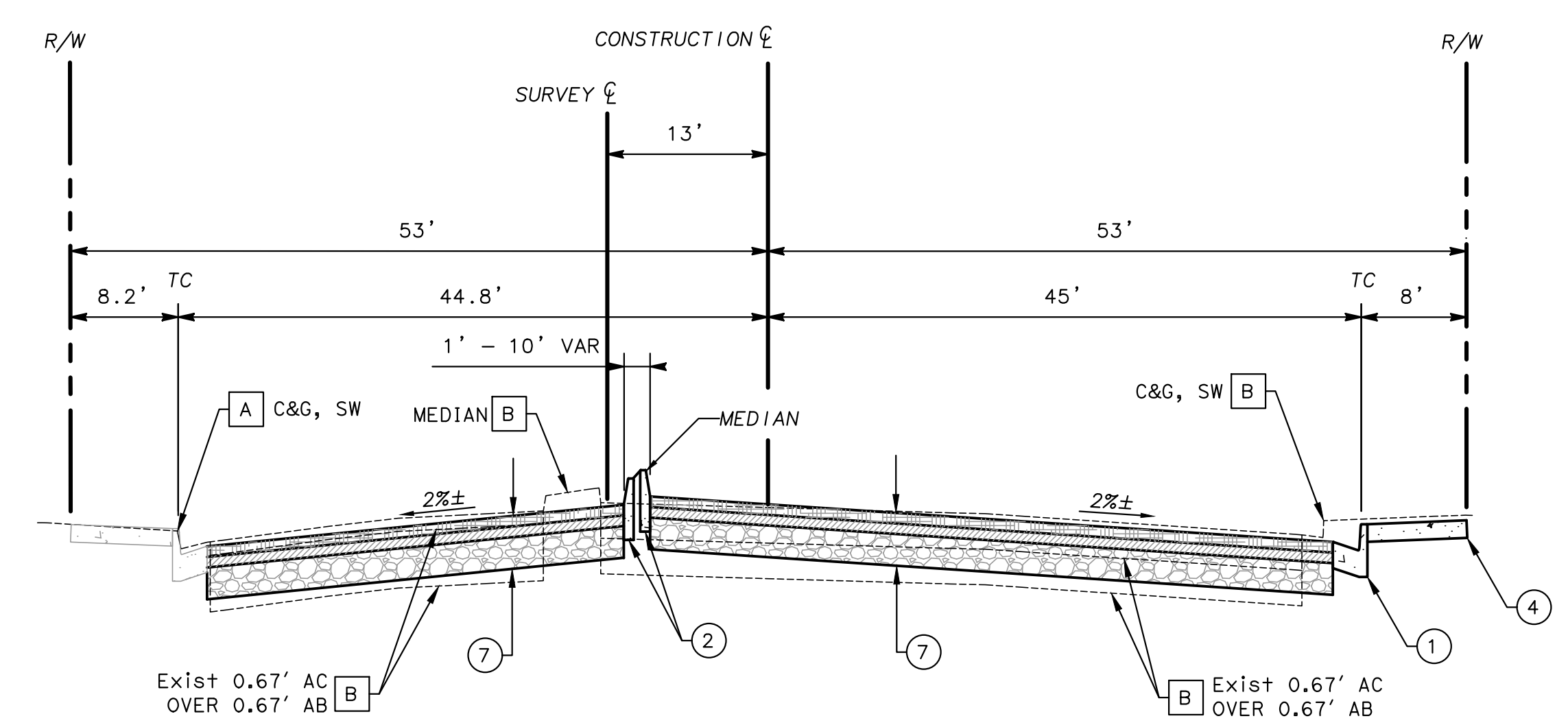
FIRESTONE BLVD
STA 24+71 TO 28+40



FIRESTONE BLVD
STA 43+75 TO 45+80



FIRESTONE BLVD
STA 29+00 TO 43+75



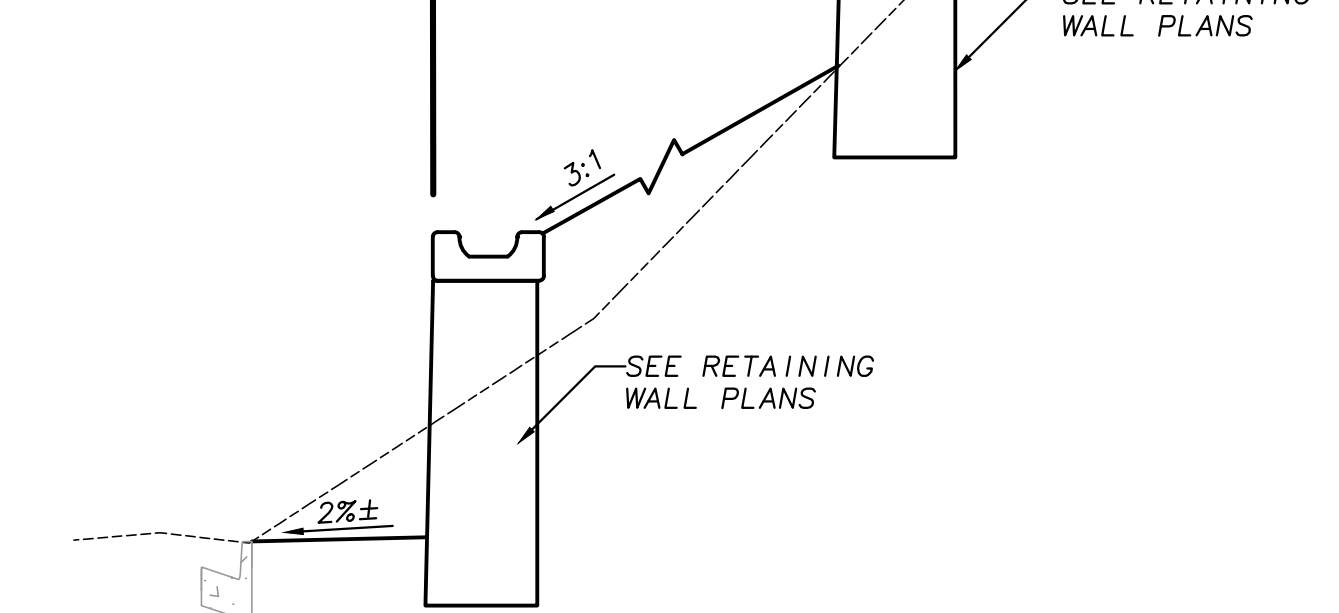
FIRESTONE BLVD
STA 45+80 TO 56+00

DISPOSITION NOTES:

- A PROTECT-IN-PLACE (ITEM AS NOTED)
- B REMOVE (ITEM AS NOTED)

CONSTRUCTION NOTES:

- 1 CONSTRUCT PCC CURB & GUTTER TYPE A2 PER CITY OF NORWALK STD. PLAN NO. 105A
- 2 CONSTRUCT PCC CURB TYPE A1 PER CITY OF NORWALK STD. PLAN NO. 105A
- 4 CONSTRUCT 4" PCC PARKWAY (WIDTH PER PLAN) PER CITY OF NORWALK STD. PLAN NO. 104
- 6 CONSTRUCT 0.20' FR-RHMA/ 0.30' FR-AC/ 0.85' AB/ REINFORCED GRID
- 7 CONSTRUCT 0.20' FR-RHMA/ 0.20' FR-AC/ 0.60' AB
- 16 CONSTRUCT CONCRETE BARRIER AND CUT OFF WALL PER DETAIL ON SHEET TBD

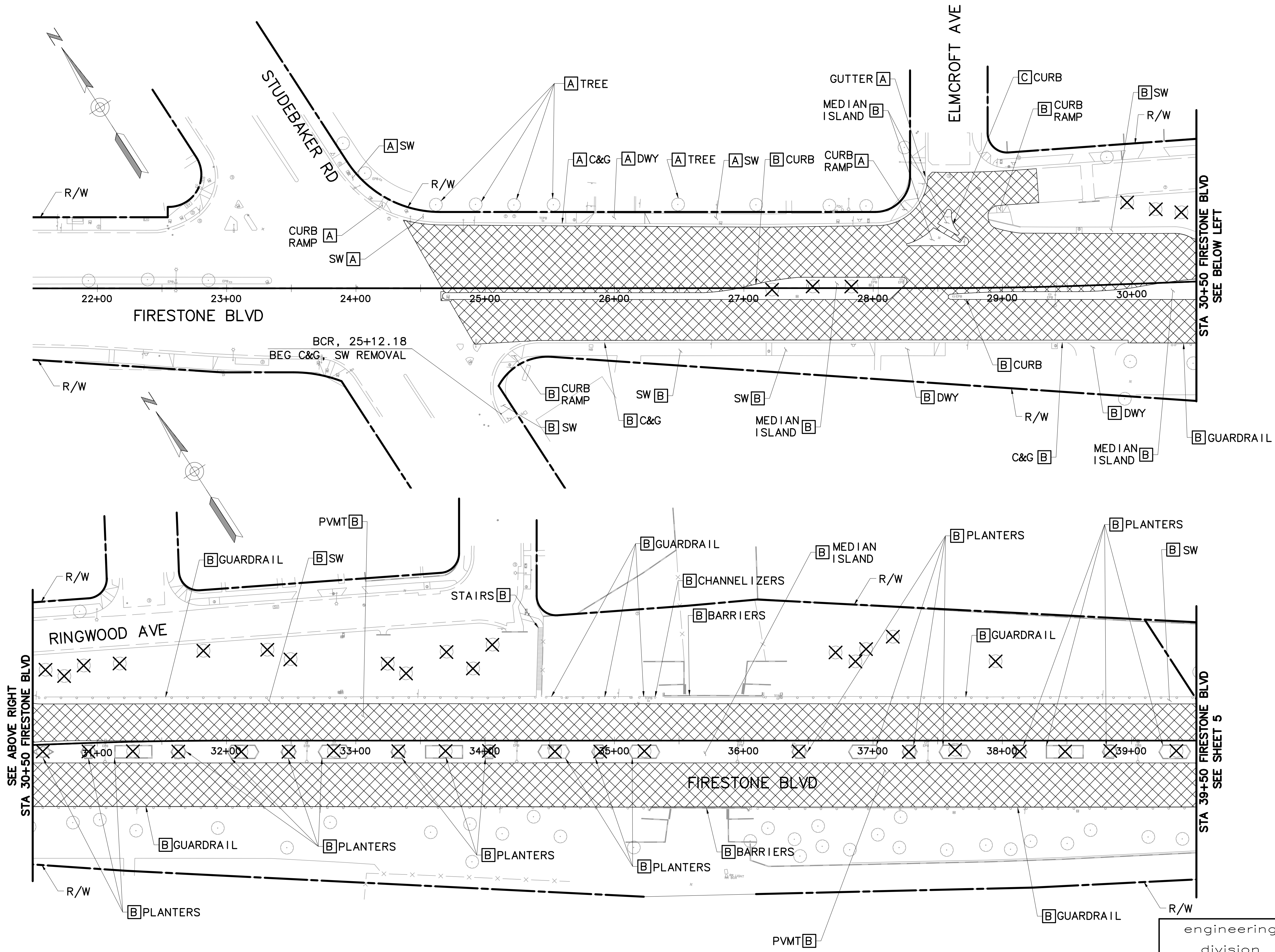


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: TYPICAL SECTIONS FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 3 OF 75

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GENERAL NOTES:

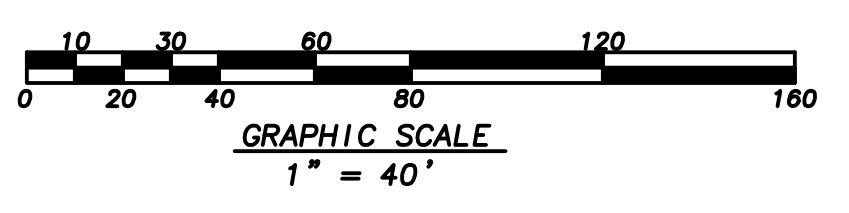
- FOR REMOVAL, RELOCATION & PROTECTION OF UTILITIES, SEE UTILITIES PLANS.
- FOR LIMIT OF REMOVAL OF DRIVEWAY PAVEMENT, SEE DRIVEWAY DETAILS.

DEMOLITION NOTES:

- A** PROTECT IN PLACE (ITEM AS NOTED)
- B** REMOVE (ITEM AS NOTED)
- C** REMOVE BY OTHERS

LEGEND

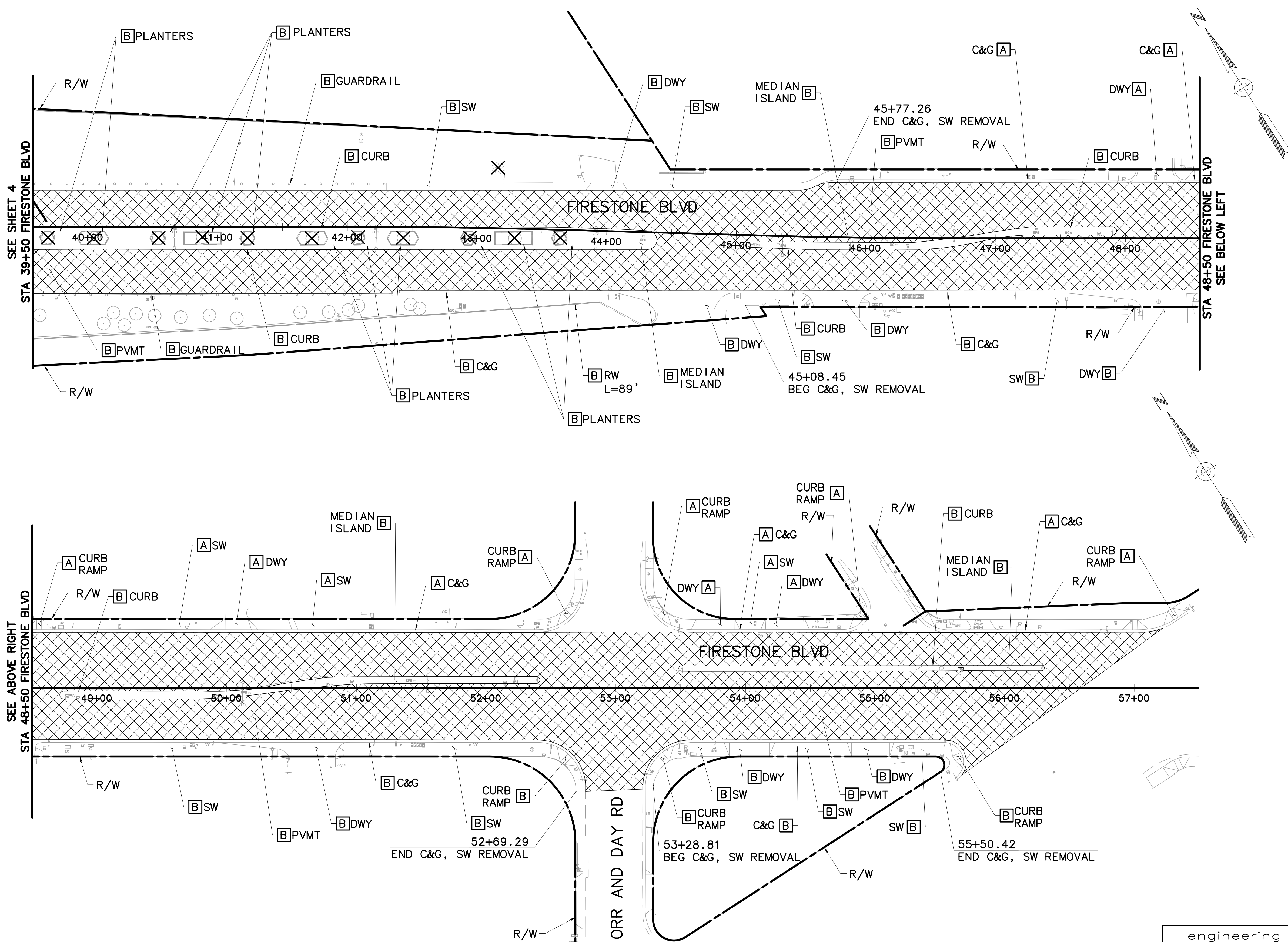
- [Cross-hatched box] AC PAVEMENT REMOVAL
- [X mark] TREE REMOVAL



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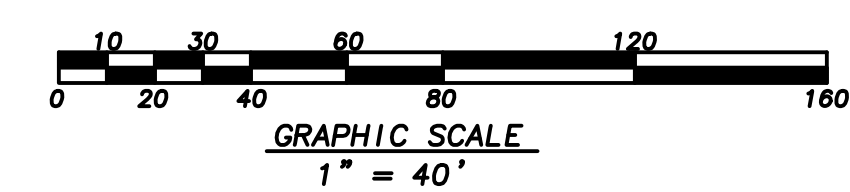


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: DEMOLITION PLAN FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	CITY ENGINEER RCE 20568 DATE
PLAN REF.			DATE
Drawn By P.B.		Checked By A.V.	
		SHEET 4 OF 75	

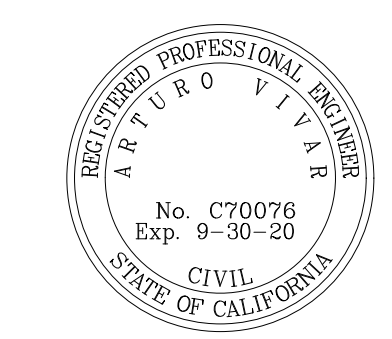


- GENERAL NOTES:**
- FOR REMOVAL, RELOCATION & PROTECTION OF UTILITIES, SEE UTILITIES PLANS.
 - FOR LIMIT OF REMOVAL OF DRIVEWAY PAVEMENT, SEE DRIVEWAY DETAILS.
- DEMOLITION NOTES:**
- [A] PROTECT IN PLACE (ITEM AS NOTED)
 - [B] REMOVE (ITEM AS NOTED)
 - [C] REMOVE BY OTHERS
- LEGEND**
- [Hatched Box] AC PAVEMENT REMOVAL
 - [X] TREE REMOVAL

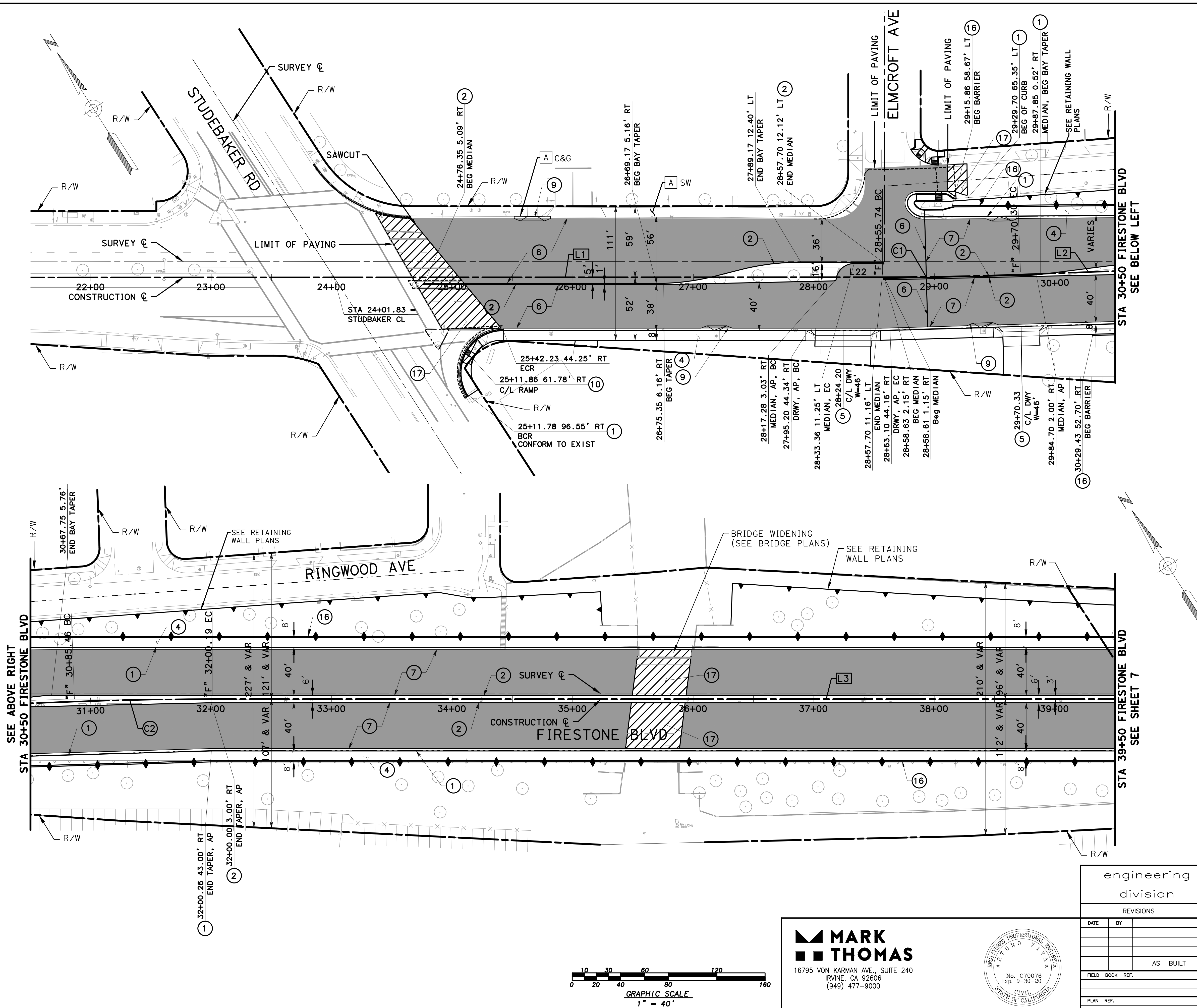
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engineering division		CITY OF NORWALK	
REVISIONS		TITLE: FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By P.B.	Checked By A.V.
			SHEET 5 OF 75



DISPOSITION NOTES:

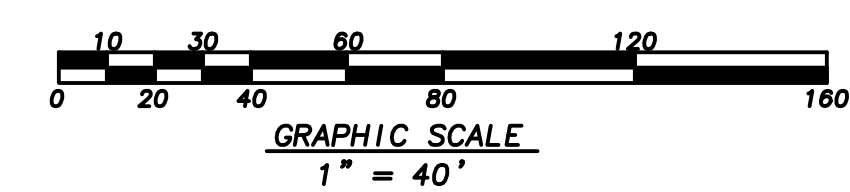
- A PROTECT-IN-PLACE (ITEM AS NOTED)
- B REMOVE (ITEM AS NOTED)

CONSTRUCTION NOTES:

- 1 CONSTRUCT 8" PCC CURB & GUTTER, TYPE A2, PER CITY OF NORWALK STD. PLAN NO. 105A
- 2 CONSTRUCT 8" PCC CURB, TYPE A1, PER CITY OF NORWALK STD. PLAN NO. 105A
- 4 CONSTRUCT 4" PCC PARKWAY (WIDTH PER PLAN) PER CITY OF NORWALK STD. PLAN NO. 104
- 5 CONSTRUCT DRIVEWAY APPROACH PER CITY OF NORWALK STD. PLAN NO. 102A. W PER PLAN
- 6 CONSTRUCT 0.20' FR-RHMA-G/ 0.30' FR-AC/ AB 0.85'/ REINFORCEMENT GRID
- 7 CONSTRUCT 0.20' FR-RHMA-G/ 0.20' FR-AC/ 0.60' AB
- 9 CONSTRUCT LOCAL DEPRESSION PER CITY STD. PLAN 307A. CASE PER PLAN
- 10 CONSTRUCT CURB RAMP, TYPE 2, CASE A PER CITY OF NORWALK STD. PLAN NO. 111-5
- 13 CONSTRUCT CURB RAMP TYPE 2 CASE D PER CITY OF NORWALK STD. PLAN NO. 111-5
- 16 CONSTRUCT CONCRETE BARRIER AND CUT OFF WALL PER DETAIL ON SHEET TBD
- 17 CONSTRUCT PAVEMENT CONFORM, MILL AND FR-AC OVERLAY, 0.2' MINIMUM

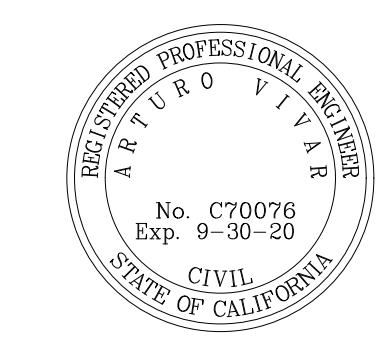
ALIGNMENT LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	2037.05'	S57°04'44"E
L2	115.15'	S59°09'45"E
L3	1020.43'	S57°03'32"E

ALIGNMENT CURVE TABLE				
CURVE	RADIUS	DELTA	TANGENT	LENGTH
C1	3150.00'	2°05'02"	57.29'	114.56'
C2	3125.00'	2°06'13"	57.37'	114.73'

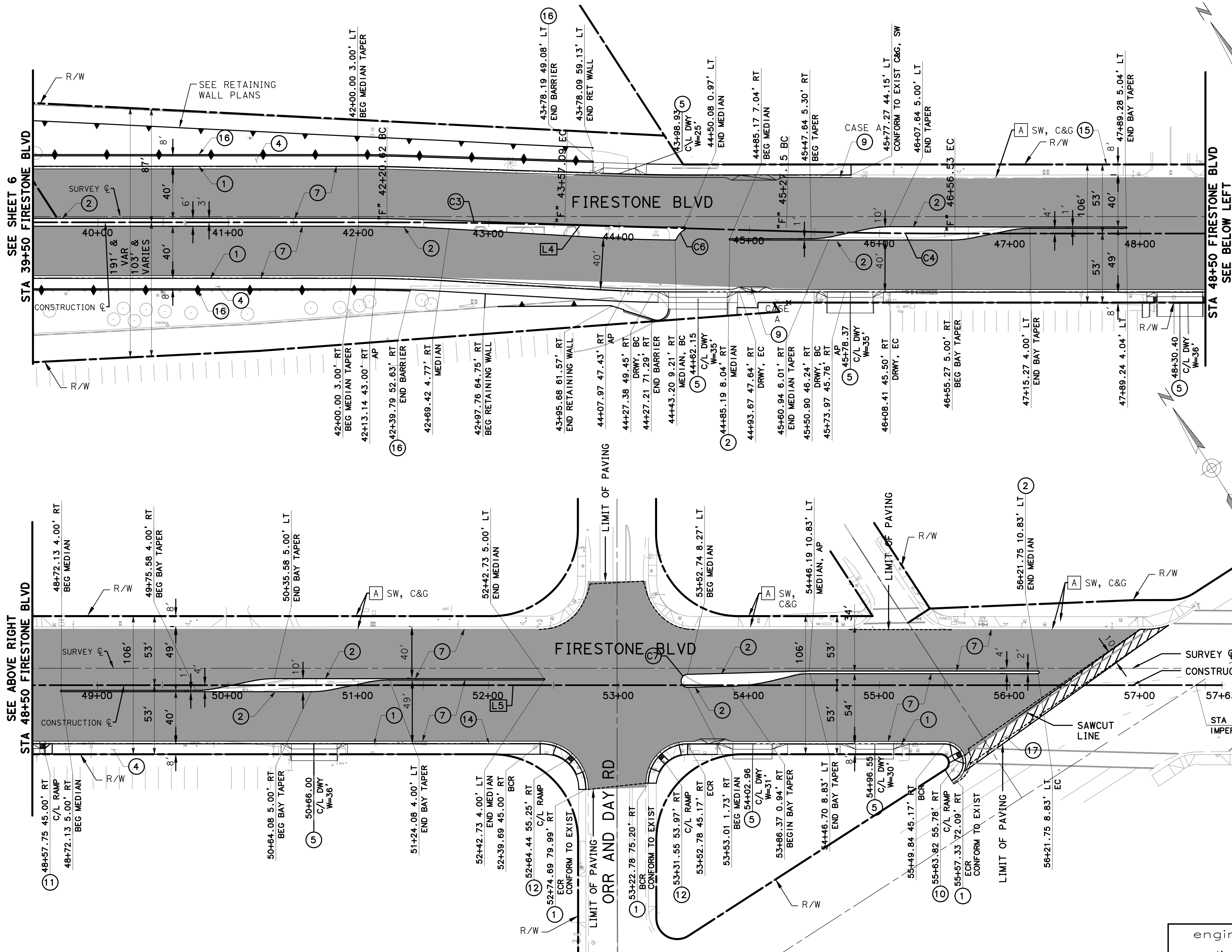


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: LAYOUT PLAN	
DATE	BY	FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
		Approved	PROJECT NO. 7196.1
		AS BUILT	CITY ENGINEER RCE 20568 DATE
FIELD BOOK REF.		Recommended	DRAWING NO.
PLAN REF.			
		Drawn By P.B.	Checked By A.V.
			SHEET 6 OF 75

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DISPOSITION NOTES:

- A PROTECT-IN-PLACE (ITEM AS NOTED)
- B REMOVE (ITEM AS NOTED)

CONSTRUCTION NOTES:

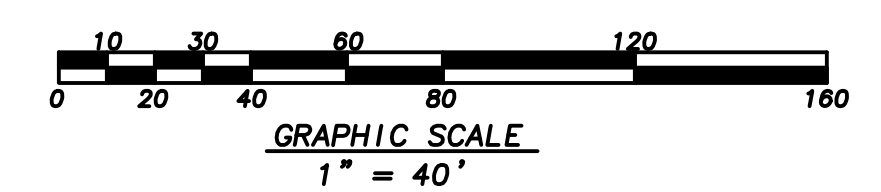
- 1 CONSTRUCT 8" PCC CURB & GUTTER, TYPE A2, PER CITY OF NORWALK STD. PLAN NO. 105A
- 2 CONSTRUCT 8" PCC CURB, TYPE A1, PER CITY OF NORWALK STD. PLAN NO. 105A
- 4 CONSTRUCT 4" PCC PARKWAY (WIDTH PER PLAN) PER CITY OF NORWALK STD. PLAN NO. 104
- 5 CONSTRUCT DRIVEWAY APPROACH PER CITY OF NORWALK STD. PLAN NO. 102A. W PER PLAN
- 7 CONSTRUCT 0.20' FR-RHMA-G/ 0.20' FR-AC/ 0.60' AB
- 9 CONSTRUCT LOCAL DEPRESSION PER CITY STD. PLAN 307A. CASE PER PLAN
- 10 CONSTRUCT CURB RAMP, TYPE 2, CASE A PER CITY OF NORWALK STD. PLAN NO. 111-5
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- 15 CONSTRUCT PARKWAY DRAIN, CULVERT TYPE, PER CITY OF NORWALK STD. PLAN NO. 107B
- 16 CONSTRUCT CONCRETE BARRIER AND CUT OFF WALL PER DETAIL ON SHEET TBD
- 17 CONSTRUCT PAVEMENT CONFORM, MILL AND FR-AC OVERLAY, 0.2' MINIMUM

ALIGNMENT LINE TABLE

LINE #	LENGTH	DIRECTION
L4	170.06'	S55°25'48"E
L5	1106.34'	S57°03'33"E

ALIGNMENT CURVE TABLE

CURVE	RADIUS	DELTA	TANGENT	LENGTH
C3	4800.00'	1°37'45"	68.24'	136.48'
C4	4550.04'	1°37'45"	64.69'	129.37'

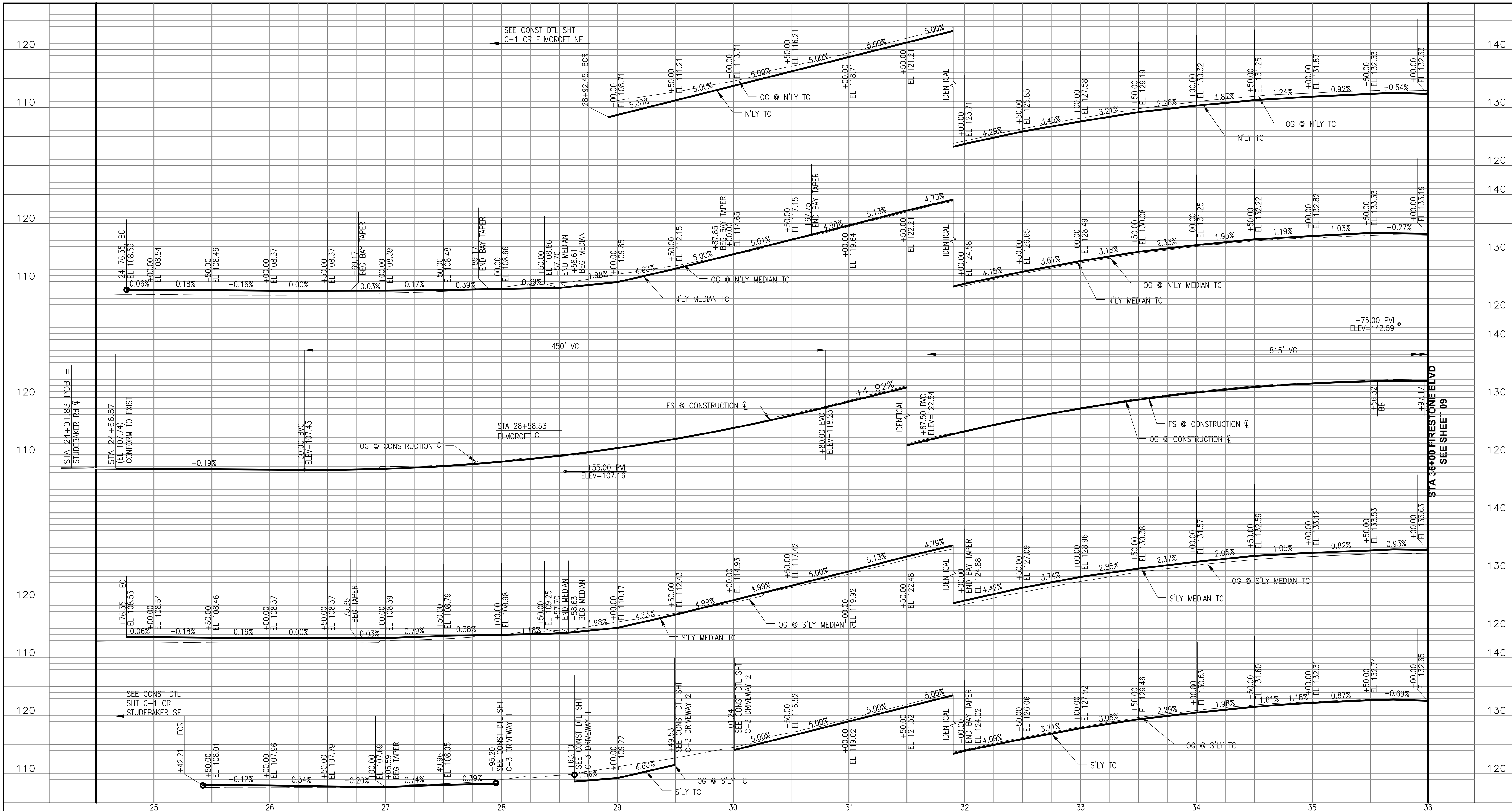


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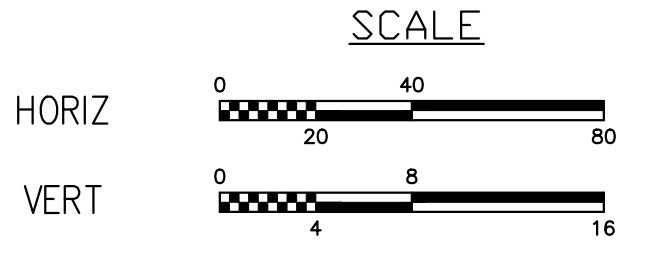


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: LAYOUT PLAN	
DATE BY		FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
AS BUILT		Approved	
FIELD BOOK REF.		PROJECT NO. 7196.1	
PLAN REF.		Recommended	
DATE		DRAWING NO.	
Drawn By P.B.		Checked By A.V.	
		SHEET 7 OF 75	

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FIRESTONE BLVD PROFILE

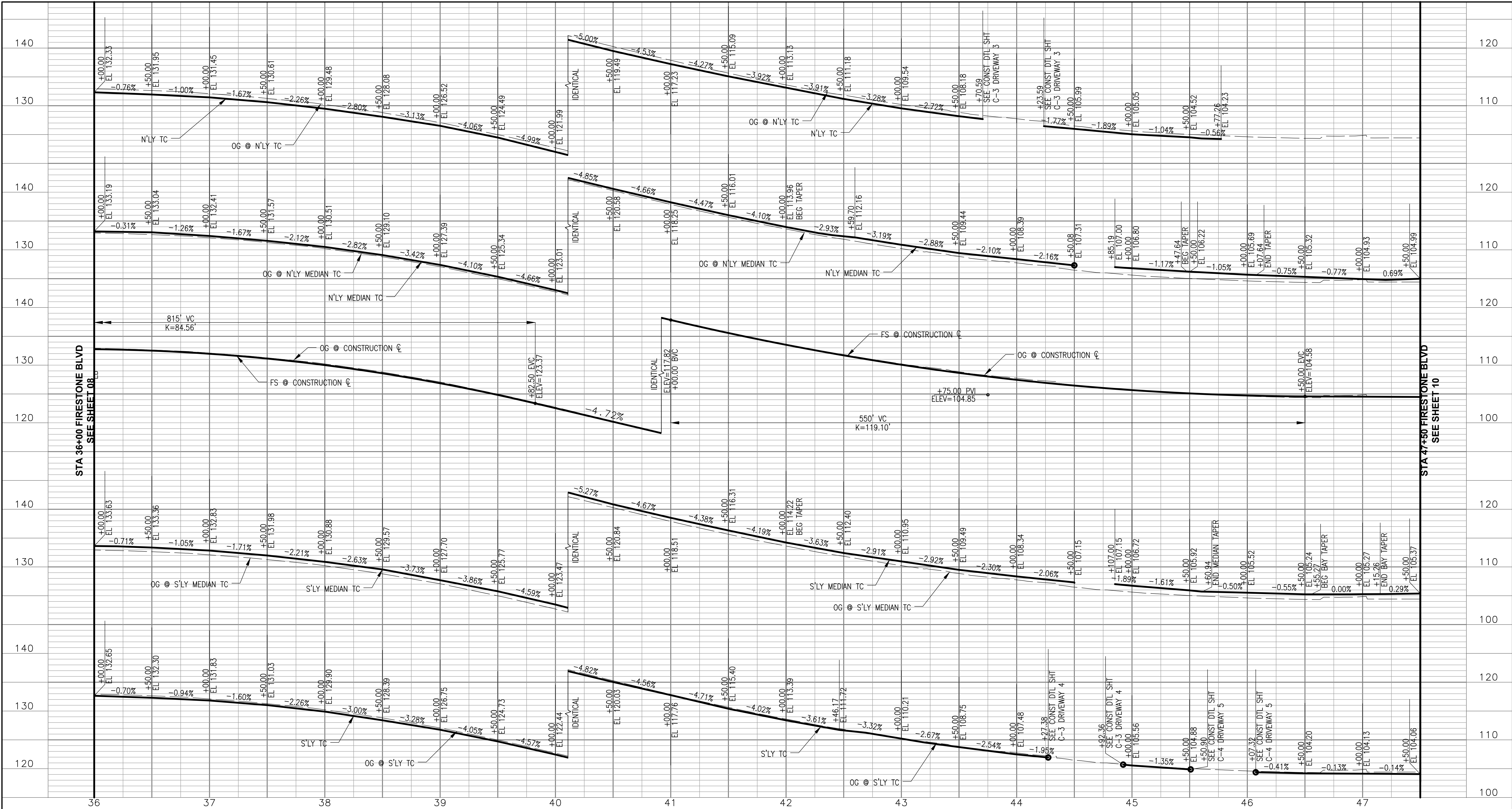


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 IRVINE, CA 92606
 (949) 477-9000



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STREET PROFILE FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568	DATE
		Drawn By <u>P.B.</u>	Checked By <u>A.V.</u>
			SHEET 8 OF 75

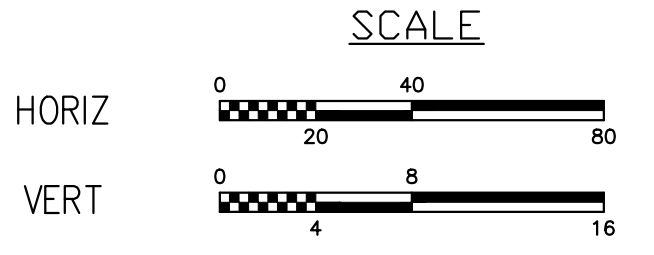
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STA 36+00 FIRESTONE BLVD
SEE SHEET 08

STA 47+50 FIRESTONE BLVD
SEE SHEET 10

FIRESTONE BLVD PROFILE

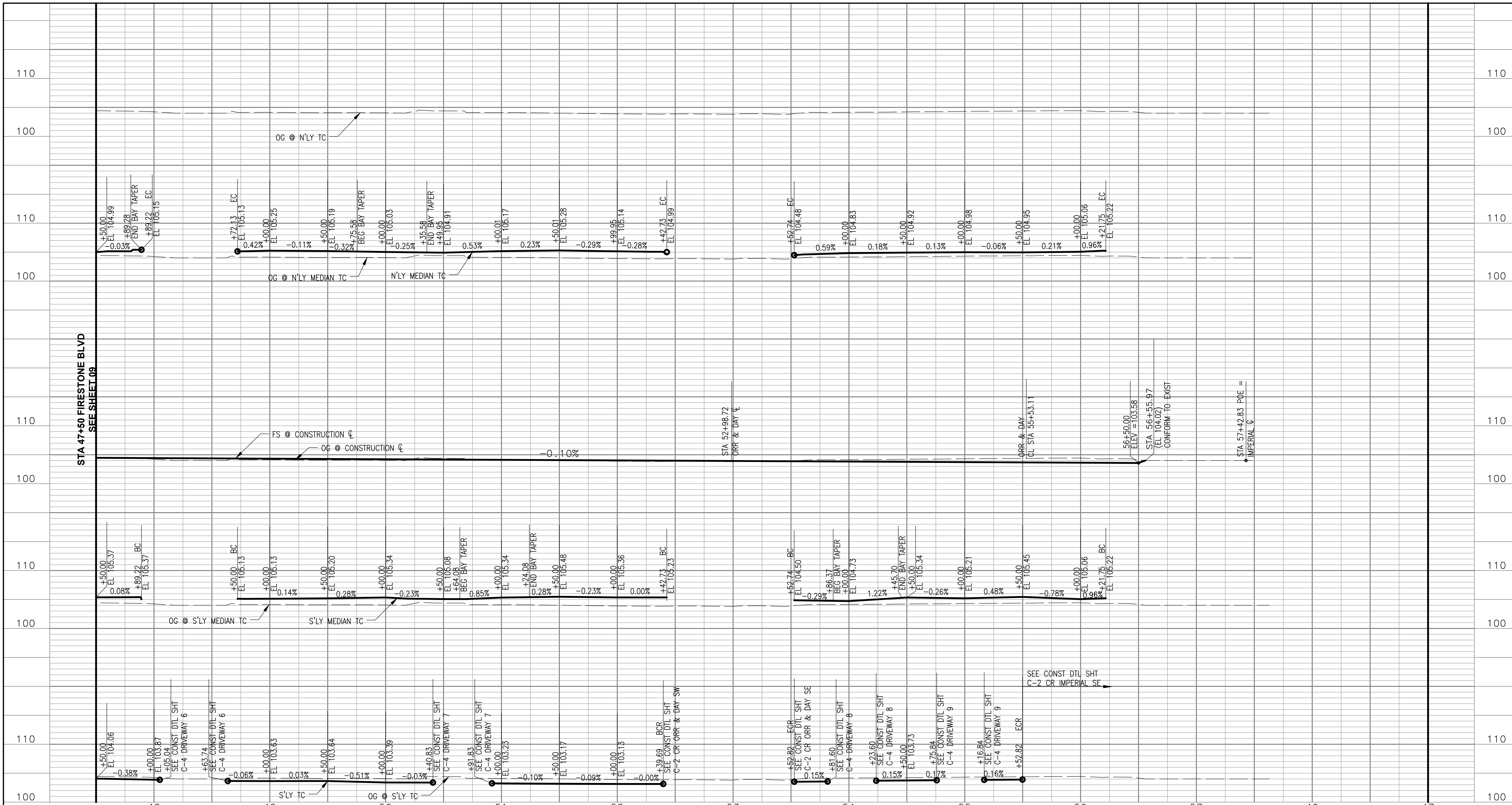


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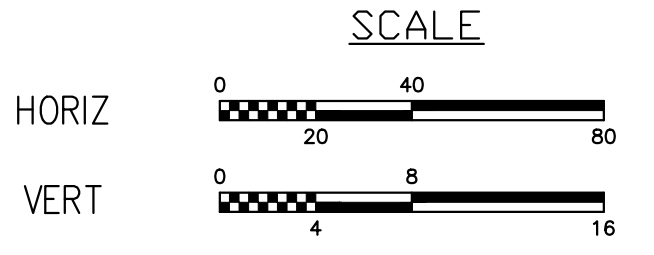


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STREET PROFILE FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	
		PROJECT NO. 7196.1	
	AS BUILT	CITY ENGINEER RCE 20568 DATE	
FIELD BOOK REF.		Recommended	
PLAN REF.		DRAWING NO.	
		Drawn By <u>P.B.</u>	Checked By <u>A.V.</u>
		SHEET 9 OF 75	

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FIRESTONE BLVD PROFILE

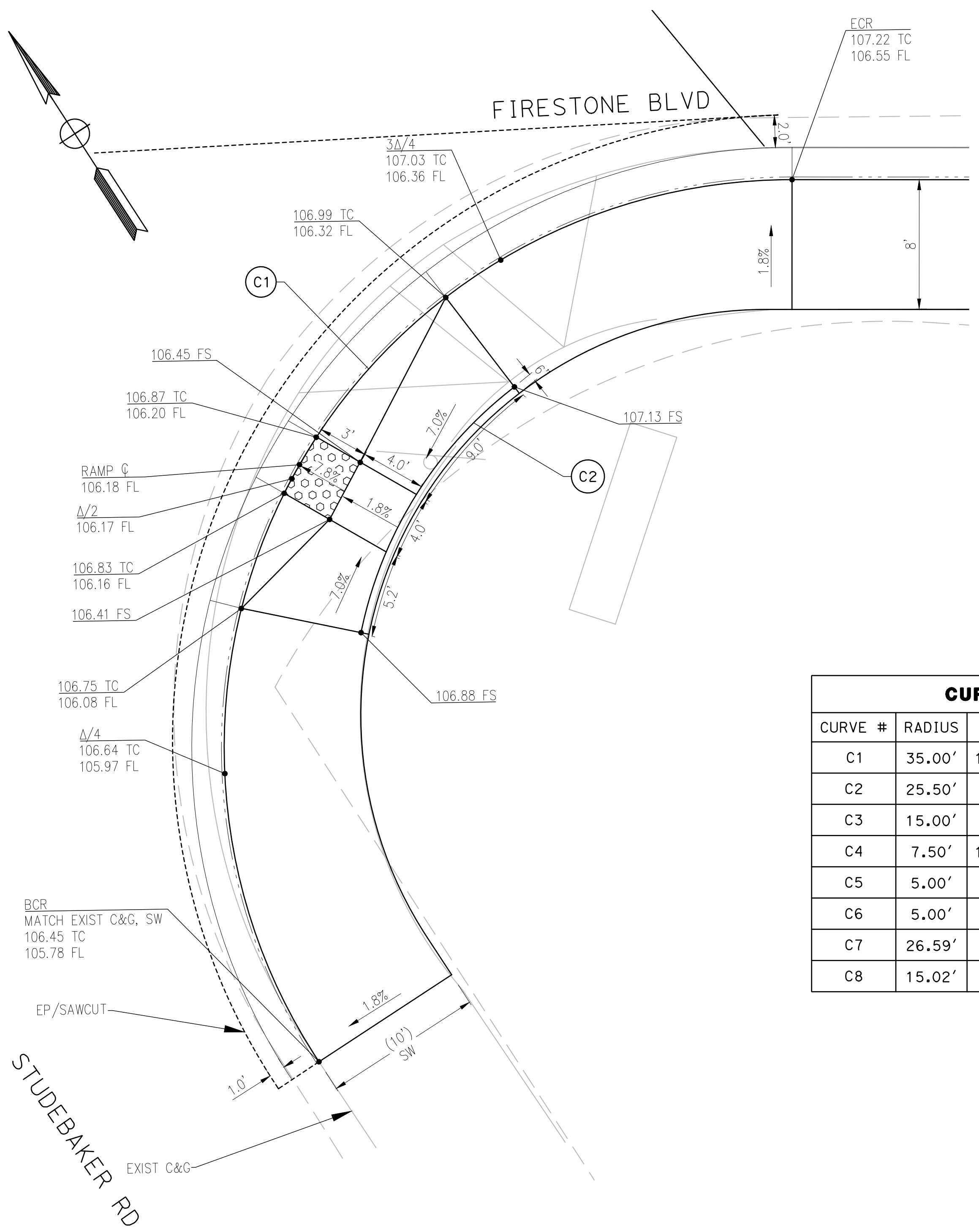


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engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STREET PROFILE FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
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		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By P.B.	Checked By A.V.
			SHEET 10 OF 75

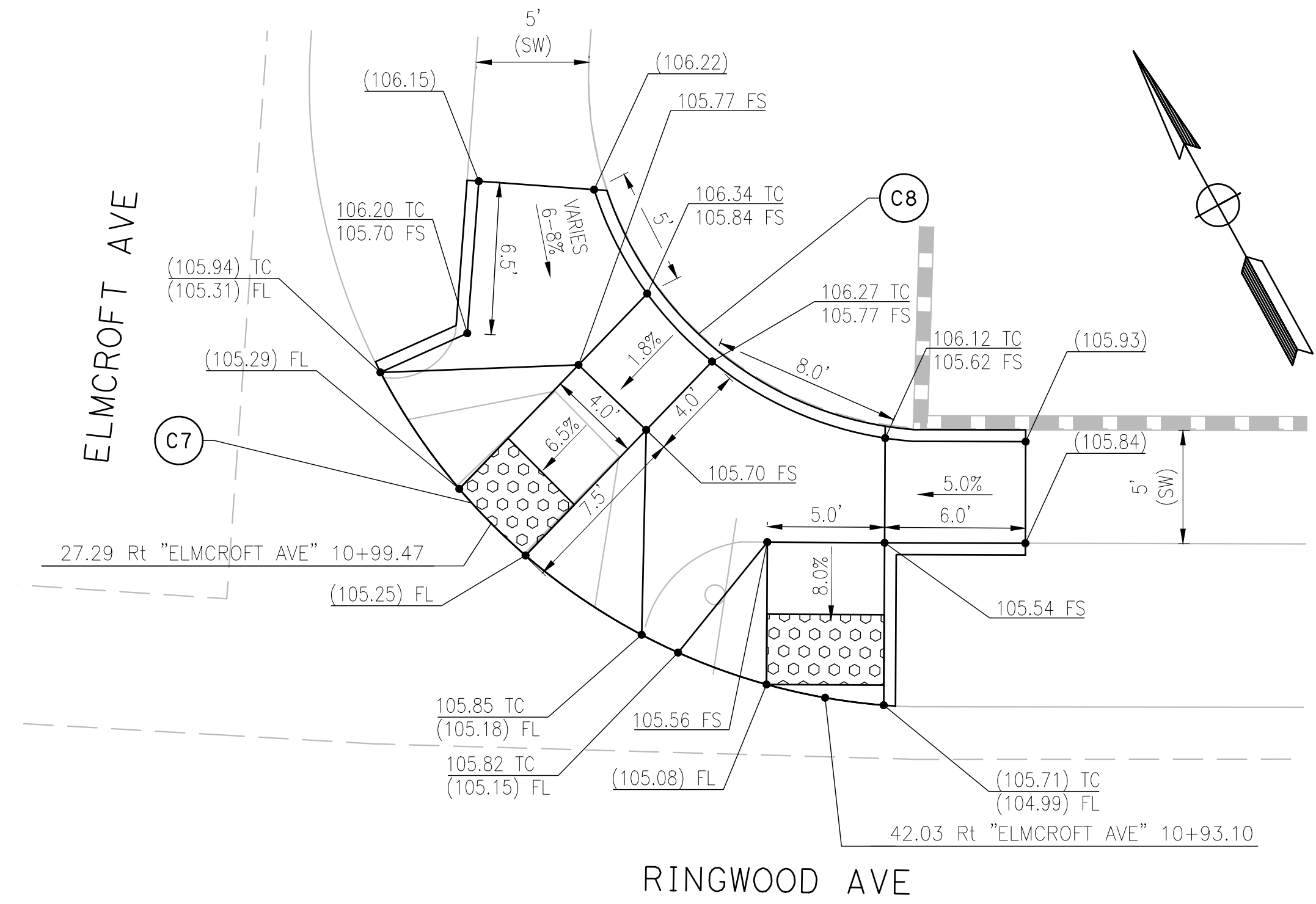
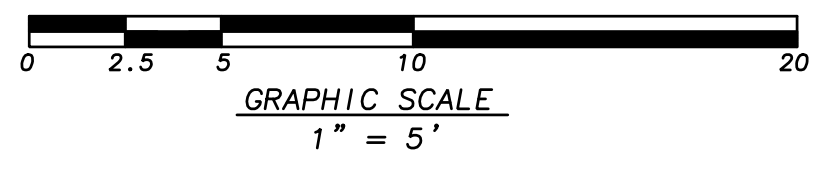
S:\FIRESTONE\CALTRANS\DWG REV. 07-15-97



STUDEBAKER SE CURB RAMP

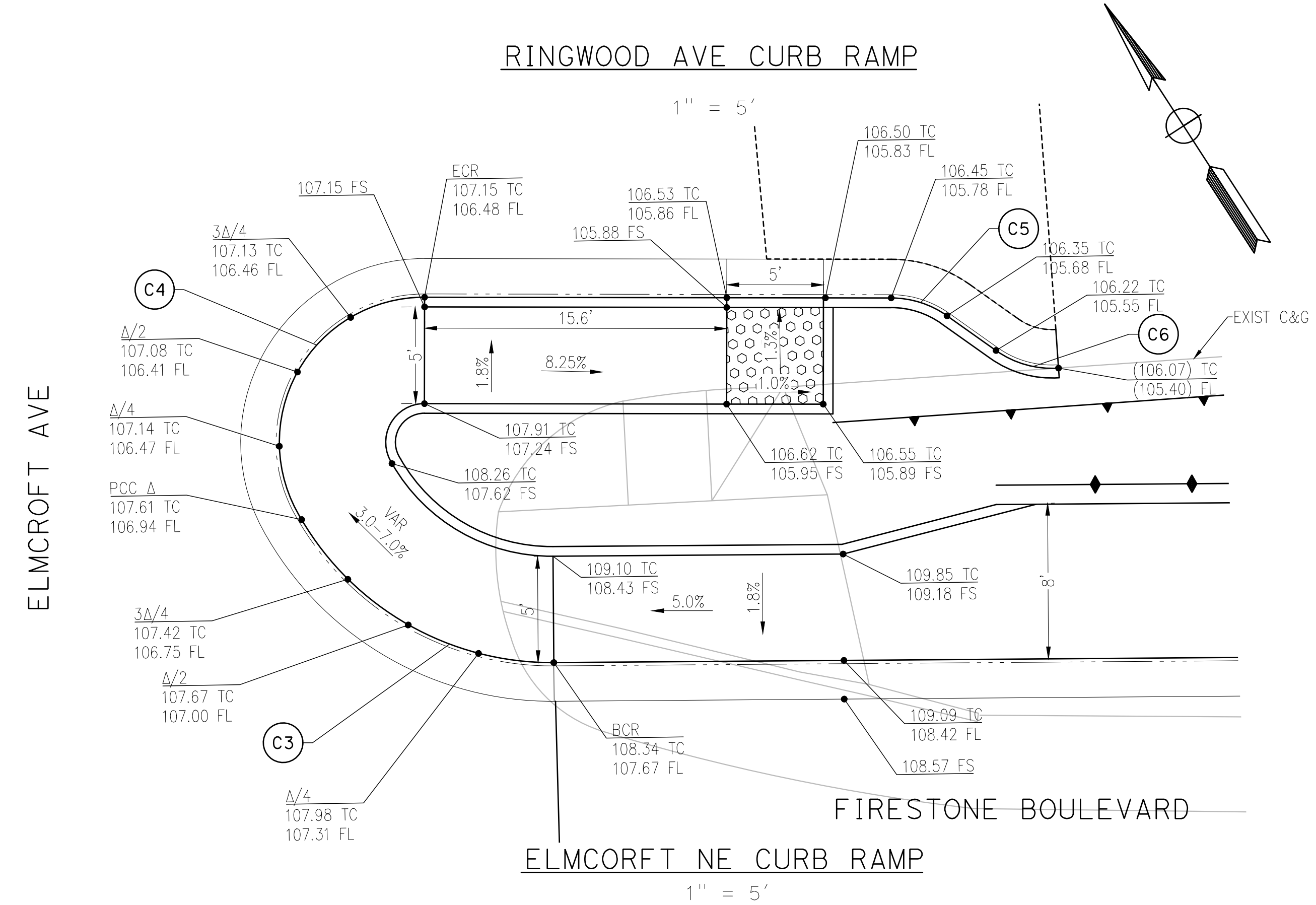
1" = 5'

CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C1	35.00'	123° 37' 12"	65.30'	75.52'
C2	25.50'	20° 15' 17"	4.55'	9.01'
C3	15.00'	60° 00' 00"	8.66'	15.71'
C4	7.50'	122° 12' 24"	13.59'	16.00'
C5	5.00'	35° 16' 32"	1.59'	3.08'
C6	5.00'	39° 15' 39"	1.78'	3.43'
C7	26.59'	57° 50' 14"	14.69'	26.84'
C8	15.02'	66° 57' 09"	9.93'	17.55'



RINGWOOD AVE CURB RAMP

1" = 5'



ELMCROFT NE CURB RAMP

1" = 5'

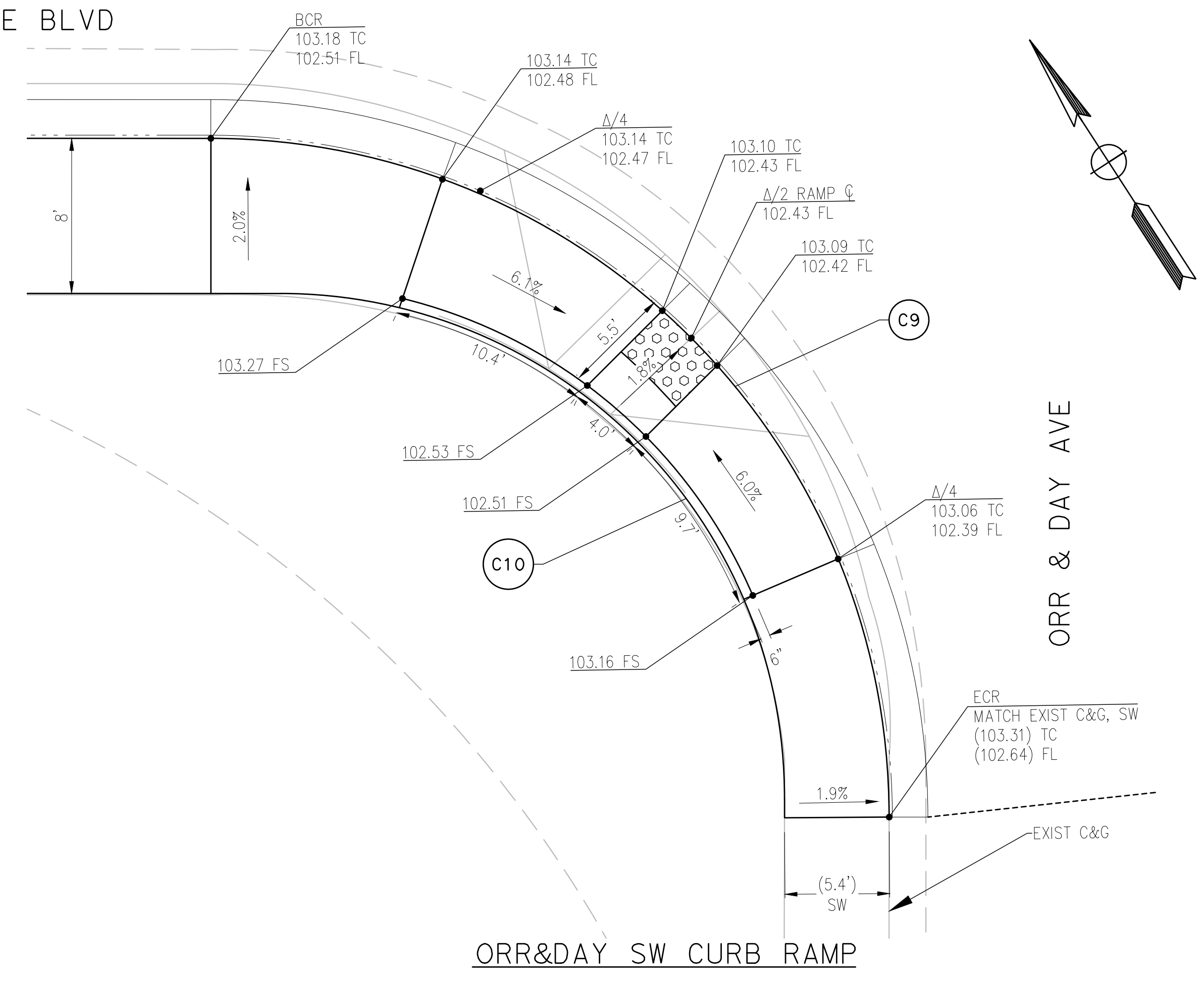
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: CURB RAMP CONSTRUCTION DETAIL FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 11 OF 75

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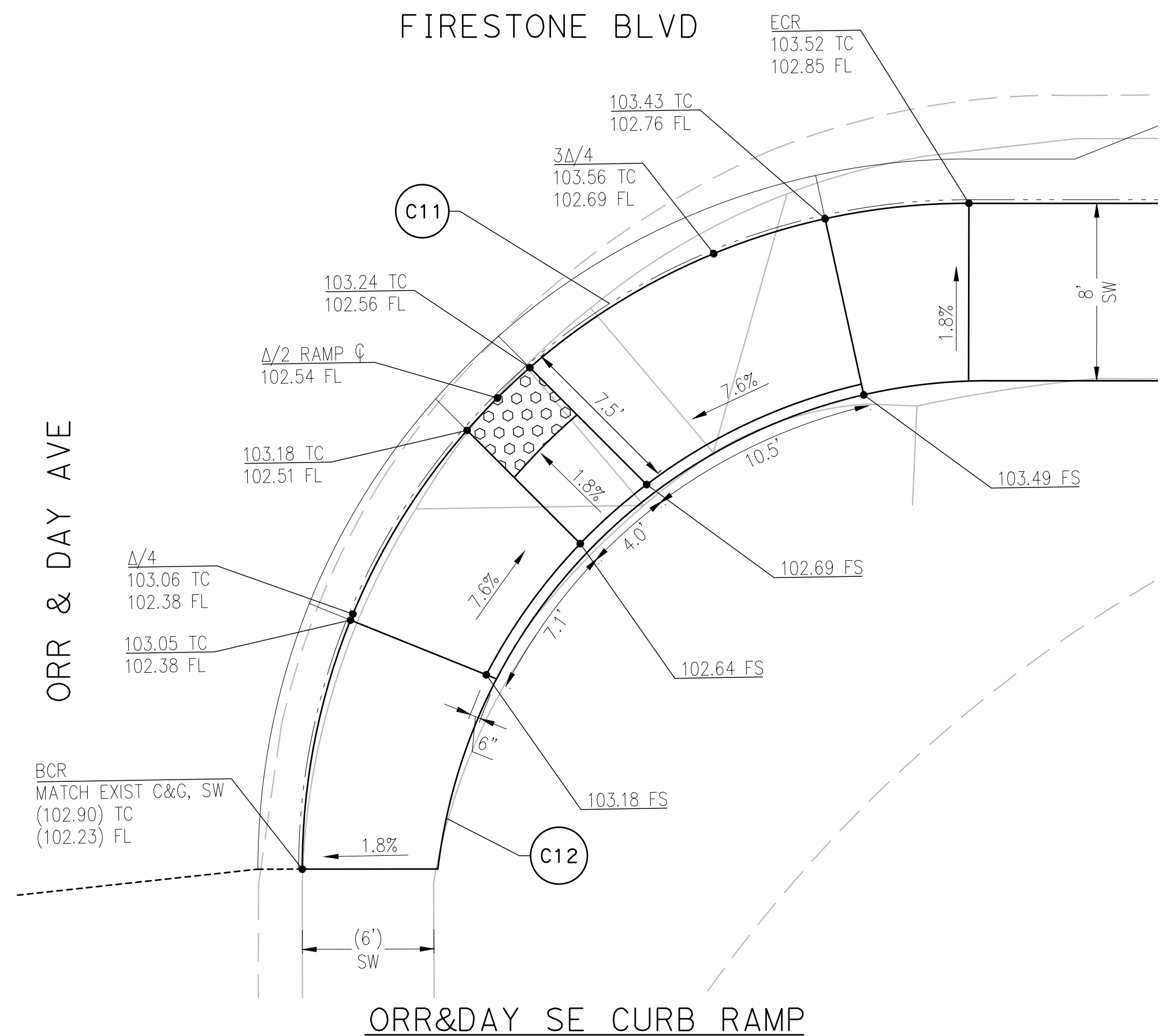
FIRESTONE BLVD



ORR&DAY SW CURB RAMP

1" = 5'

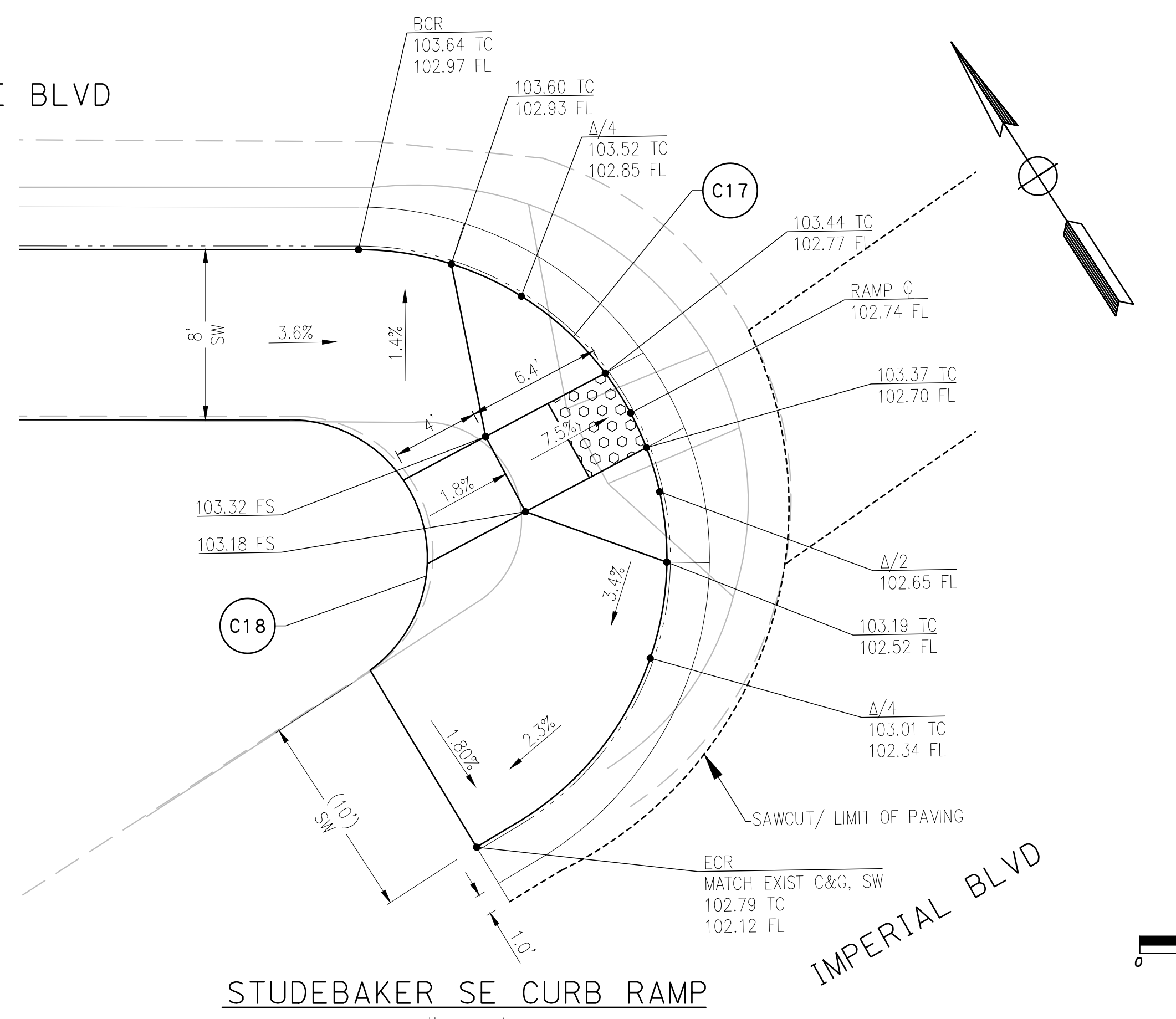
FIRESTONE BLVD



ORR&DAY SE CURB RAMP

1" = 5'

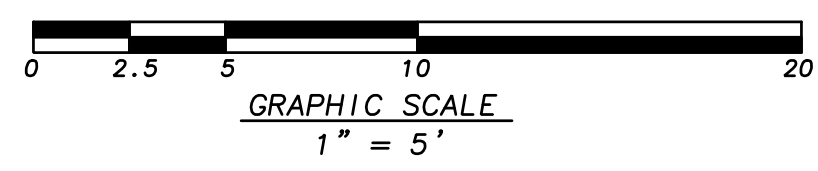
FIRESTONE BLVD



STUDEBAKER SE CURB RAMP

1" = 5'

CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C9	35.00'	89°59'18"	34.99'	54.97'
C10	26.00'	90°06'35"	26.05'	40.89'
C11	30.17'	90°03'51"	30.20'	47.42'
C12	25.00'	83°10'11"	22.18'	36.29'
C17	14.50'	148°55'54"	52.16'	37.69'
C18	6.50'	144°07'05"	20.08'	16.35'

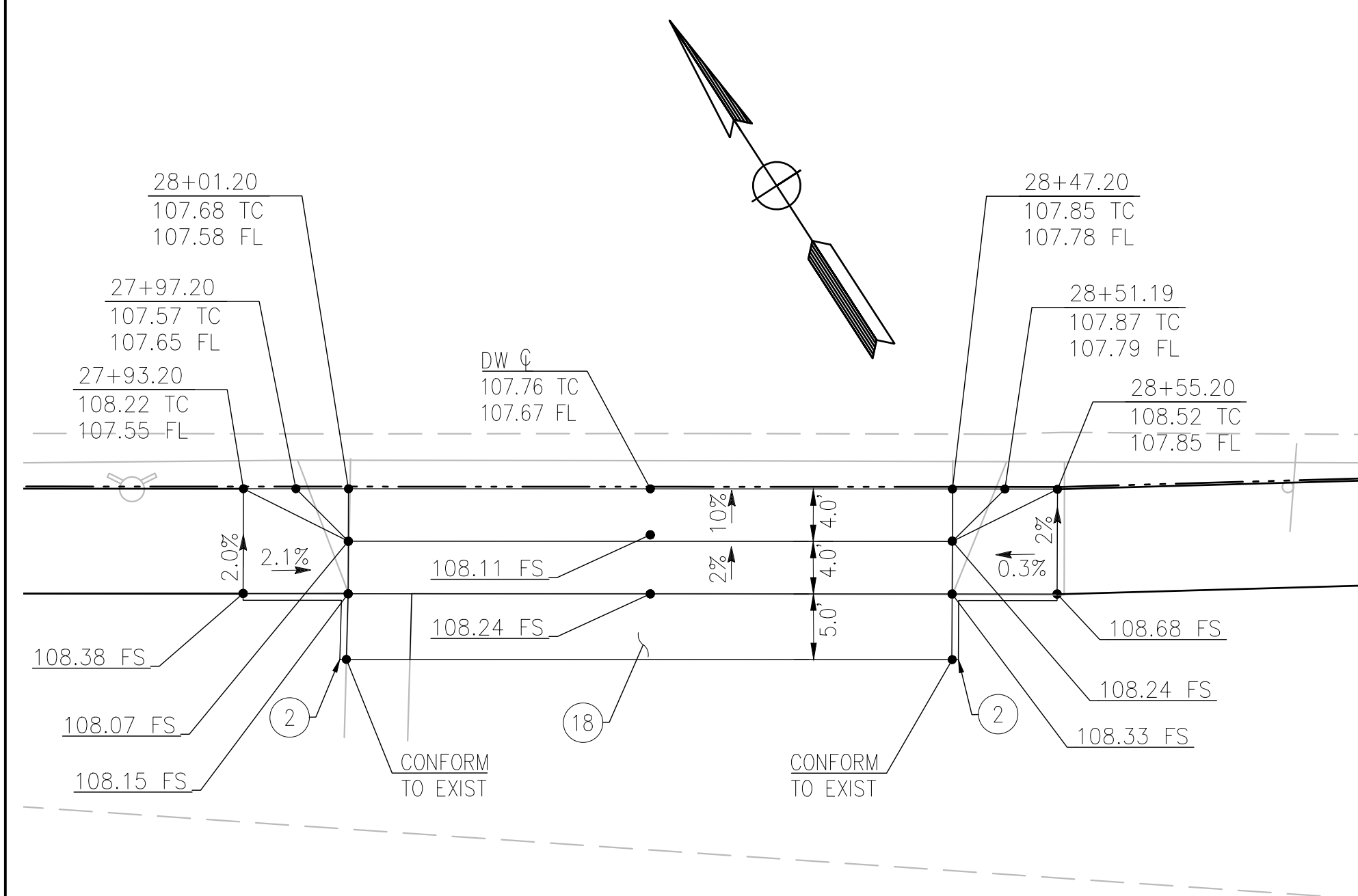


GRAPHIC SCALE
1" = 5'

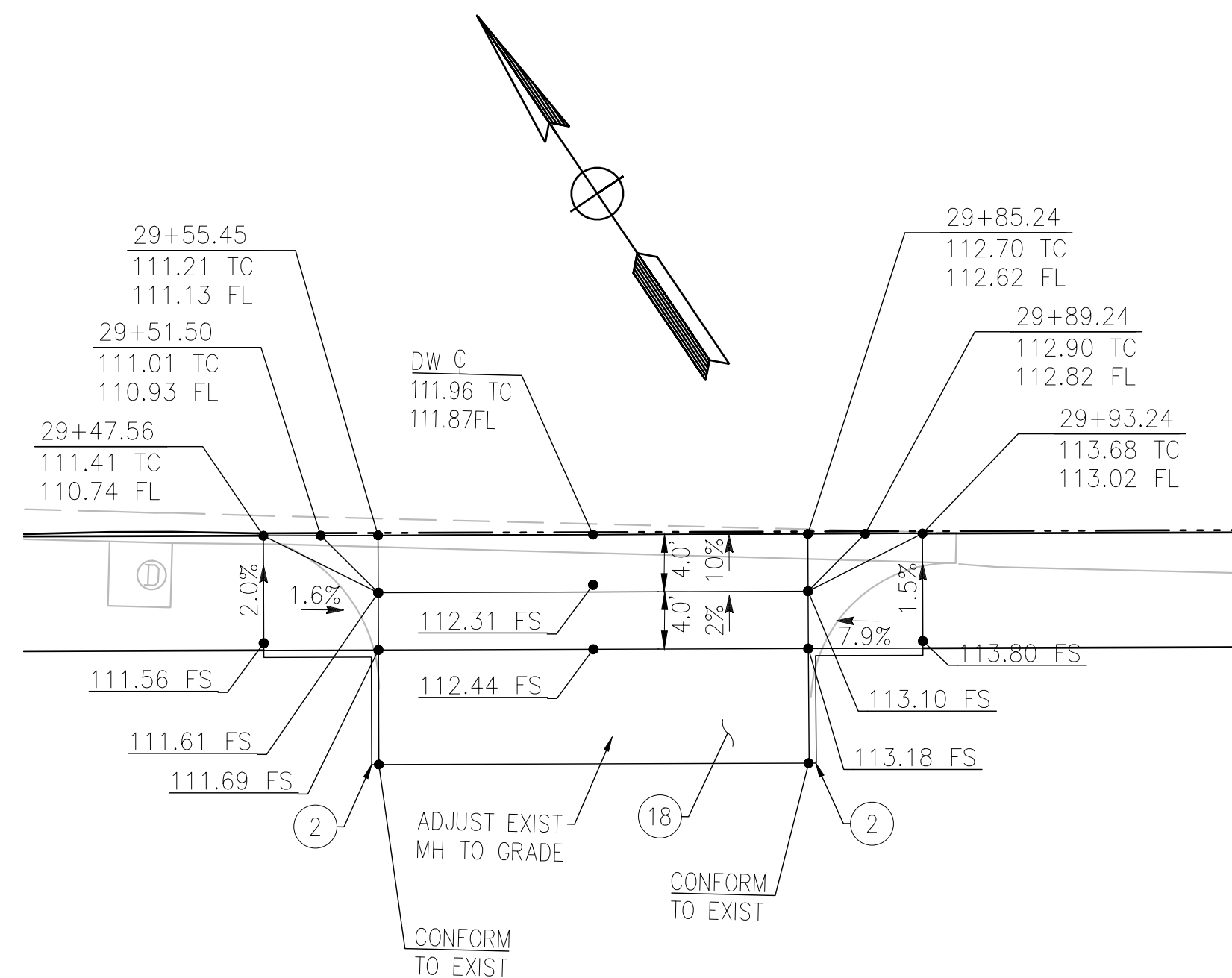
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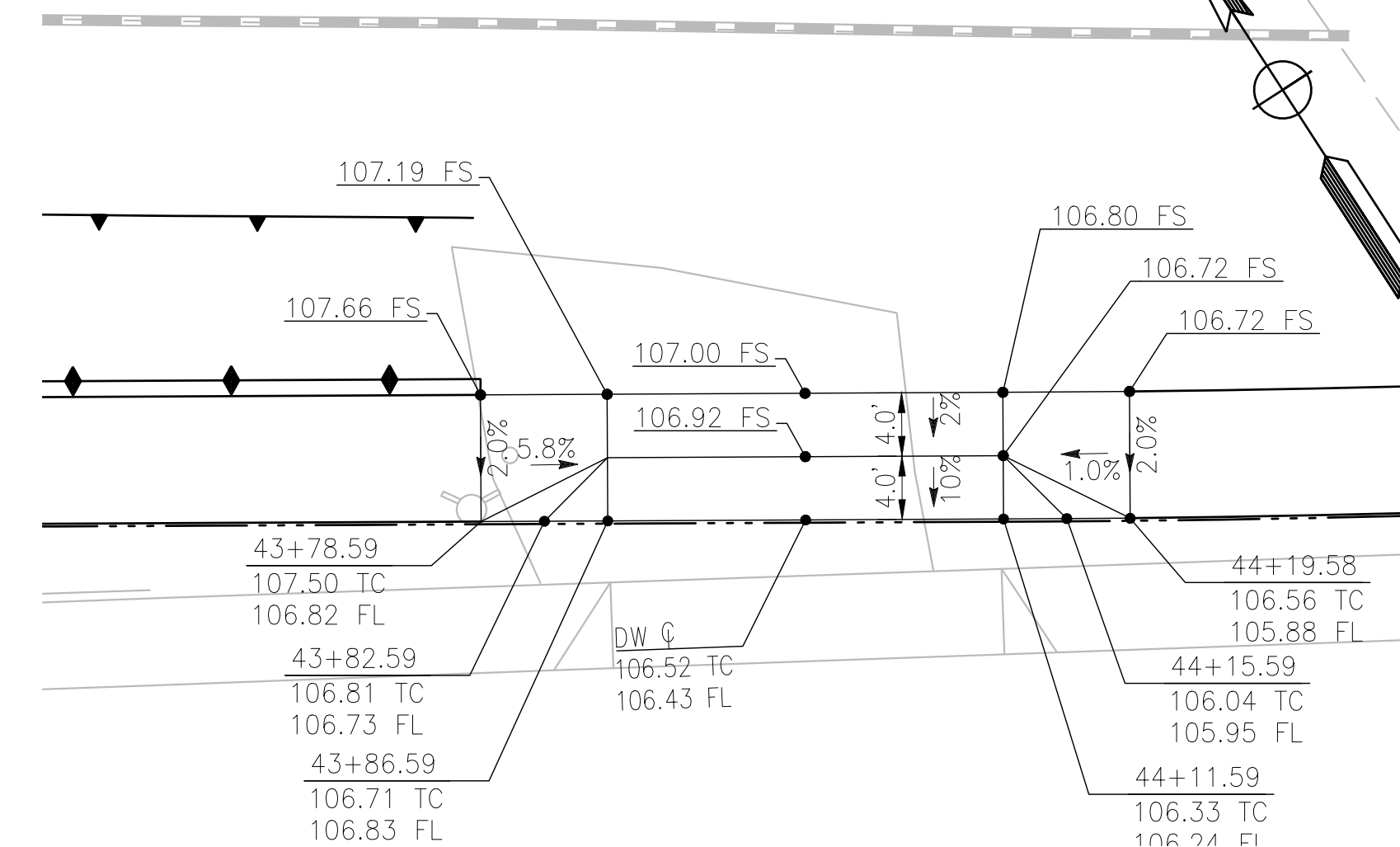
engineering division	CITY OF NORWALK	
REVISIONS	TITLE: CURB RAMP CONSTRUCTION DETAIL FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE BY	Approved	PROJECT NO. 7196.1
AS BUILT	Recommended	DRAWING NO.
FIELD BOOK REF.	CITY ENGINEER RCE 20568 DATE	DATE
PLAN REF.	Drawn By P.B.	Checked By A.V.
		SHEET 12 OF 75



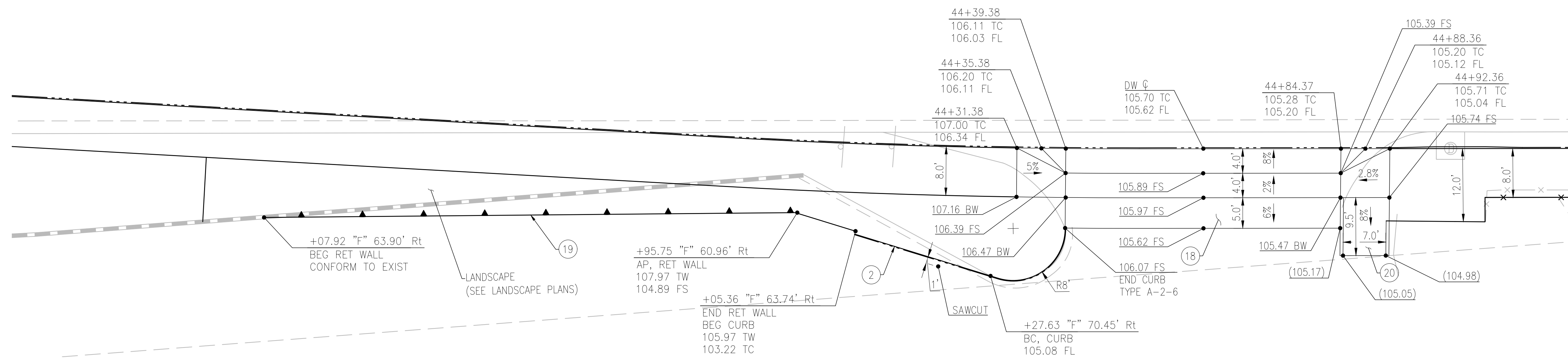
DRIVEWAY 1 AT STA 28+24.19
1" = 10'



DRIVEWAY 2 AT STA 29+70.25
1" = 10'



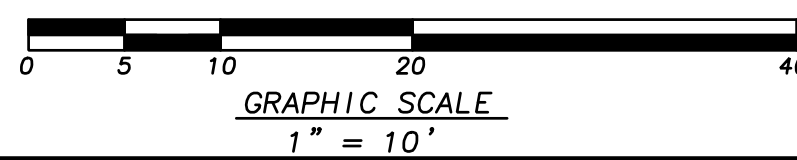
DRIVEWAY 3 AT STA 43+99.09
1" = 10'



DRIVEWAY 4 AT STA 44+61.86
1" = 10'

CONSTRUCTION NOTES:

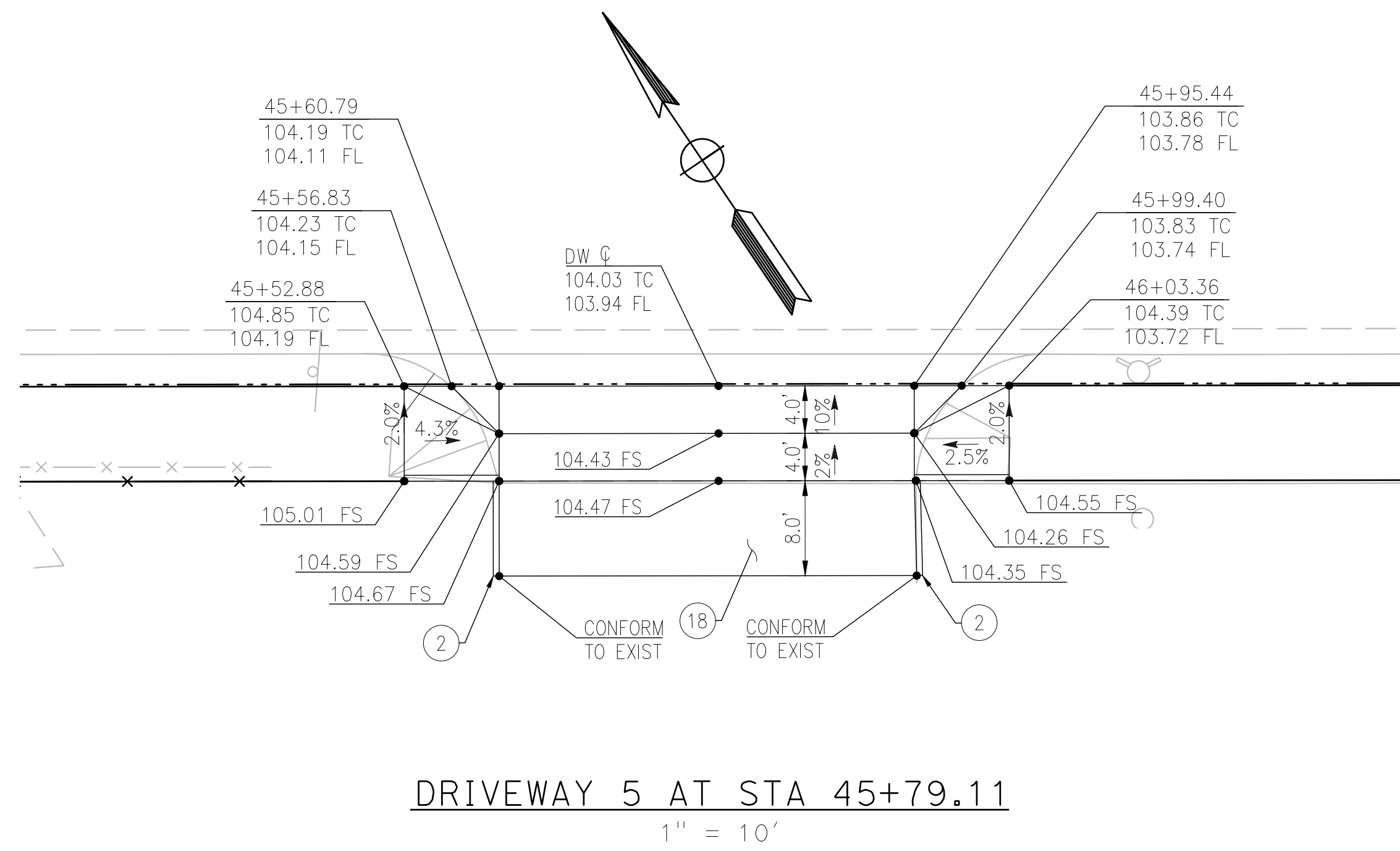
- (2) CONSTRUCT 8" PCC CURB, TYPE A1, PER CITY OF NORWALK STD. PLAN NO. 105A
- (17) CONSTRUCT PAVEMENT CONFORM, MILL AND FR-AC OVERLAY, 0.2" MINIMUM
- (18) CONSTRUCT 8" FULL PAVEMENT CONFORM, MILL AND AC OVERLAY.
- (19) CONSTRUCT 36" RET WALL
- (20) CONSTRUCT 6" PCC RAMP CONFORM.



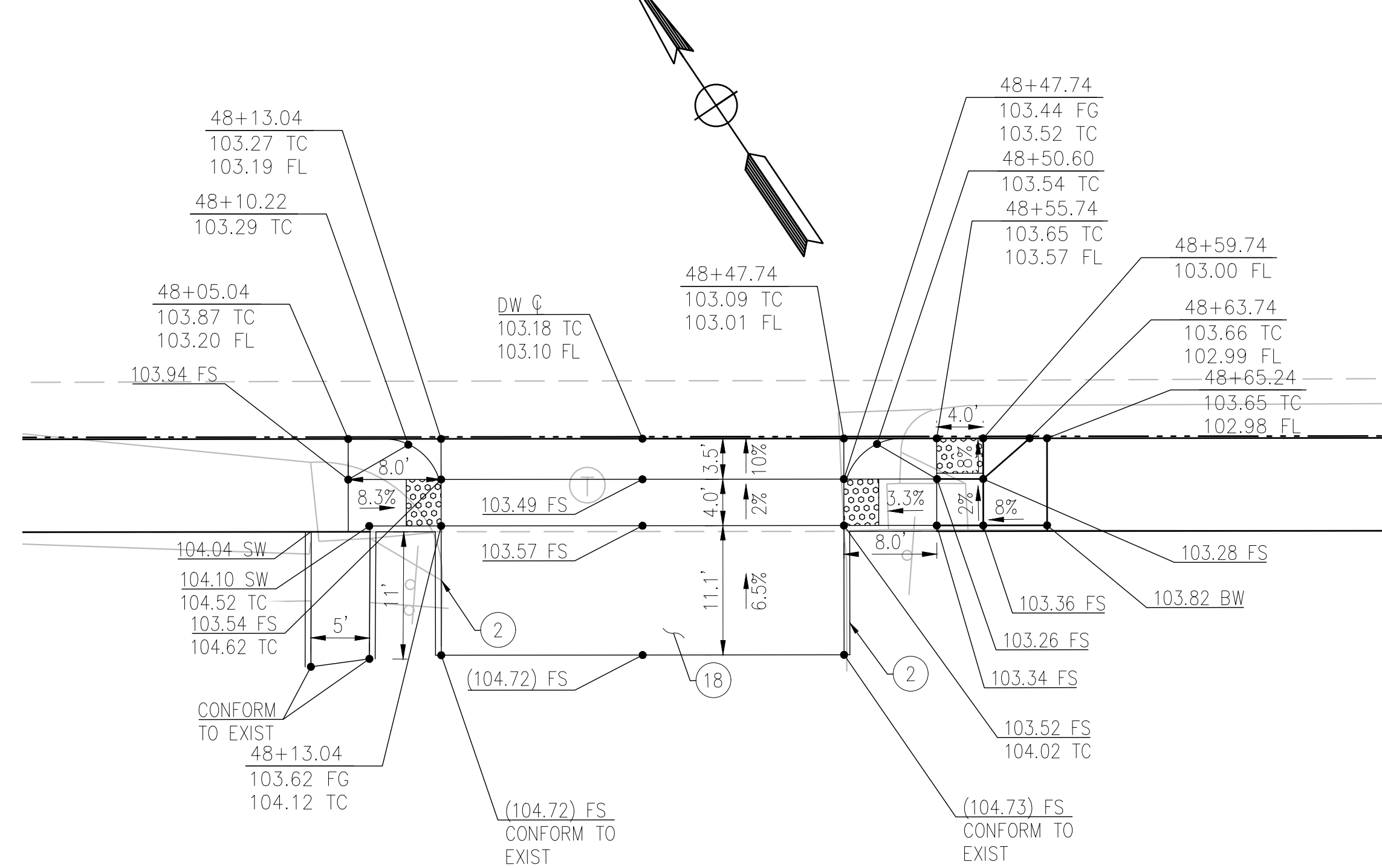
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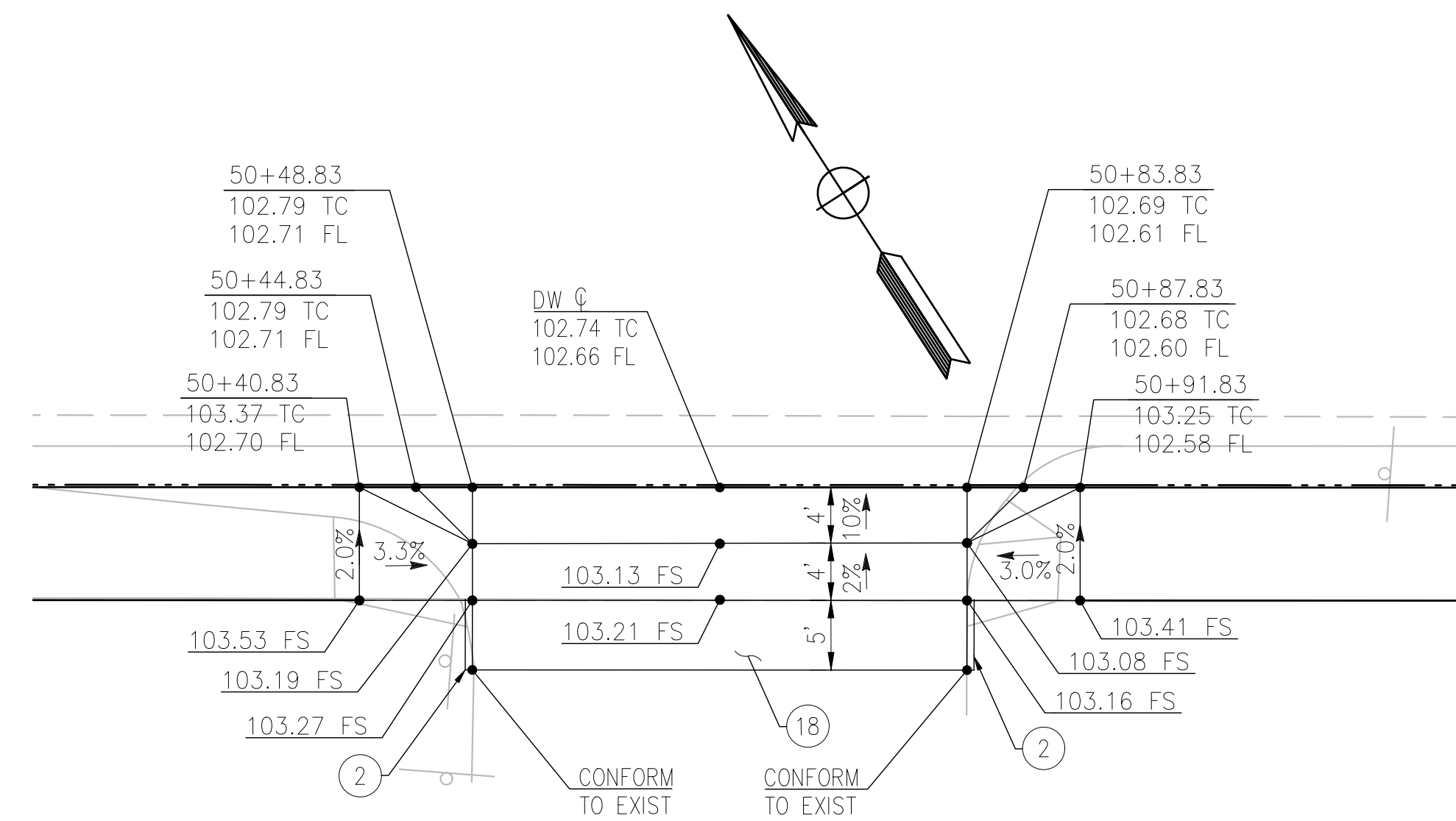
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: DRIVEWAY CONSTRUCTION DETAIL FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	CITY ENGINEER RCE 20568 DATE
FIELD BOOK REF.		Recommended	DRAWING NO.
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 13 OF 75



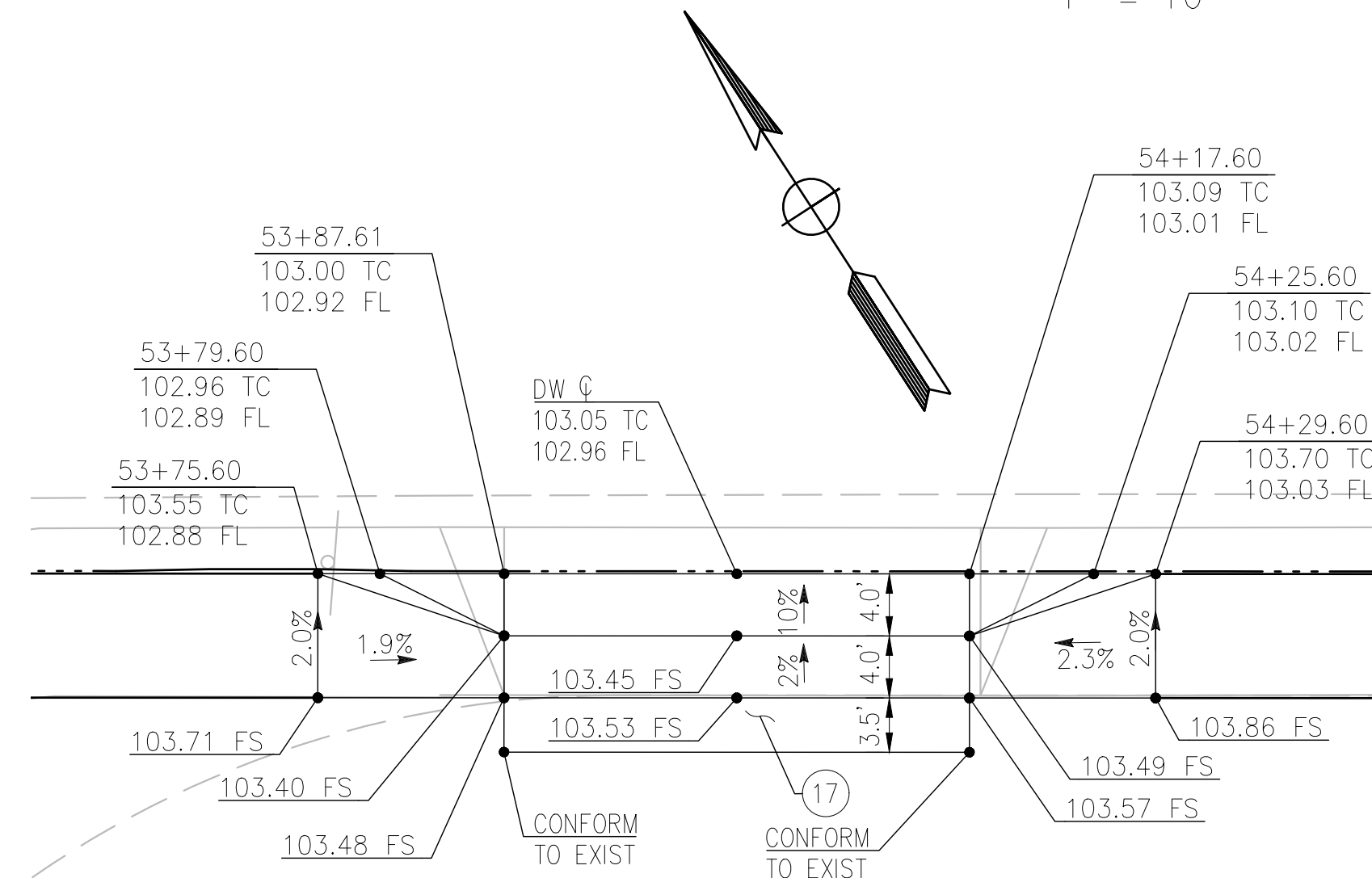
DRIVEWAY 5 AT STA 45+79.11
1" = 10'



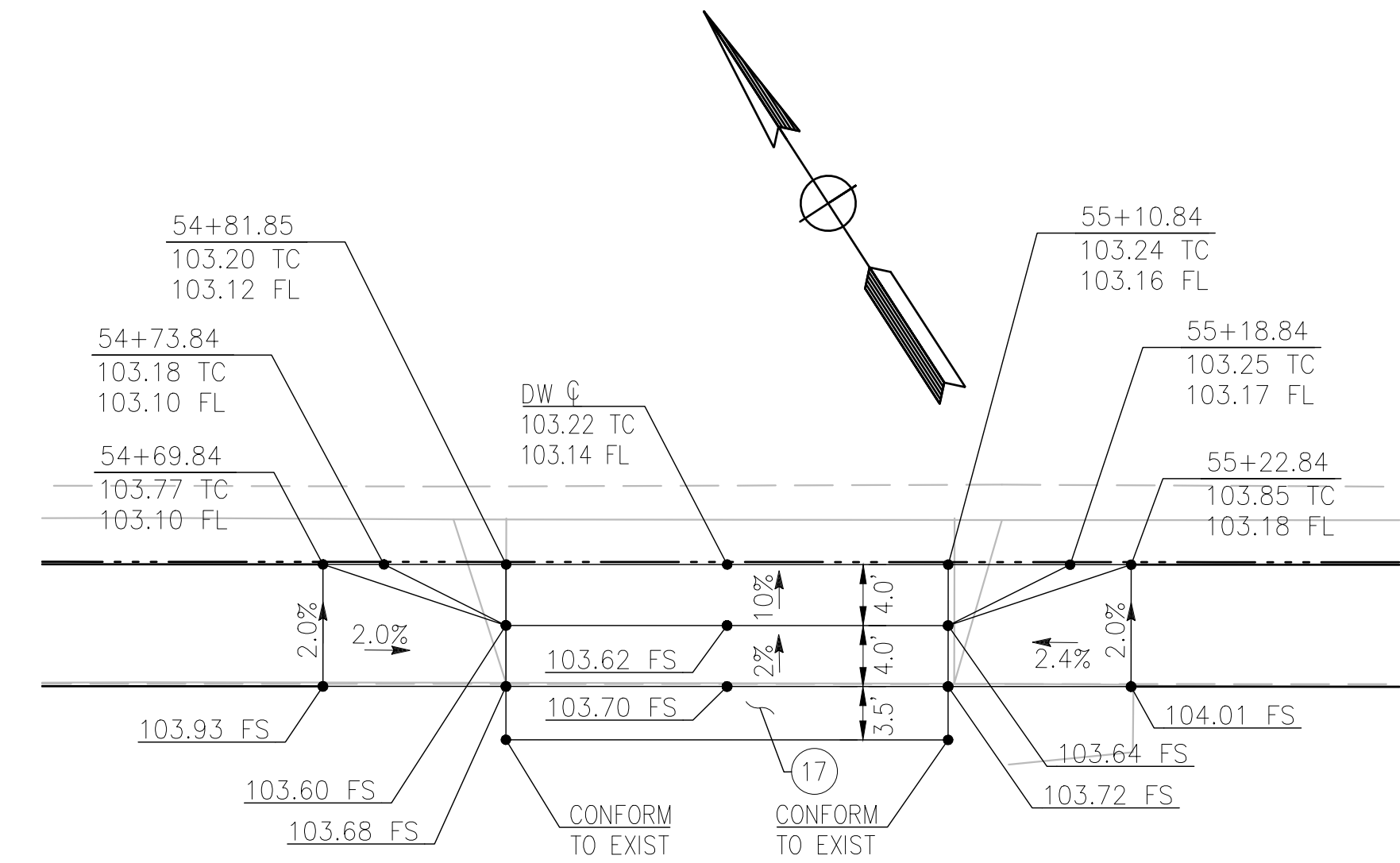
DRIVEWAY 6 AT STA 48+30.39
1" = 10'



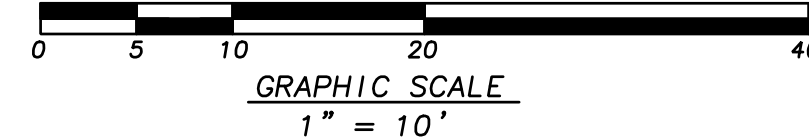
DRIVEWAY 7 AT STA 50+66.33
1" = 10'



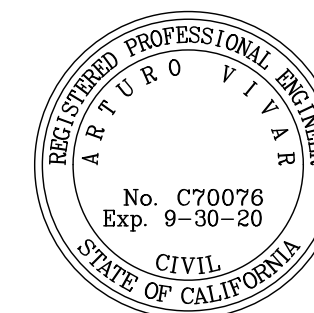
DRIVEWAY 8 AT STA 54+02.61
1" = 10'



DRIVEWAY 9 AT STA 54+96.35
1" = 10'



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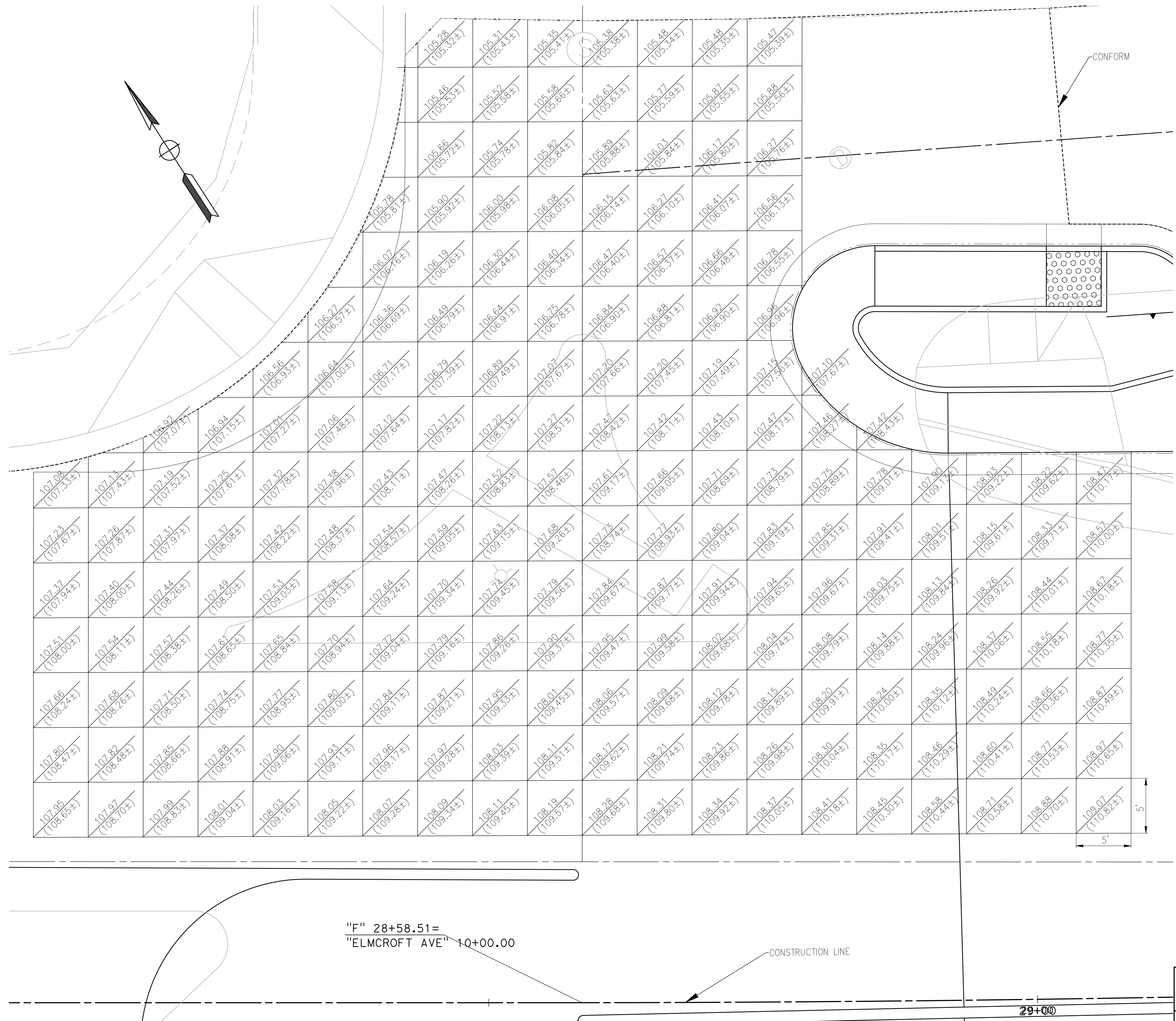


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: DRIVEWAY CONSTRUCTION DETAIL FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 14 OF 75

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ELMCROFT AVENUE

FIRESTONE BOULEVARD



"F" 28+58.51=
"ELMCROFT AVE" 10+00.00

CONSTRUCTION LINE

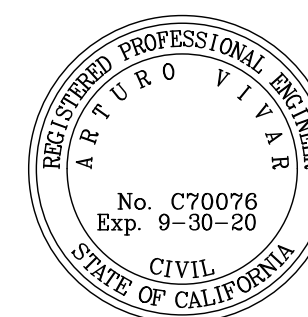
29+00

FIRESTONE BOULEVARD & ELMCROFT AVENUE

SCALE: 1" = 5'

MARK THOMAS

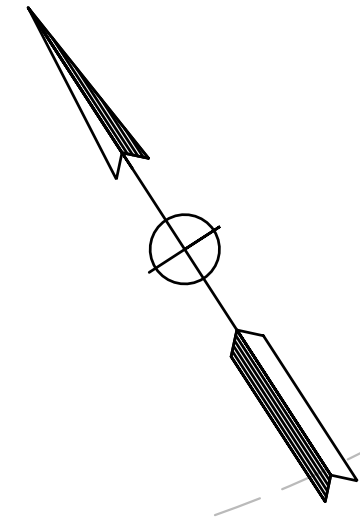
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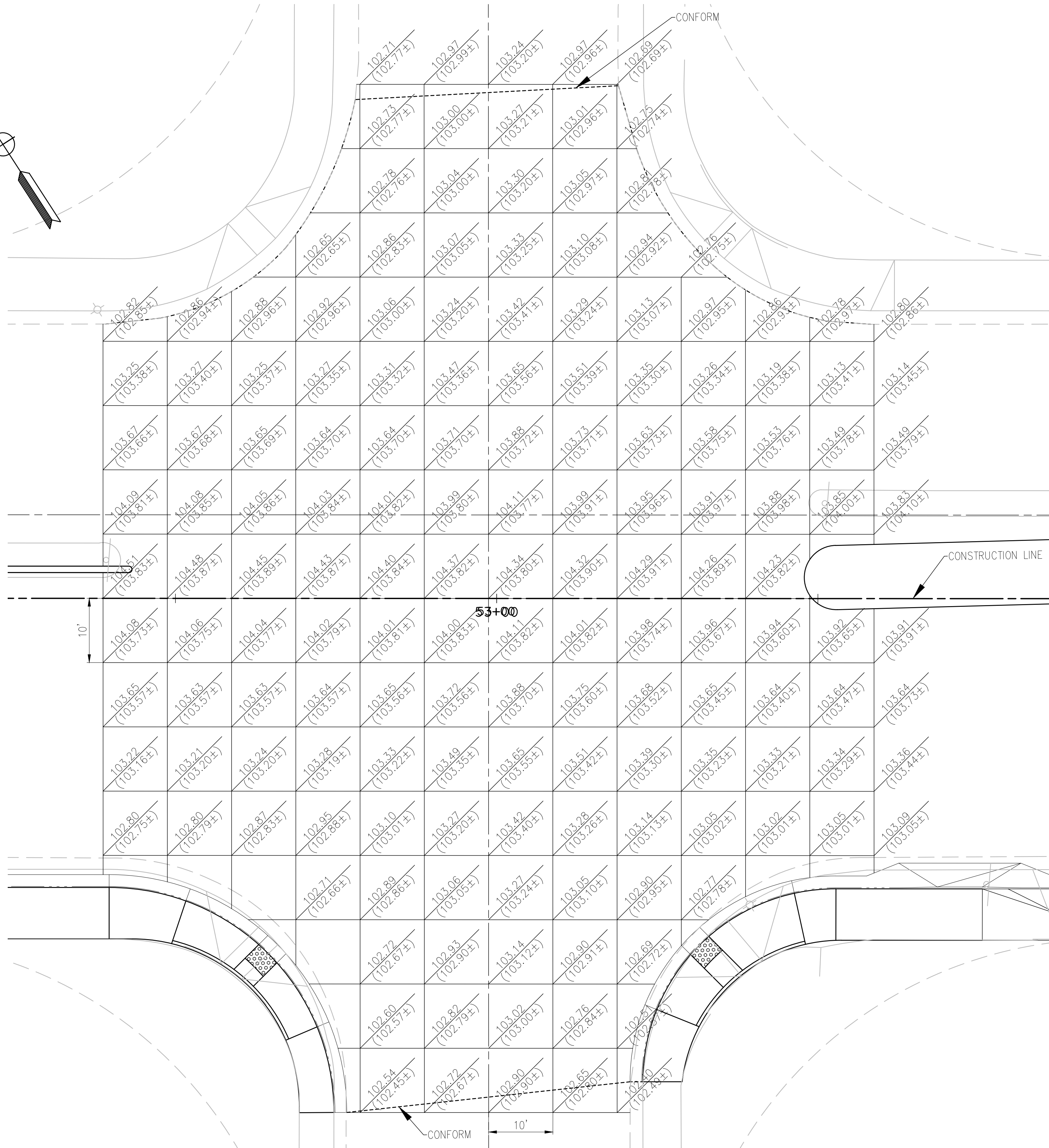
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: INTERSECTION CONSTRUCTION DETAIL FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	CITY ENGINEER RCE 20568 DATE
PLAN REF.			DATE
		Drawn By P.B.	Checked By A.V.
			SHEET 15 OF 75

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ORR AND DAY ROAD

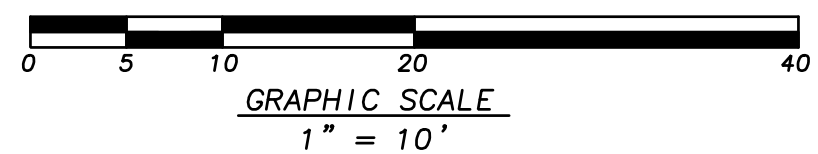


FIRESTONE BOULEVARD

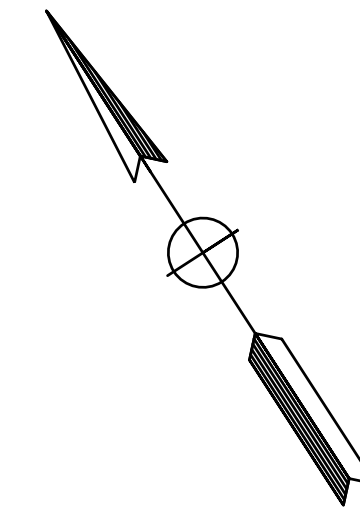


FIRESTONE BOULEVARD & ORR AND DAY ROAD

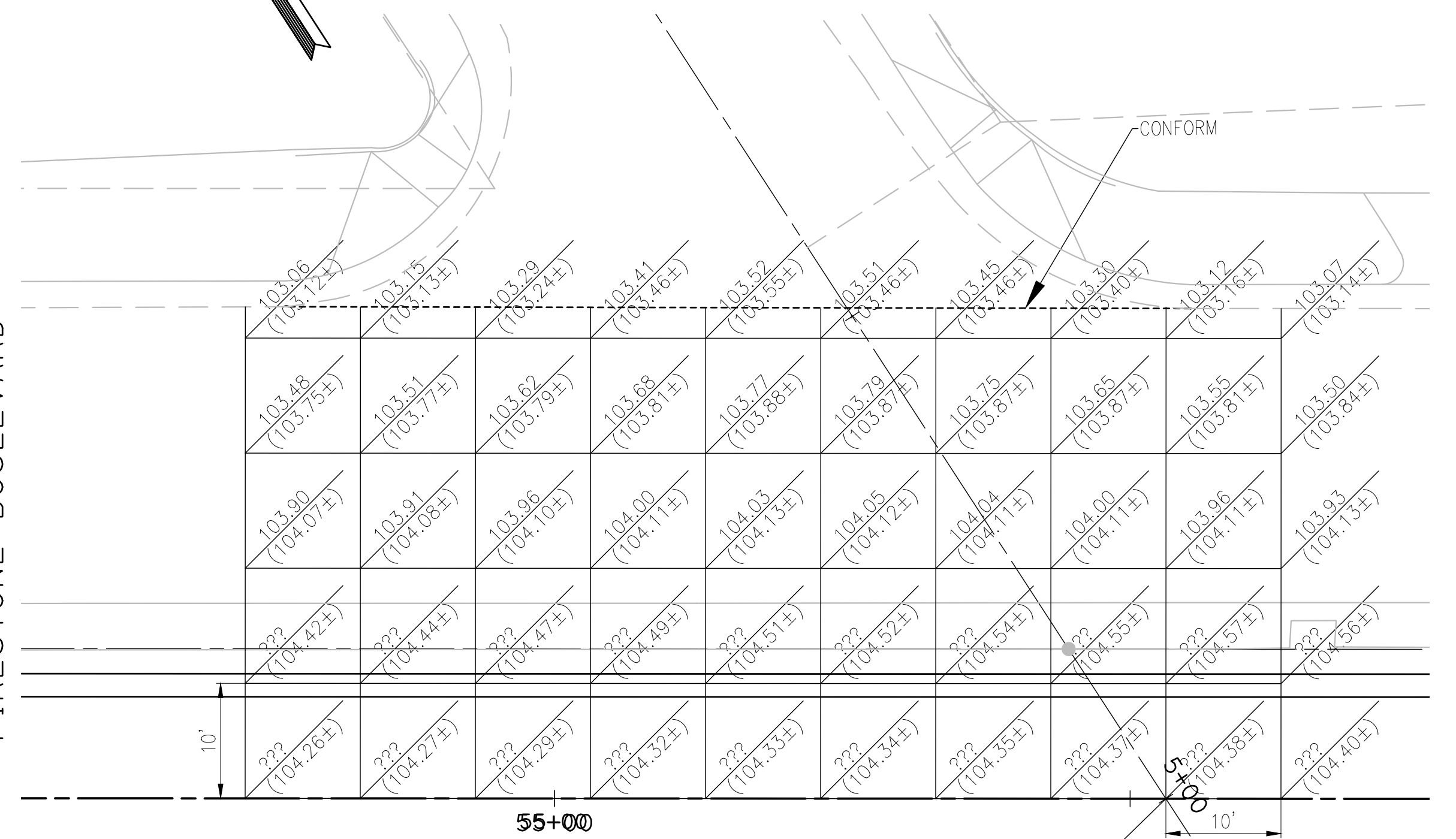
SCALE: 1" = 10'



ORR AND DAY AVENUE



FIRESTONE BOULEVARD



FIRESTONE BOULEVARD & ORR AND DAY AVENUE (EAST)

SCALE: 1" = 10'

"F" 55+53.11=
"ORR AND DAY Rd (EAST)" 5+00.00

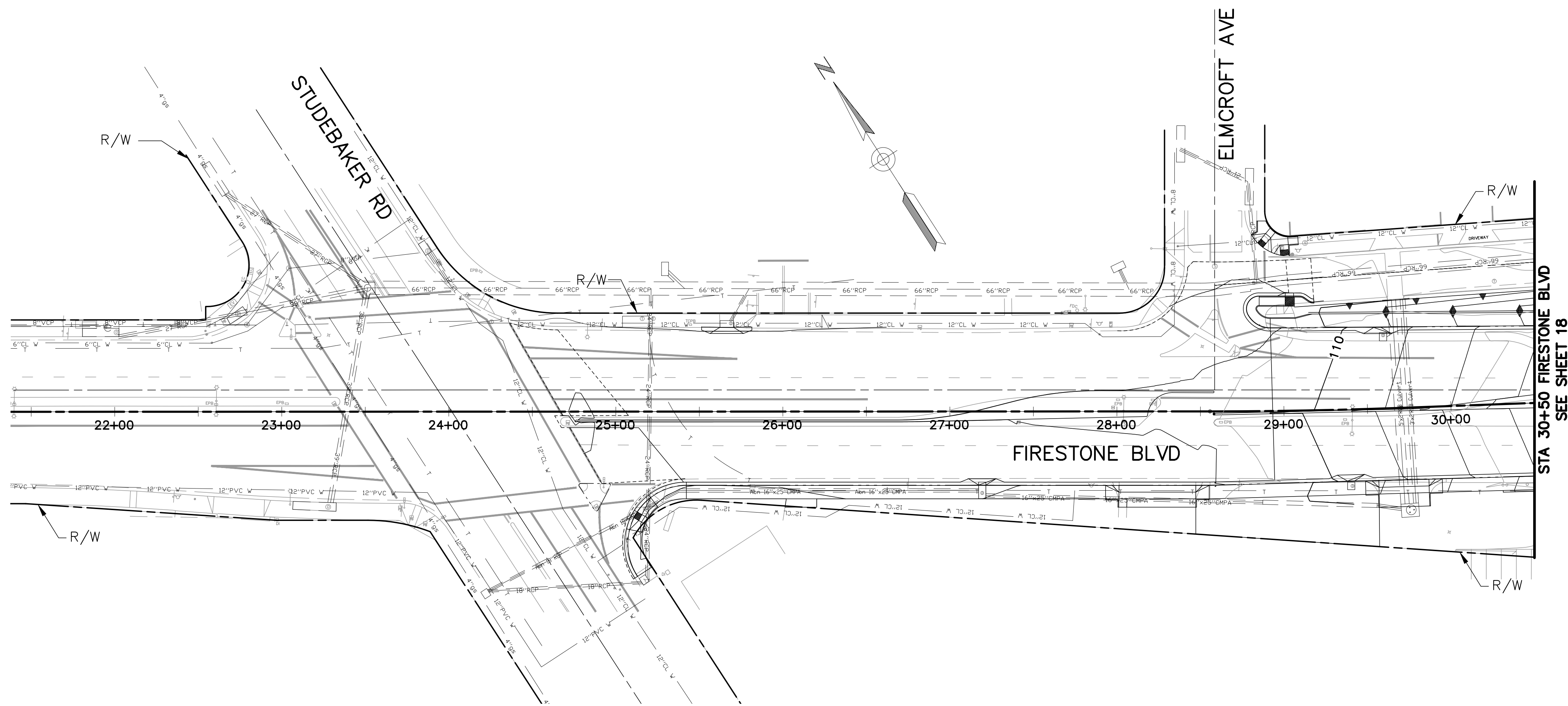
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DWG: J:\City of Norwalk-IR-19101-Firestone Blvd\CADD_2018\Sheets\IR-19101_CD_3_P1.dwg USER: ccas1110
DATE: Apr 07, 2020 5:58pm

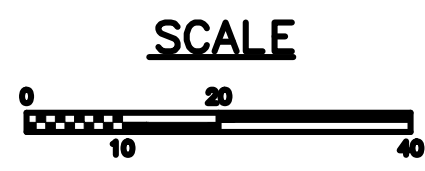
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(949) 477-9000



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: INTERSECTION CONSTRUCTION DETAIL FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	CITY ENGINEER RCE 20568 DATE
FIELD BOOK REF.		Recommended	DRAWING NO.
PLAN REF.		DATE	
Drawn By P.B.		Checked By A.V.	SHEET 16 OF 75



STA 30+50 FIRESTONE BLVD
SEE SHEET 18

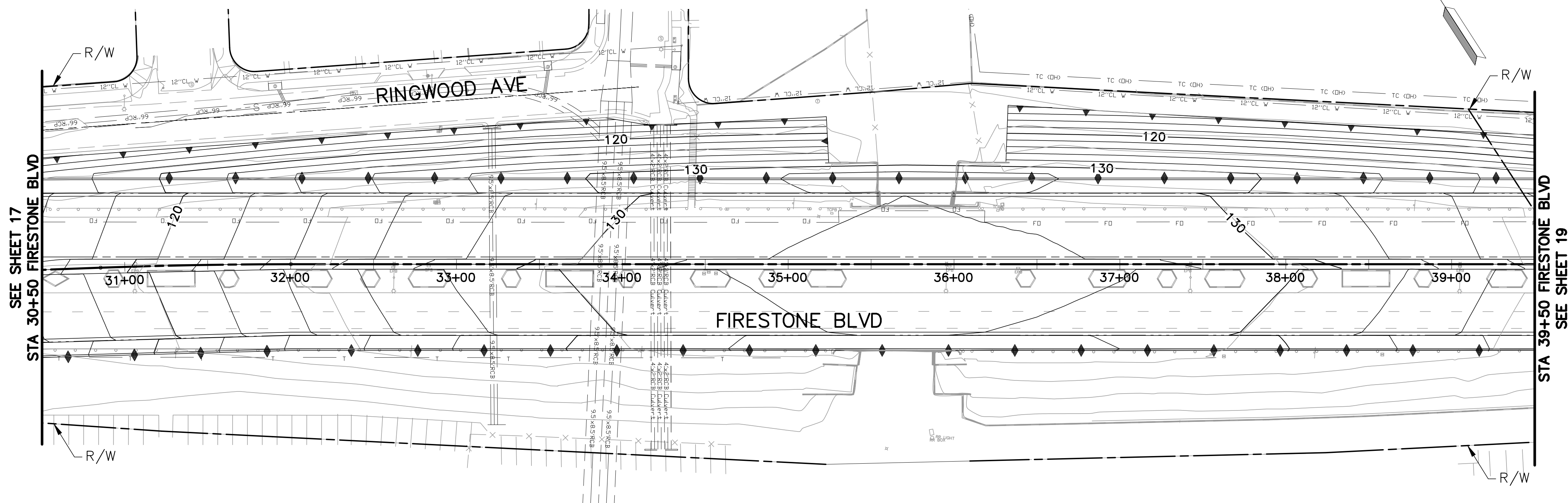


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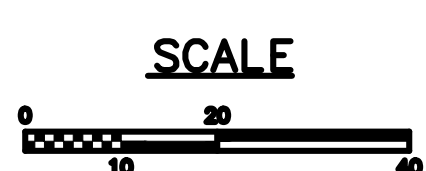
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: GRADING PLAN FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By <u>P.B.</u> Checked By <u>A.V.</u>	SHEET <u>17</u> OF <u>75</u>

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SEE SHEET 17
STA 30+50 FIRESTONE BLVD

STA 39+50 FIRESTONE BLVD
SEE SHEET 19

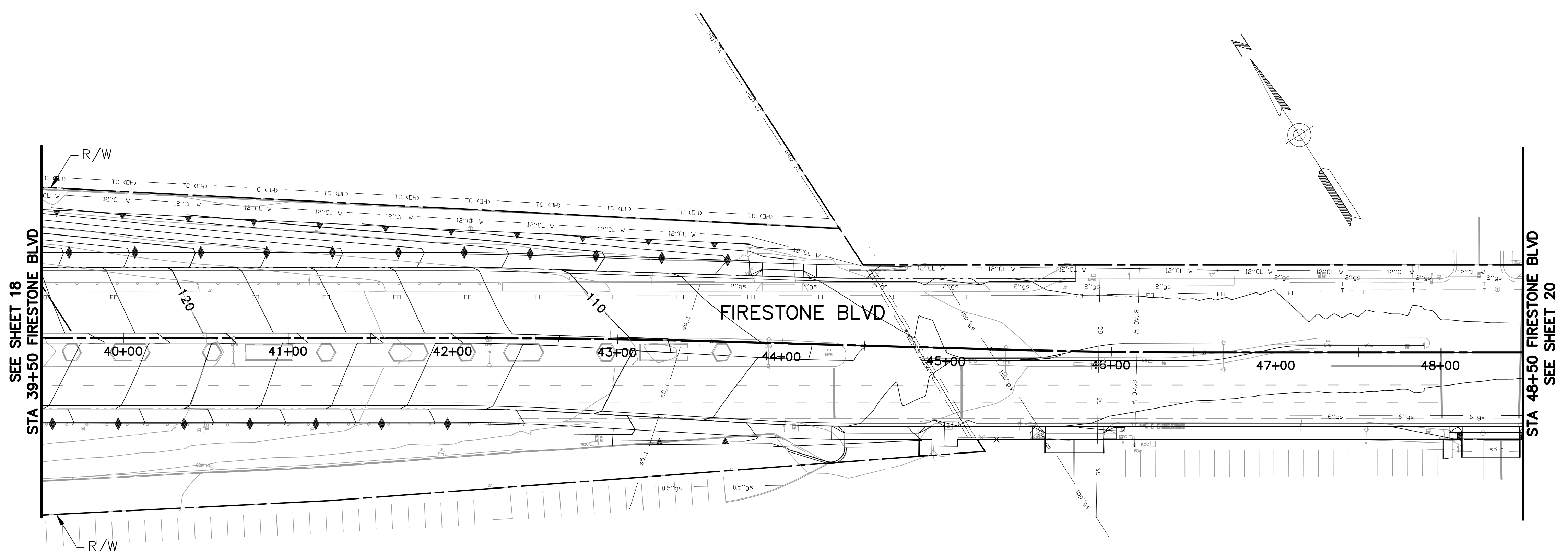


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engineering division		CITY OF NORWALK	
REVISIONS		TITLE: GRADING PLAN FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By <u>P.B.</u>	Checked By <u>A.V.</u>
			SHEET 18 OF 75

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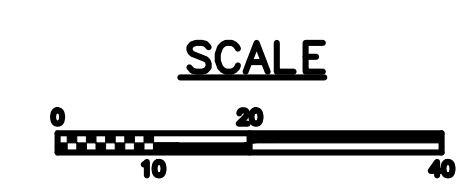


SEE SHEET 18
STA 39+50 FIRESTONE BLVD

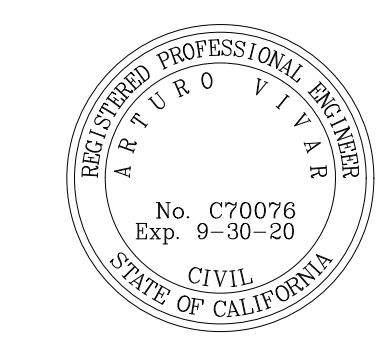
STA 48+50 FIRESTONE BLVD
SEE SHEET 20

FIRESTONE BLVD

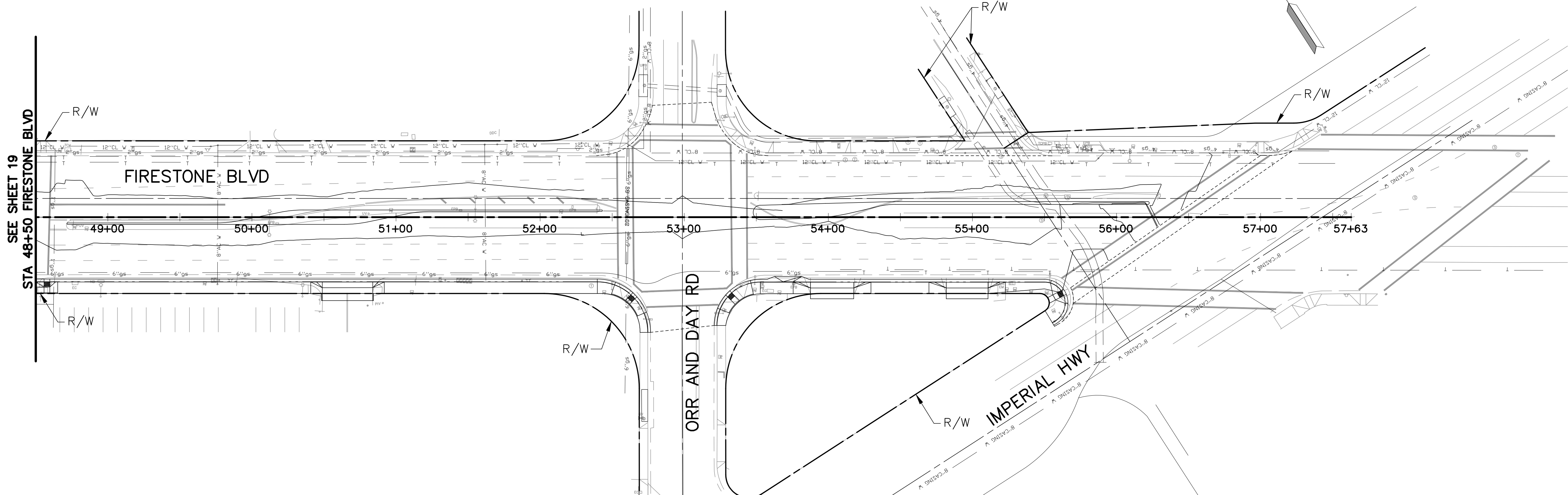
40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00



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DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By <u>P.B.</u>	Checked By <u>A.V.</u>
			SHEET <u>19</u> OF <u>75</u>

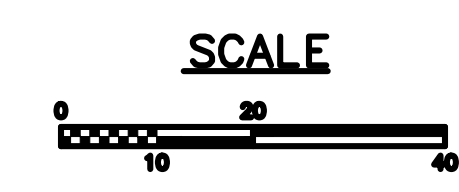


SEE SHEET 19
STA 48+50 FIRESTONE BLVD

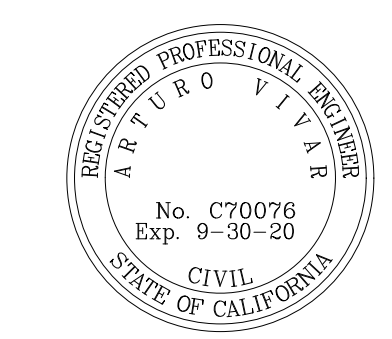
FIRESTONE BLVD

ORR AND DAY RD

IMPERIAL HWY



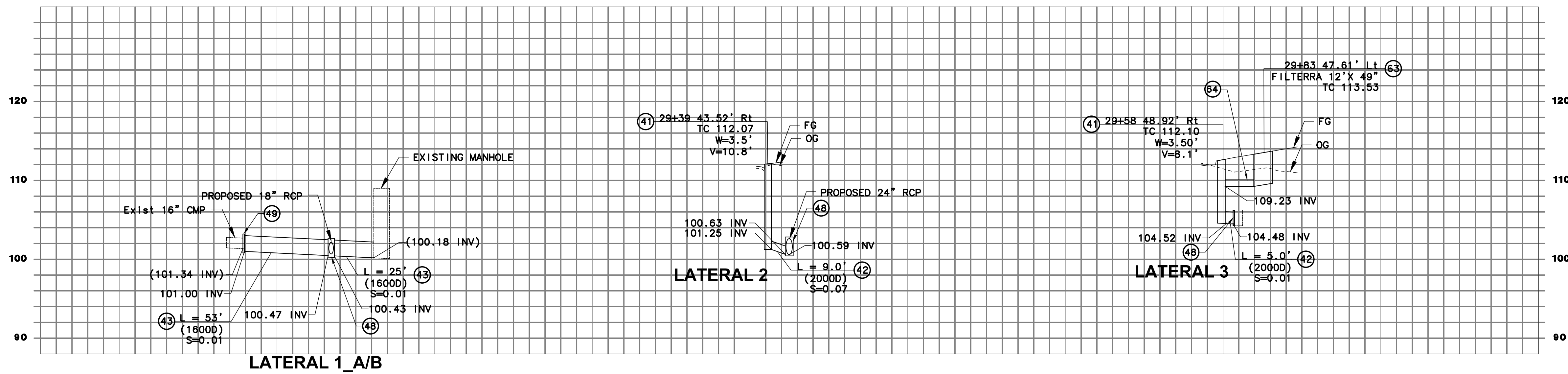
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(949) 477-9000



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: GRADING PLAN FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
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		Recommended	DRAWING NO.
FIELD BOOK REF.	AS BUILT	CITY ENGINEER RCE 20568 DATE	
PLAN REF.		DATE	
Drawn By <u>P.B.</u>		Checked By <u>A.V.</u>	SHEET <u>20</u> OF <u>75</u>

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



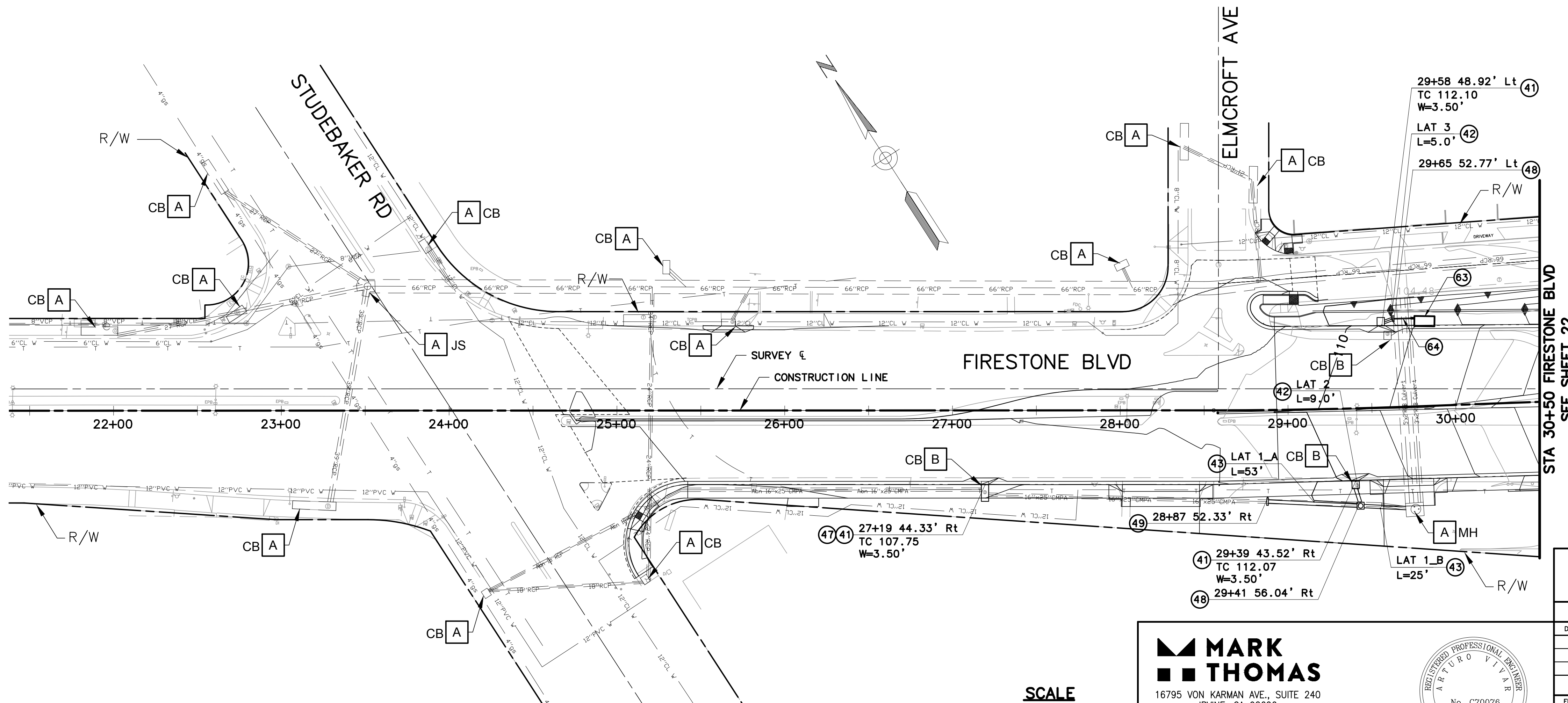
DISPOSITION NOTES:

- A PROTECT-IN-PLACE (ITEM AS NOTED)
- B REMOVE (ITEM AS NOTED)

CONSTRUCTION NOTES:

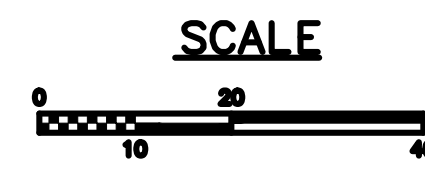
- ④1 CONSTRUCT CURB OPENING CATCH BASIN PER CITY OF NORWALK STD. PLAN NO. 300A.
- ④2 INSTALL 18" RCP.
- ④3 INSTALL 24" RCP.
- ④7 REMOVE AND RECONSTRUCT CATCH BASIN PER DETAIL ON SHEET 25.
- ④8 CONSTRUCT JUNCTION STRUCTURE PER CITY OF NORWALK STD. PLAN NO. 309A.
- ④9 CONSTRUCT CONCRETE COLLAR PER CITY OF NORWALK STD. PLAN NO. 308.
- ⑥3 CONSTRUCT FILTERRA PER DETAIL ON SHEET 26.
- ⑥4 CONSTRUCT 10" PLASTIC PIPE

LINE TABLE	
LINE #	DIRECTION
L1_A	N54°19'41"W
L1_B	N54°19'41"W
L2	S14°54'00"W
L3	S77°17'23"E



engineering division			
REVISIONS			
DATE	BY	TITLE: DRAINAGE PLAN & PROFILES FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
AS BUILT		Approved	PROJECT NO. 7196.1
FIELD BOOK REF.		Recommended	DRAWING NO.
PLAN REF.		CITY ENGINEER: RCE 20568 DATE:	PROJECT NO. 7196.1 DRAWING NO.
		Drawn By: P.B. Checked By: A.V.	SHEET 21 OF 75

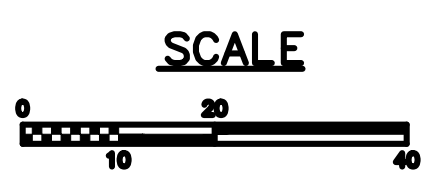
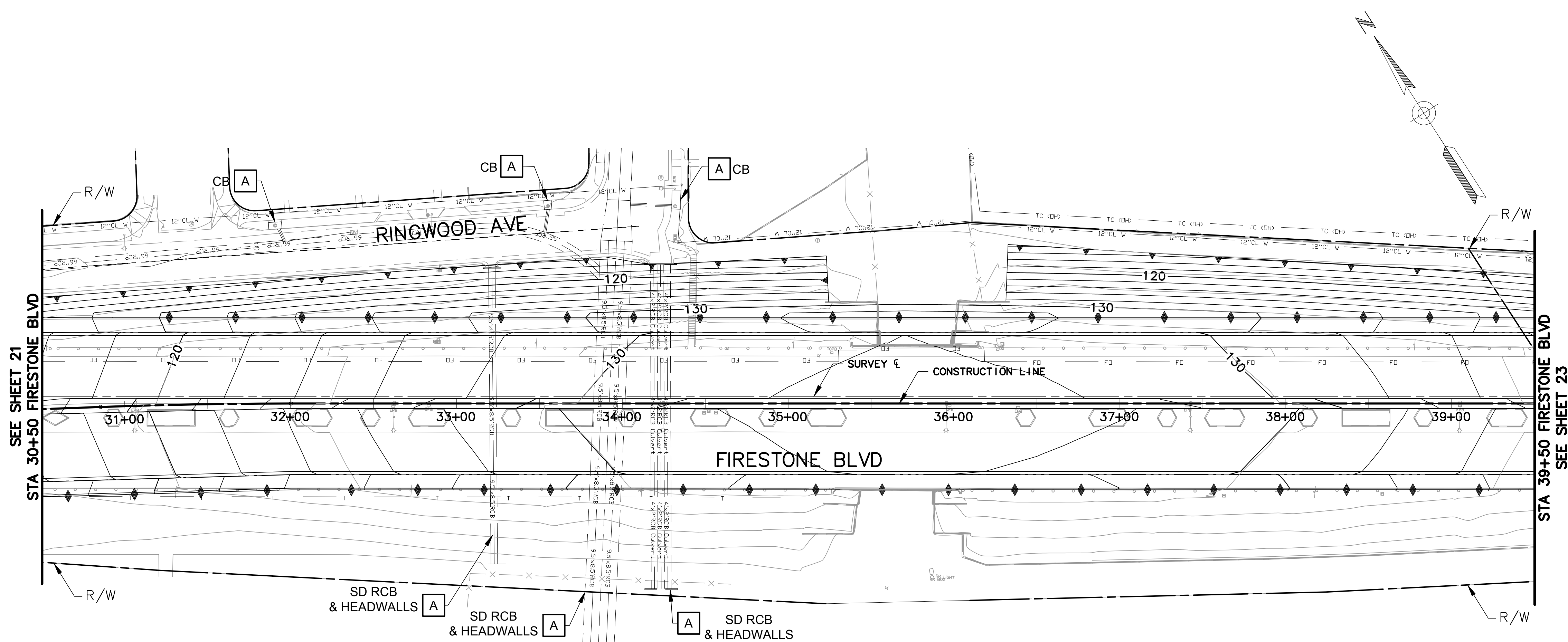
MARK THOMAS
 16795 VON KARMAN AVE., SUITE 240
 IRVINE, CA 92606
 (949) 477-9000



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DISPOSITION NOTES:

A PROTECT-IN-PLACE (ITEM AS NOTED)



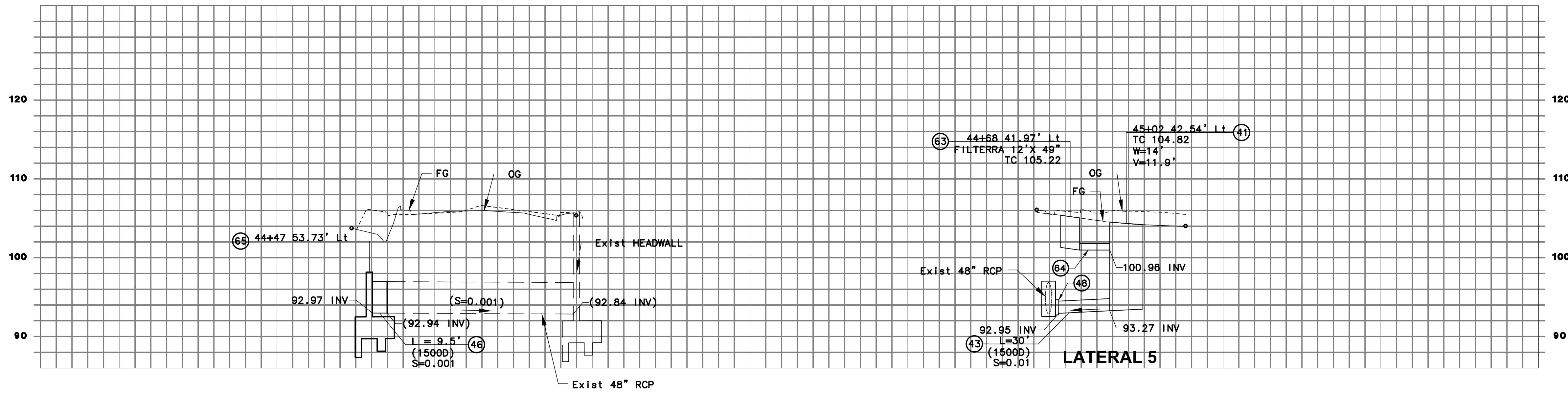
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engineering division		CITY OF NORWALK	
REVISIONS		TITLE: DRAINAGE PLAN & PROFILES FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By P.B.	Checked By A.V.
			SHEET 22 OF 75

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



LATERAL 4

LATERAL 5

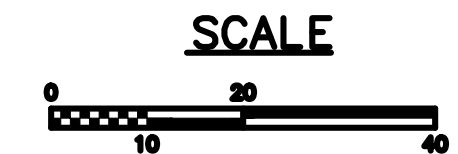
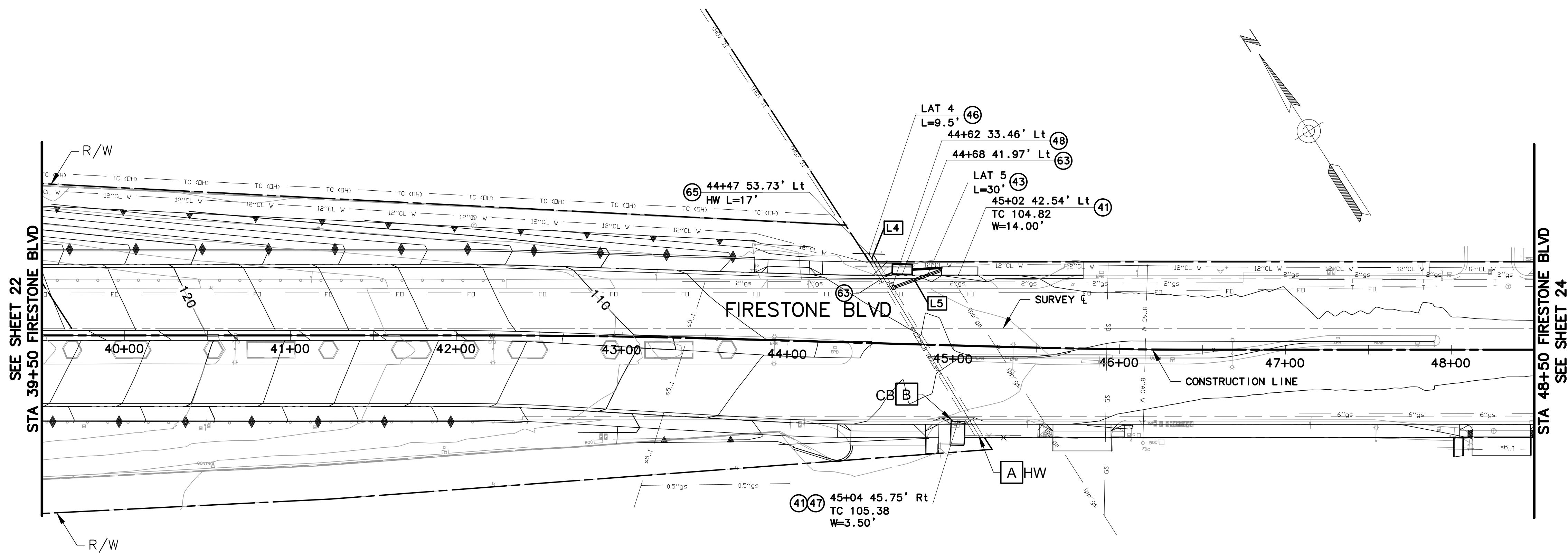
DISPOSITION NOTES:

- A PROTECT-IN-PLACE (ITEM AS NOTED)
- B REMOVE (ITEM AS NOTED)

CONSTRUCTION NOTES:

- 41 CONSTRUCT CURB OPENING CATCH BASIN PER CITY OF NORWALK STD. PLAN NO. 300A.
- 43 INSTALL 24" RCP.
- 46 INSTALL 48" RCP.
- 47 REMOVE AND RECONSTRUCT CATCH BASIN PER DETAIL ON SHEET 16.
- 48 CONSTRUCT JUNCTION STRUCTURE PER CITY OF NORWALK STD. PLAN NO. 309A.
- 49 CONSTRUCT CONCRETE COLLAR PER CITY OF NORWALK STD. PLAN NO. 308.
- 63 CONSTRUCT FILTERA PER DETAIL ON SHEET 26.
- 64 CONSTRUCT 10" PLASTIC PIPE.
- 65 CONSTRUCT HEADWALL PER DETAIL ON SHEET 25.

LINE TABLE	
LINE #	DIRECTION
L4	S1°46'48"W
L5	S76°53'45"E



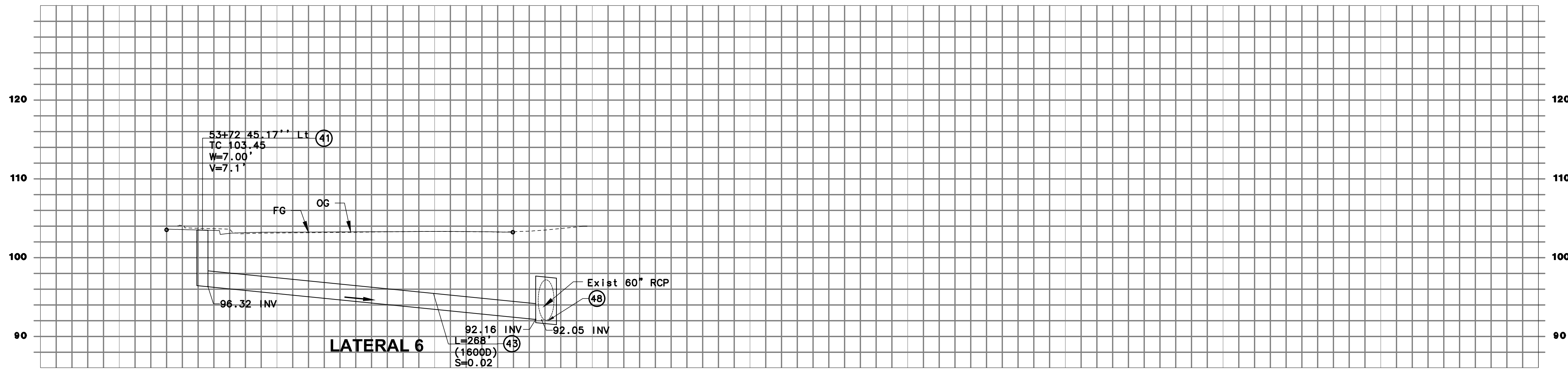
engineering division	CITY OF NORWALK	
REVISIONS	TITLE: DRAINAGE PLAN & PROFILES FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE BY	Approved	PROJECT NO. 7196.1
	AS BUILT	DRAWING NO.
FIELD BOOK REF.	Recommended	
PLAN REF.		
	Drawn By P.B.	Checked By A.V.
		SHEET 23 OF 75

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



DISPOSITION NOTES:

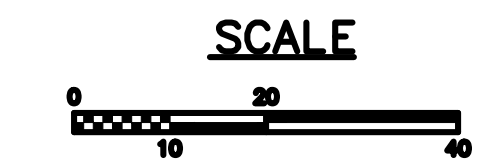
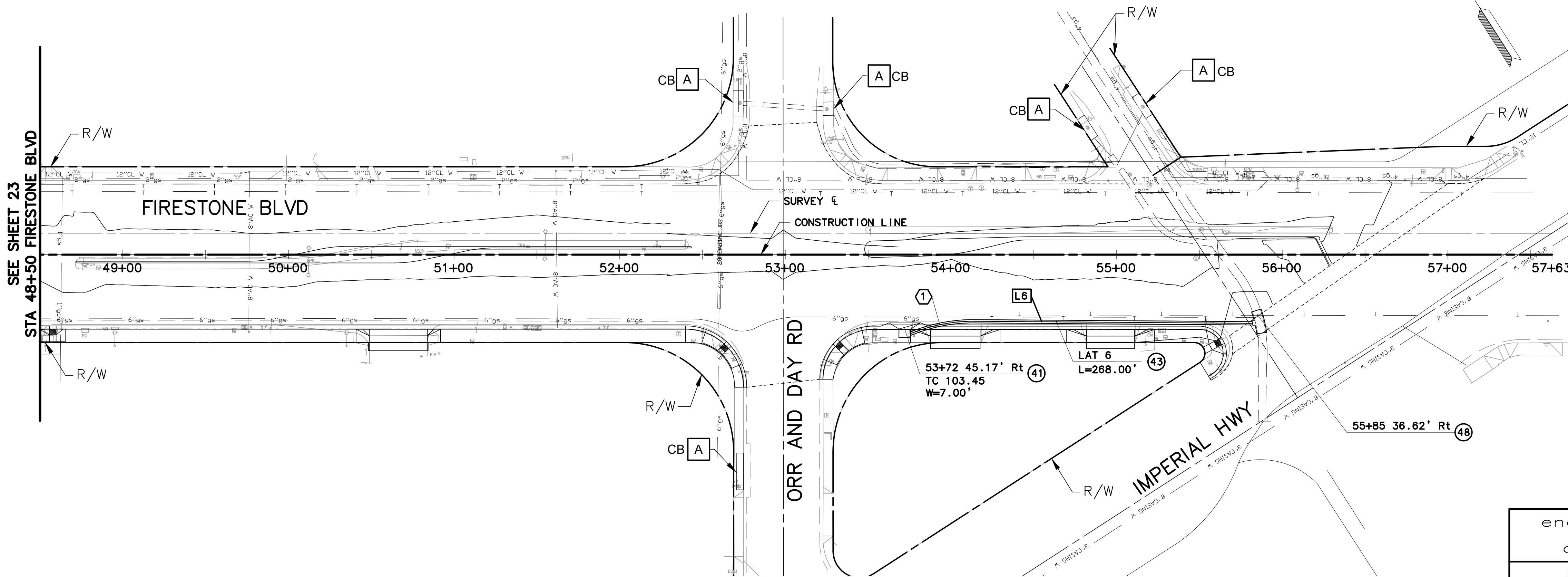
- A PROTECT-IN-PLACE (ITEM AS NOTED)
- B REMOVE (ITEM AS NOTED)

CONSTRUCTION NOTES:

- (41) CONSTRUCT CURB OPENING CATCH BASIN PER CITY OF NORWALK STD. PLAN NO. 300A.
- (43) INSTALL 24" RCP.
- (48) CONSTRUCT JUNCTION STRUCTURE PER CITY OF NORWALK STD. PLAN NO. 309A.

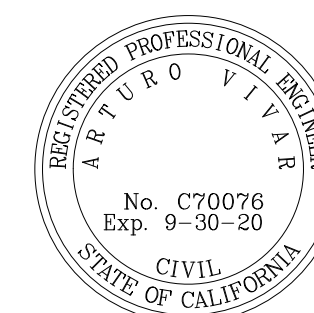
LINE TABLE	
LINE #	DIRECTION
L6	S56°38'14"E

CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
6				

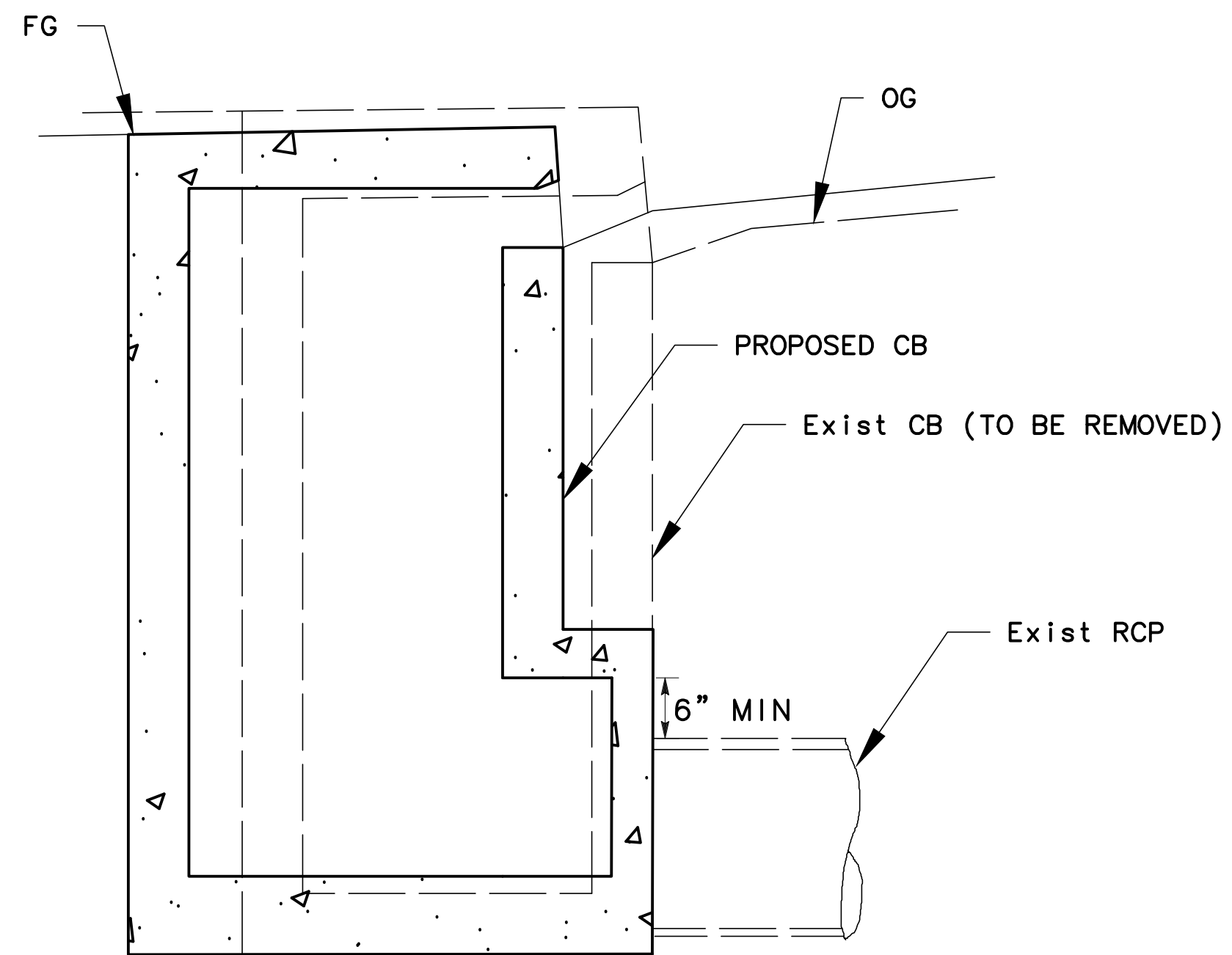


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: DRAINAGE PLAN & PROFILES FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.			
		Drawn By P.B.	Checked By A.V.
		SHEET 24 OF 75	

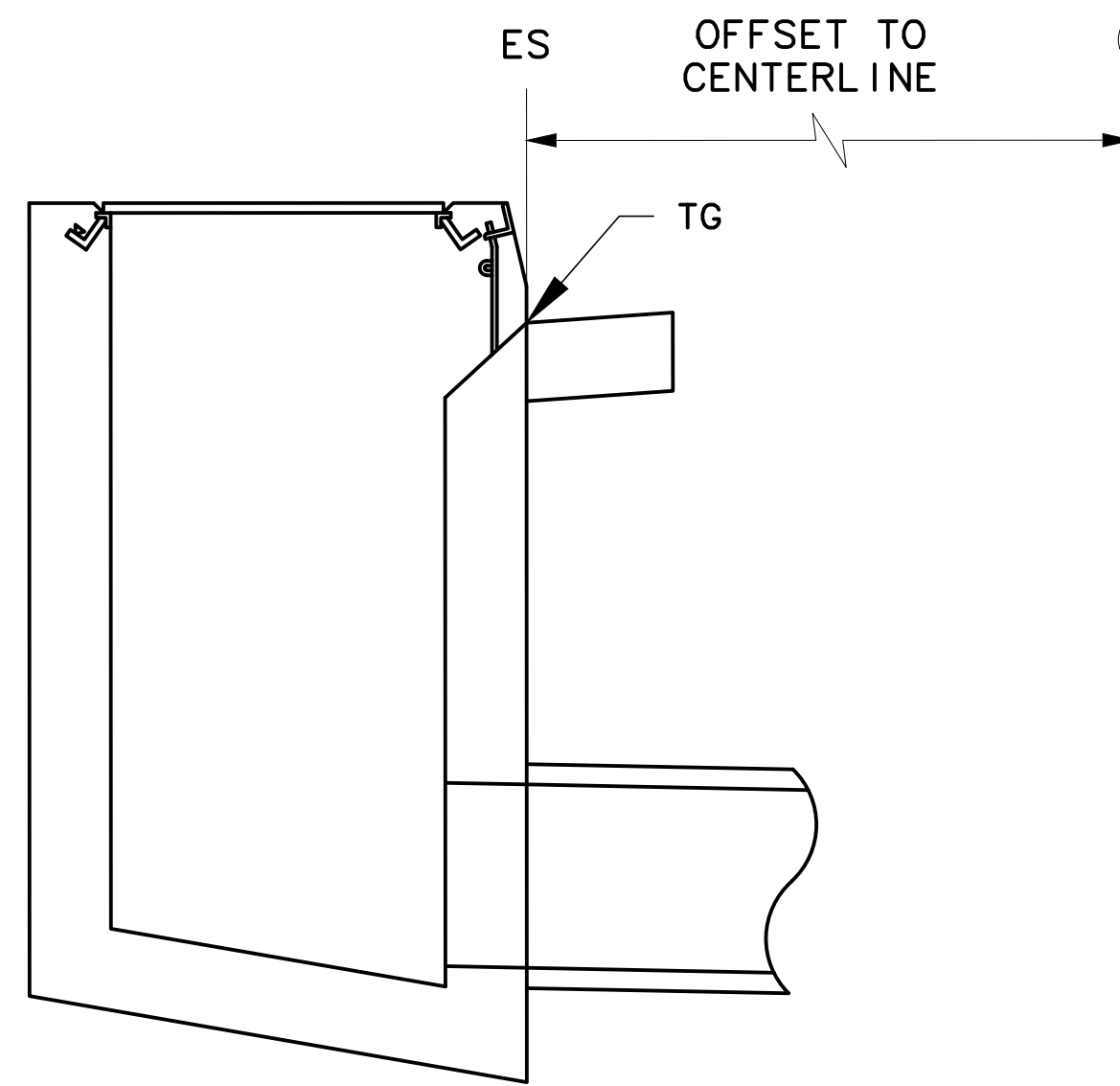
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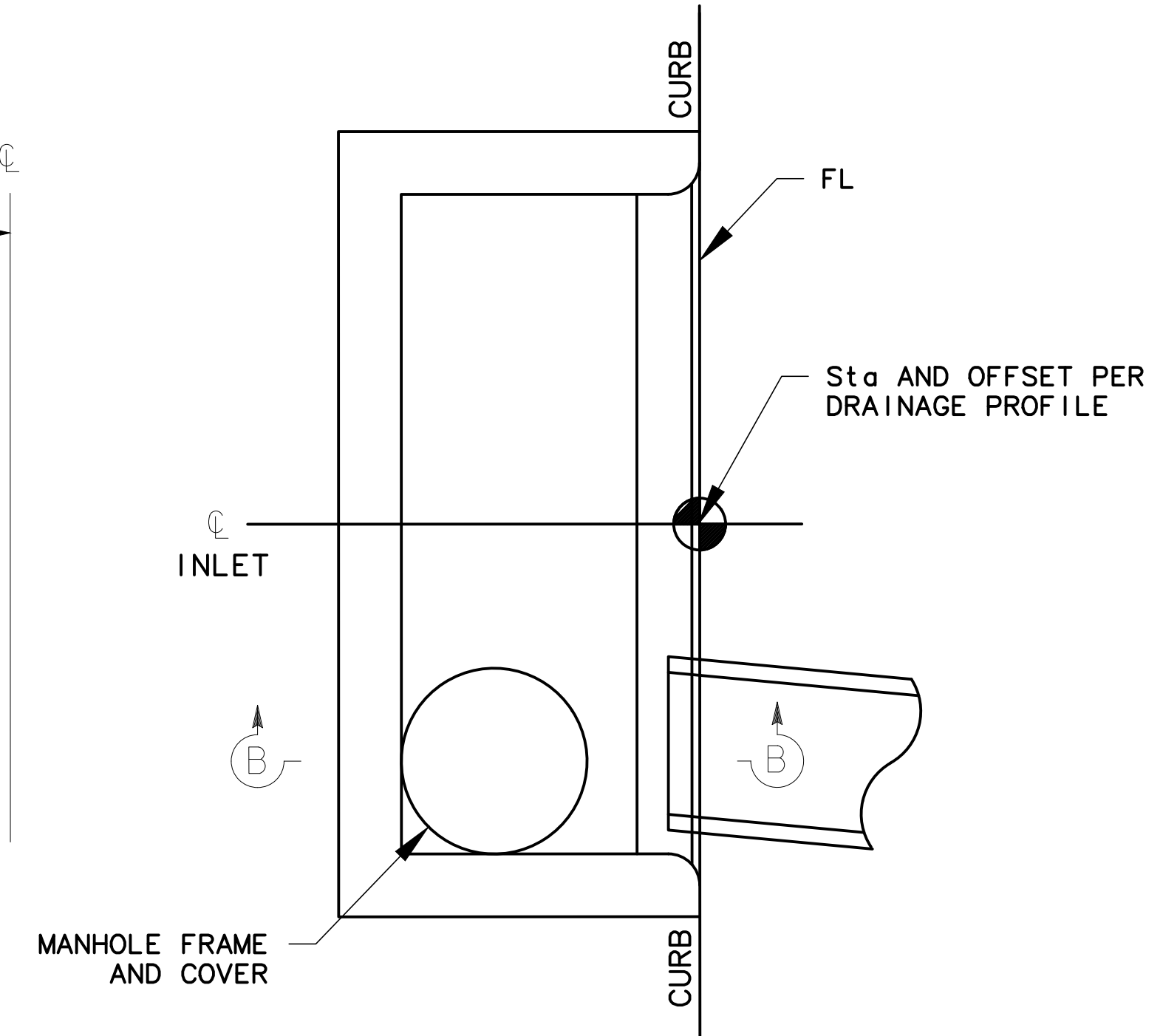
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REMOVE AND RECONSTRUCT CATCH BASIN

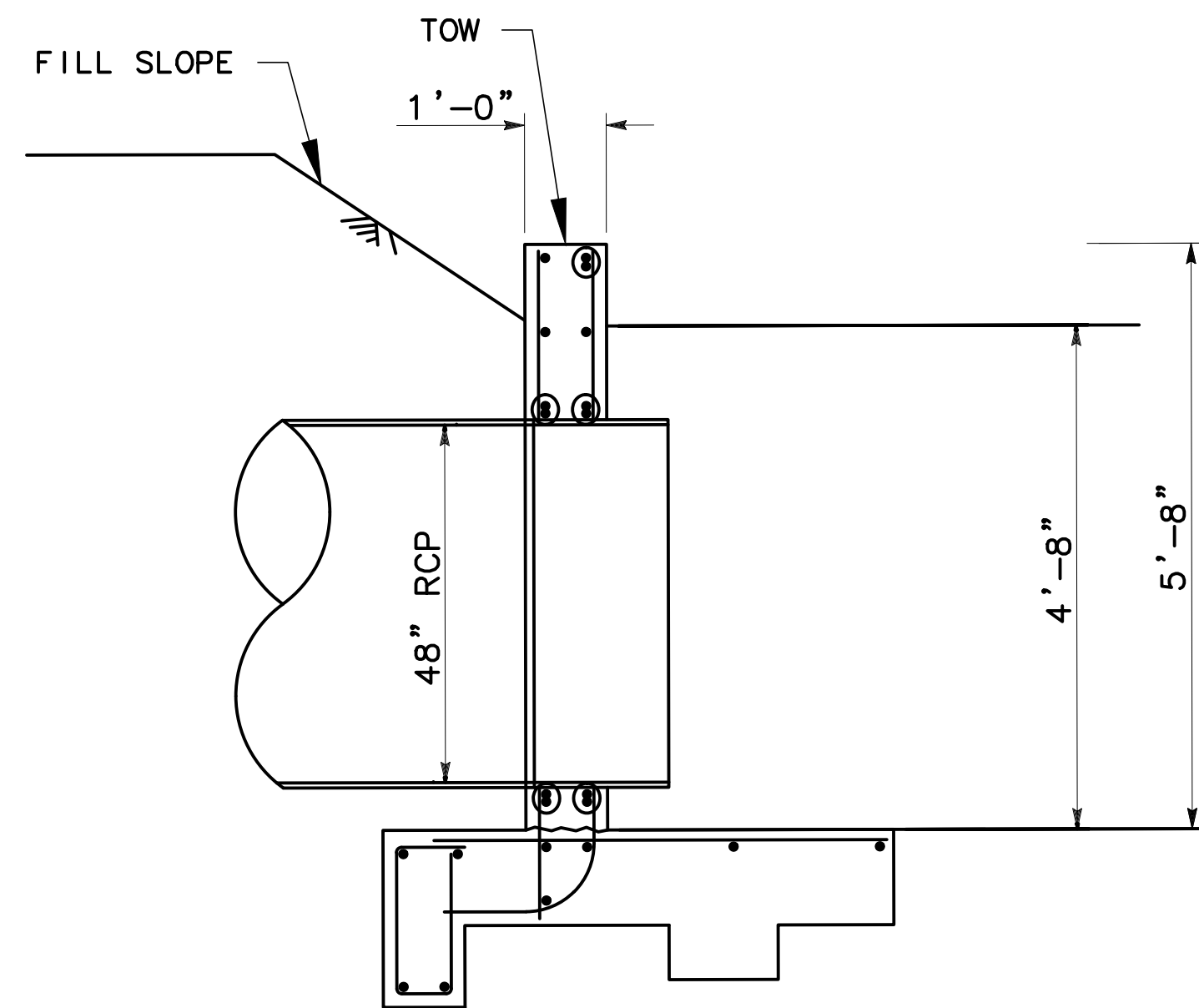


SECTION B-B



PLAN

CURB OPENING INLET LAYOUT CONTROL POINT



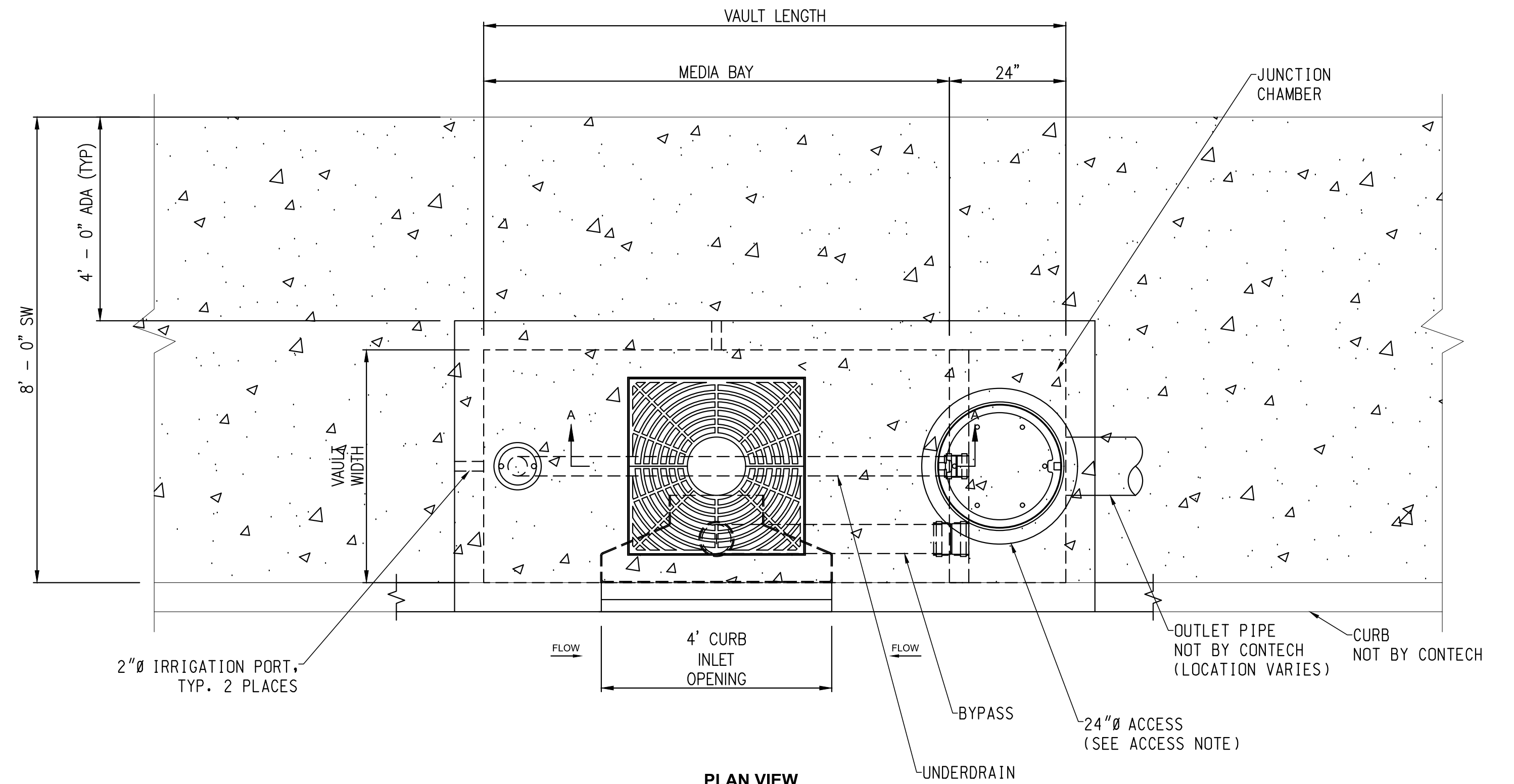
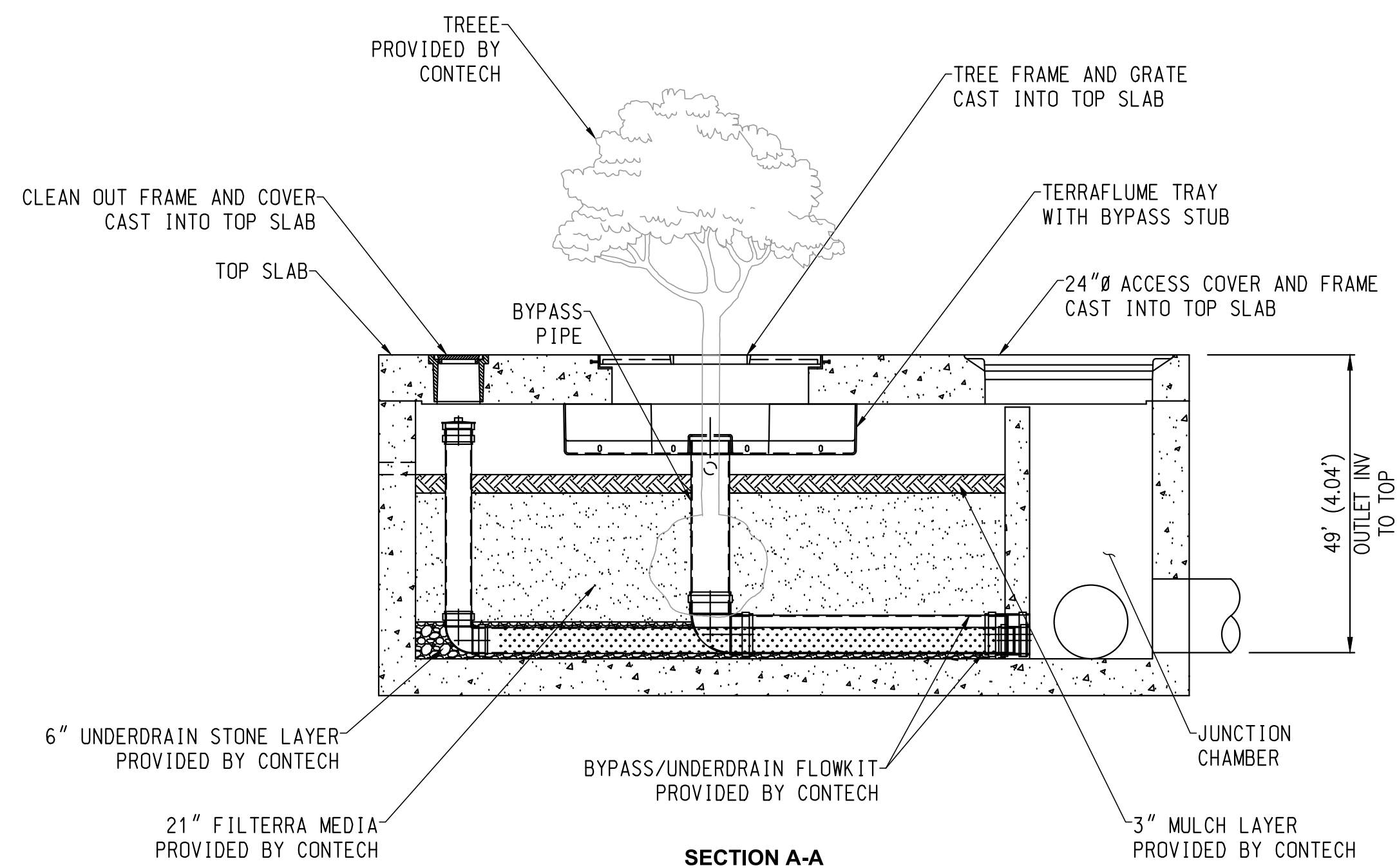
HEADWALL

engineering division		CITY OF NORWALK	
REVISIONS		TITLE: DRAINAGE DETAILS FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By P.B.	Checked By A.V.
			SHEET 25 OF 75

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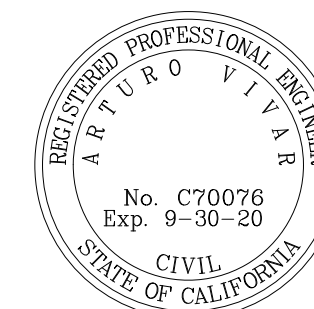
FILTERRA DETAILS
NO SCALE

CONSTRUCTION AND INSTALLATION:

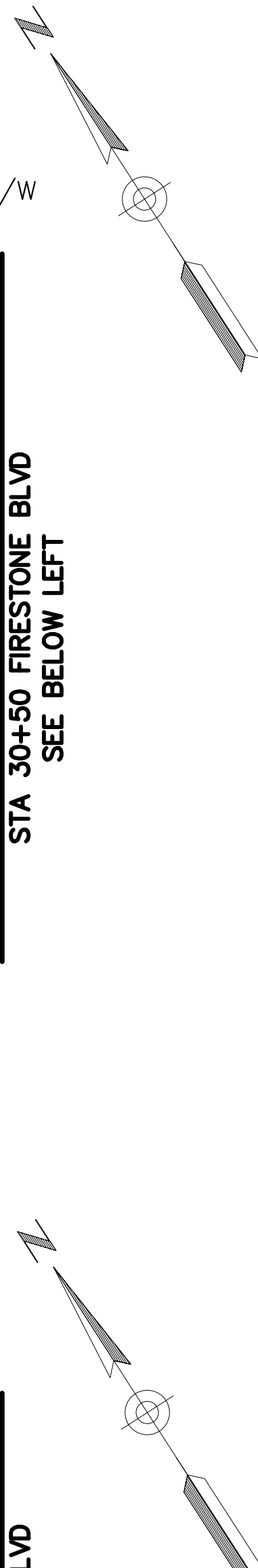
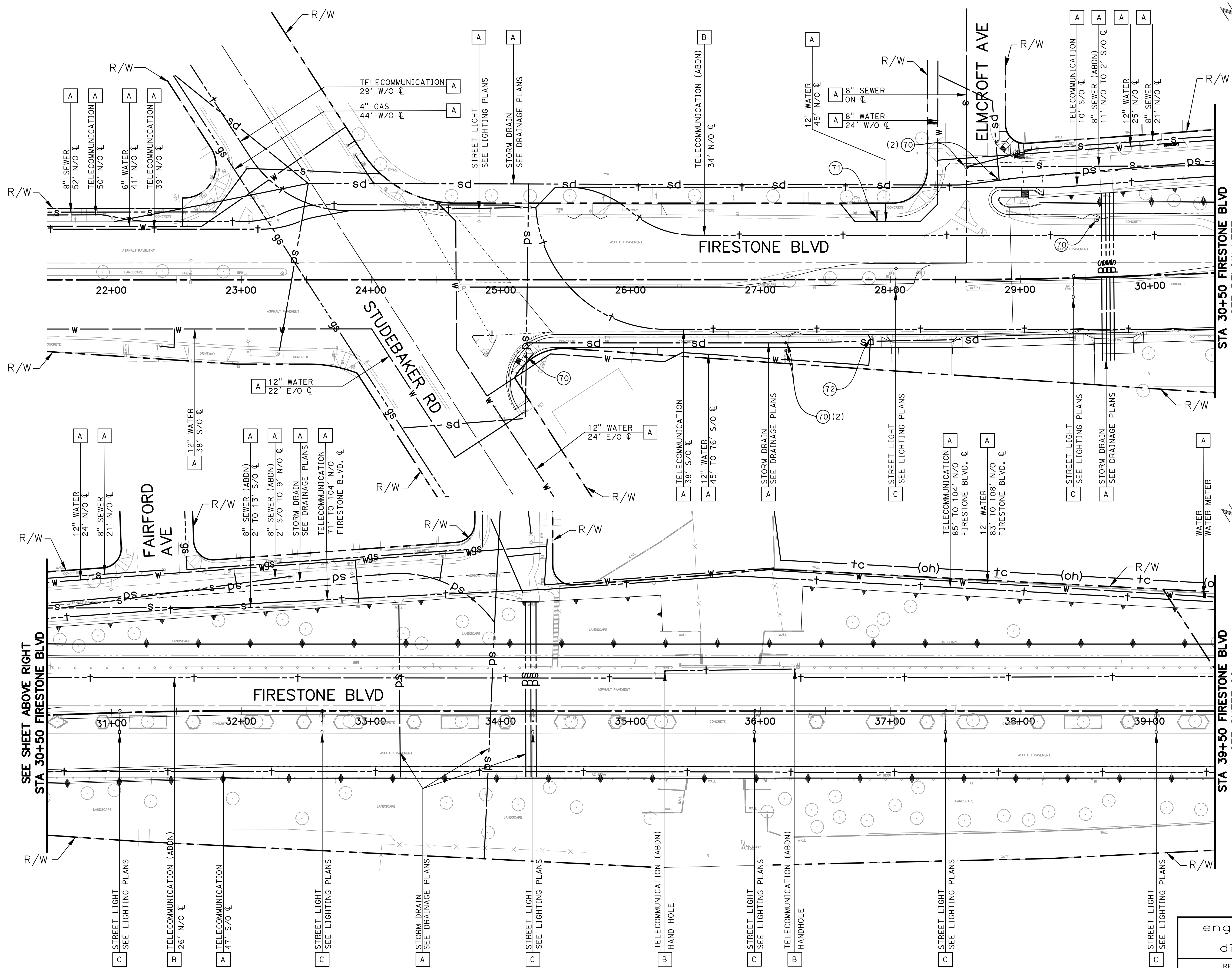
- A. EACH UNIT SHALL BE CONSTRUCTED AT THE LOCATIONS AND ELEVATIONS ACCORDING TO THE SIZES SHOWN ON THE APPROVED DRAWINGS. ANY MODIFICATIONS TO THE ELEVATION OR LOCATION SHALL BE AT THE DIRECTION OF AND APPROVED BY THE ENGINEER.
- B. IF THE FILTERRA™ IS STORED BEFORE INSTALLATION, THE TOP SLAB MUST BE PLACED ON THE BOX USING THE 2X4 WOOD PROVIDED, TO PREVENT ANY CONTAMINATION FROM THE SITE. ALL INTERNAL FITTINGS SUPPLIED (IF ANY), MUST BE LEFT IN PLACE AS PER THE DELIVERY.
- C. THE UNIT SHALL BE PLACED ON A COMPACTED SUB-GRADE WITH A MINIMUM 6-INCH (150 MM) GRAVEL BASE MATCHING THE FINAL GRADE OF THE CURB LINE IN THE AREA OF THE UNIT. THE UNIT IS TO BE PLACED SUCH THAT THE UNIT AND TOP SLAB MATCH THE GRADE OF THE CURB IN THE AREA OF THE UNIT. COMPACT UNDISTURBED SUB-GRADE MATERIALS TO 95% OF MAXIMUM DENSITY AT +1- 2% OF OPTIMUM MOISTURE. UNSUITABLE MATERIAL BELOW SUB-GRADE SHALL BE REPLACED TO THE SITE ENGINEER'S APPROVAL.
- D. OUTLET CONNECTIONS SHALL BE ALIGNED AND SEALED TO MEET THE APPROVED DRAWINGS WITH MODIFICATIONS NECESSARY TO MEET SITE CONDITIONS AND LOCAL REGULATIONS.
- E. ONCE THE UNIT IS SET, THE INTERNAL WOODEN FORMS AND PROTECTIVE MESH COVER MUST BE LEFT INTACT. REMOVE ONLY THE TEMPORARY WOODEN SHIPPING BLOCKS BETWEEN THE BOX AND TOP SLAB. THE TOP LID SHOULD BE SEALED ONTO THE BOX SECTION BEFORE BACKFILLING, USING A NONSHRINK GROUT, BUTYL RUBBER OR SIMILAR WATERPROOF SEAL. THE BOARDS ON TOP OF THE LID AND BOARDS SEALED IN THE UNIT'S THROAT MUST NOT BE REMOVED. THE SUPPLIER (AMERICAST OR ITS AUTHORIZED DEALER) WILL REMOVE THESE SECTIONS AT THE TIME OF ACTIVATION. BACKFILLING SHOULD BE PERFORMED IN A CAREFUL MANNER, BRINGING THE APPROPRIATE FILL MATERIAL UP IN 6-INCH (150 MM) LIFTS ON ALL SIDES. PRECAST SECTIONS SHALL BE SET IN A MANNER THAT WILL RESULT IN A WATERTIGHT JOINT. IN ALL INSTANCES, INSTALLATION OF FILTERRA™ UNIT SHALL CONFORM TO ASTM SPECIFICATION C891 "STANDARD PRACTICE FOR INSTALLATION OF UNDERGROUND PRECAST UTILITY STRUCTURES", UNLESS DIRECTED OTHERWISE IN CONTRACT DOCUMENTS.
- F. CURB AND GUTTER CONSTRUCTION (WHERE PRESENT) SHALL ENSURE THAT THE FLOW-LINE OF THE FILTERRA™ UNITS IS AT A GREATER ELEVATION THAN THE FLOW-LINE OF THE BYPASS STRUCTURE OR RELIEF (DROP INLET, CURB CUT OR SIMILAR). FAILURE TO COMPLY WITH THIS GUIDELINE MAY CAUSE FAILURE AND/OR DAMAGE TO THE FILTERRA™ ENVIRONMENTAL DEVICE.
- G. EACH FILTERRA™ UNIT MUST RECEIVE ADEQUATE IRRIGATION TO ENSURE SURVIVAL OF THE LIVING SYSTEM DURING PERIODS OF DRIER WEATHER. THIS MAY BE ACHIEVED THROUGH A PIPED SYSTEM, GUTTER FLOW OR THROUGH THE TREE GRATE.

engineering division		CITY OF NORWALK	
REVISIONS		TITLE: TREATMENT BMP TYPICAL DETAILS FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		CITY ENGINEER RCE 20568 DATE	
PLAN REF.		Recommended	
		DATE	
		Drawn By P.B.	Checked By A.V.
			SHEET 26 OF 75

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16795 VON KARMAN AVE., SUITE 240
IRVINE, CA 92606
(949) 477-9000



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- GENERAL NOTES:**
1. LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER AND/OR CONTRACTOR PRIOR TO CONSTRUCTION.
 2. UTILITY OWNERS TO VERIFY OR SUPPLY RELOCATIONS OF UTILITIES.
 3. SEE DRAINAGE PLANS FOR EXISTING AND PROPOSED UNDERGROUND STORM DRAINS.
 4. SEE IRRIGATION PLANS FOR IRRIGATION LINES AND OTHER SURFACE IRRIGATION UTILITIES.
 5. SEE LIGHTING PLANS FOR EXISTING AND PROPOSED MEDIAN LIGHTING UTILITIES.
 6. SEE TRAFFIC SIGNAL PLANS FOR SIGNAL, INTERCONNECT DISPOSITIONS AND FINAL LOCATIONS.

- DISPOSITION NOTES:**
- A PROTECT-IN-PLACE
 - B REMOVE
 - C RELOCATE
 - D RELOCATE BY OTHERS
 - E ADJUST TO GRADE BY OTHERS

- CONSTRUCTION NOTES:**
- (70) ADJUST MANHOLE TO GRADE PER CITY STD. PLAN 203.
 - (71) ADJUST WATER VALVE TO GRADE PER CITY STD. PLAN 415.
 - (72) SALVAGE EXISTING FIRE HYDRANT AND INSTALL NEW FIRE HYDRANT PER CITY STD. PLAN 410.
 - (73) ADJUST WATER METER PER STD. PLAN 400, 401 AND 404.

LEGEND

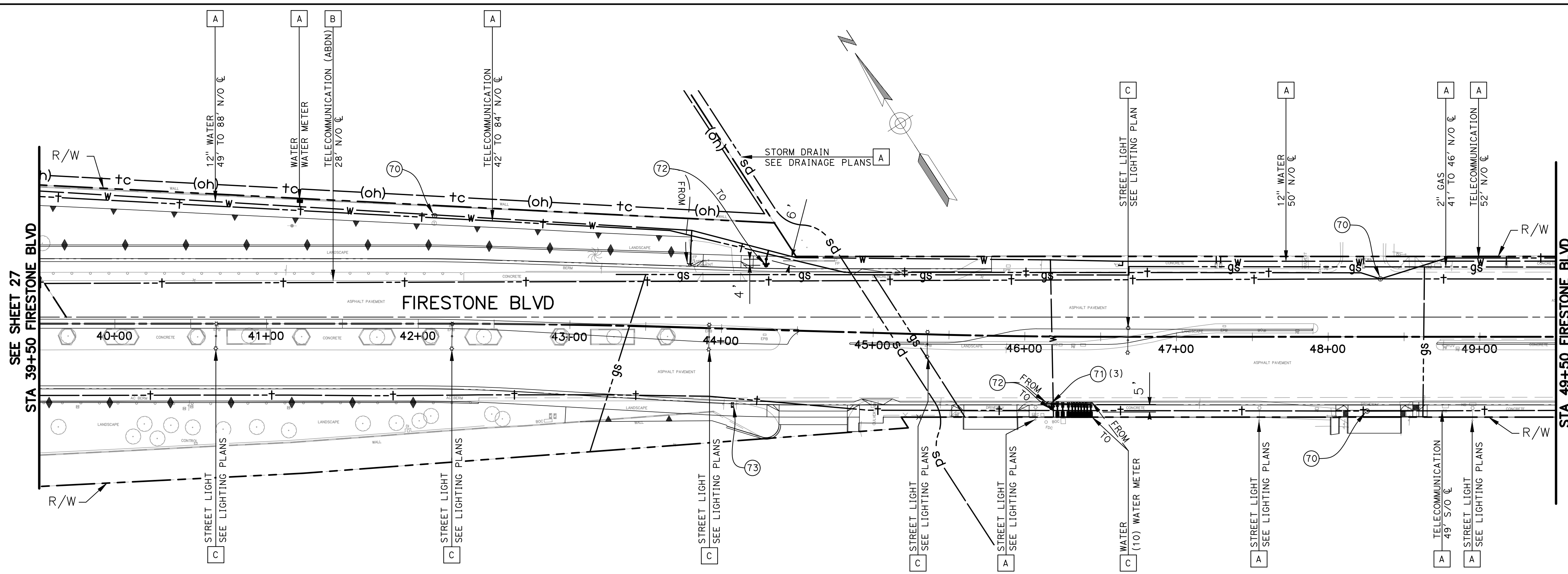
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---	gs	EXIST GAS
---	w	EXIST WATER
---	t	EXIST TELEPHONE
---	o	EXIST OIL
---	e	EXIST ELECTRIC
---	sd	EXIST ELECTRIC
---	w	PROP WATER

engineering division		CITY OF NORWALK	
REVISIONS		TITLE: UTILITY LAYOUTS FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	CITY ENGINEER RCE 20568 DATE
FIELD BOOK REF.		Recommended	DRAWING NO.
PLAN REF.		DATE	
Drawn By P.B.		Checked By A.V.	SHEET 27 OF 75

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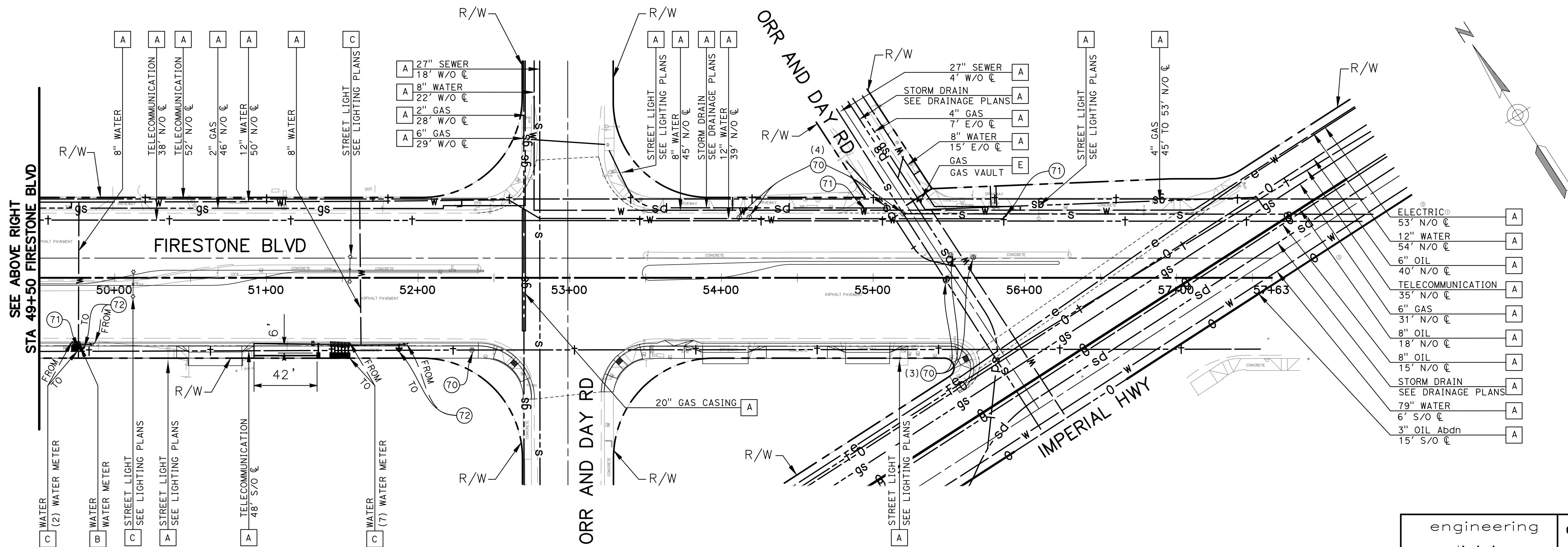
S:\FIRESTONE\CALTRANS\DWG REV. 07-15-20



- GENERAL NOTES:**
1. LOCATION OF UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER AND/OR CONTRACTOR PRIOR TO CONSTRUCTION.
 2. UTILITY OWNERS TO VERIFY OR SUPPLY RELOCATIONS OF UTILITIES.
 3. SEE DRAINAGE PLANS FOR EXISTING AND PROPOSED UNDERGROUND STORM DRAINS.
 4. SEE IRRIGATION PLANS FOR IRRIGATION LINES AND OTHER SURFACE IRRIGATION UTILITIES.
 5. SEE LIGHTING PLANS FOR EXISTING AND PROPOSED MEDIAN LIGHTING UTILITIES.
 6. SEE TRAFFIC SIGNAL PLANS FOR SIGNAL, INTERCONNECT DISPOSITIONS AND FINAL LOCATIONS.

- DISPOSITION NOTES:**
- A PROTECT-IN-PLACE
 - B REMOVE
 - C RELOCATE
 - D RELOCATE BY OTHERS
 - E ADJUST TO GRADE BY OTHERS

- CONSTRUCTION NOTES:**
- (70) ADJUST MANHOLE TO GRADE PER CITY STD. PLAN 203.
 - (71) ADJUST WATER VALVE TO GRADE PER CITY STD. PLAN 415.
 - (72) SALVAGE EXISTING FIRE HYDRANT AND INSTALL NEW FIRE HYDRANT PER CITY STD. PLAN 410.
 - (73) ADJUST WATER METER PER STD. PLAN 400, 401 AND 404.

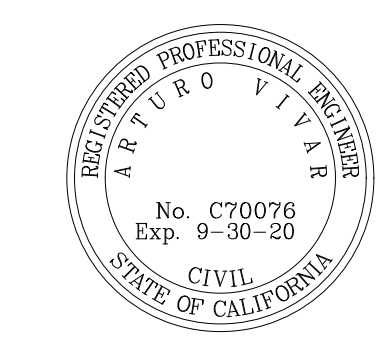


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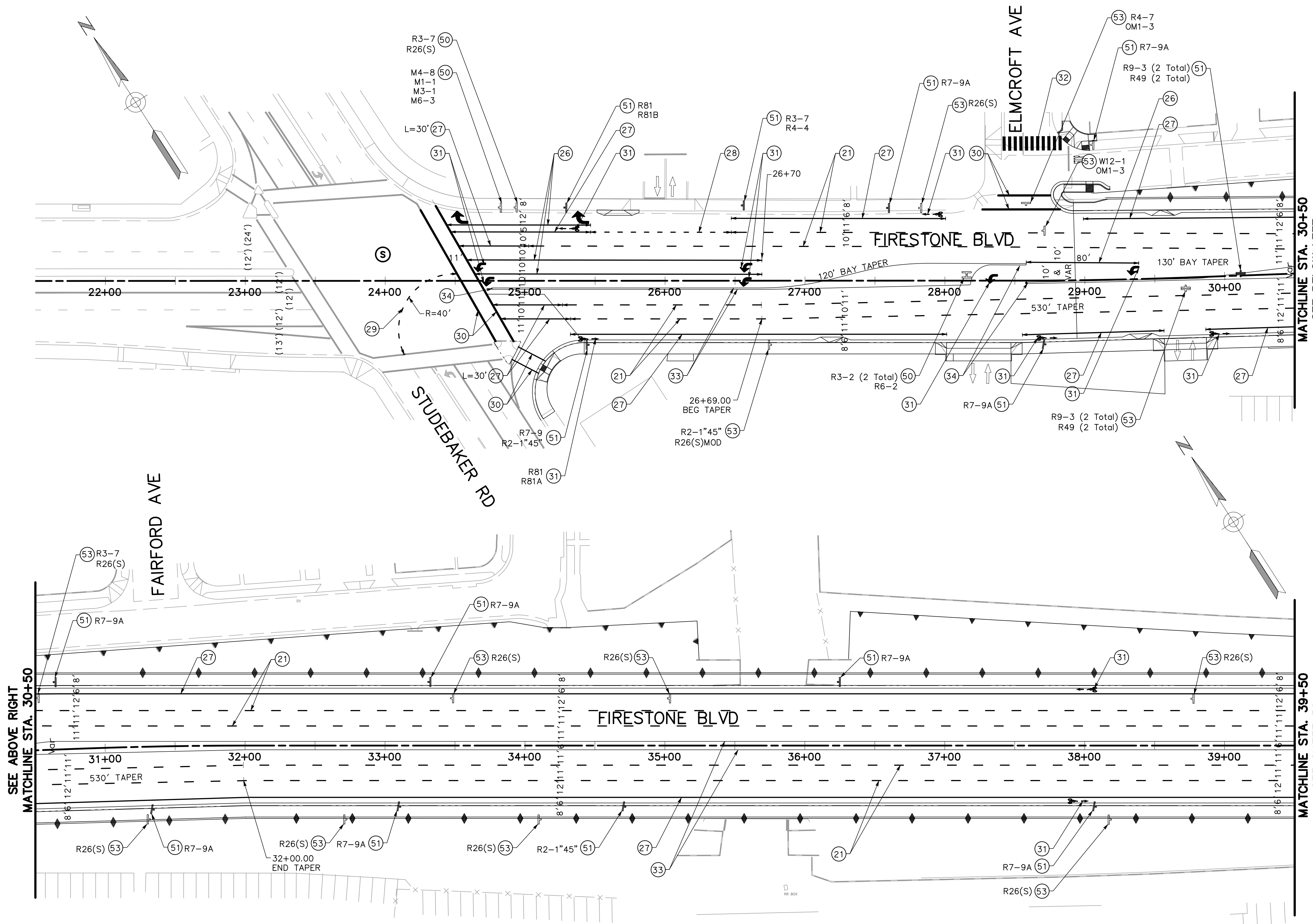
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---	o	---	EXIST OIL
---	e	---	EXIST ELECTRIC
---	sd	---	EXIST ELECTRIC
---	w	---	PROP WATER

engineering division		CITY OF NORWALK	
REVISIONS		TITLE: FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER	
		Checked By P.B.	Checked By A.V.
			SHEET 28 OF 75

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SIGNING AND STRIPING LEGEND:

- (S) SIGNALIZED INTERSECTION
- ↓ EXISTING SIGN AND POST
- ↑ PROPOSED SIGN AND POST
- ↕ EXISTING DRIVEWAY

CONSTRUCTION NOTES:

- (21) INSTALL DETAIL 12
- (23) INSTALL DETAIL 27B
- (24) INSTALL DETAIL 29
- (25) INSTALL DETAIL 32
- (26) INSTALL DETAIL 38
- (27) INSTALL 6" WHITE SOLID STRIPE
- (28) INSTALL DETAIL 39A
- (29) INSTALL DETAIL 40
- (30) INSTALL 12" WHITE CROSSWALK- LIMIT LINE
- (31) PAINT PAVEMENT MARKING OR LEGEND AS SHOWN. ARROWS SHALL BE TYPE IV UNLESS OTHERWISE NOTED.
- (32) 24" WHITE CROSSING CONTINENTAL X-WALK
- (33) INSTALL DETAIL 26
- (34) INSTALL OBJECT MARKER, TYPE 2 (OM2-2V)
- (50) EXISTING SIGN PANEL AND POST TO REMAIN PROTECT IN PLACE.
- (51) FURNISH AND INSTALL NEW SIGN AND POST.
- (52) FURNISH AND INSTALL NEW SIGN ON EXISTING POST.
- (53) REMOVE EXISTING SIGN.
- (54) REPLACE EXISTING SIGN IN-KIND.

SEE ABOVE RIGHT
MATCHLINE STA. 30+50

MATCHLINE STA. 30+50
SEE BELOW LEFT

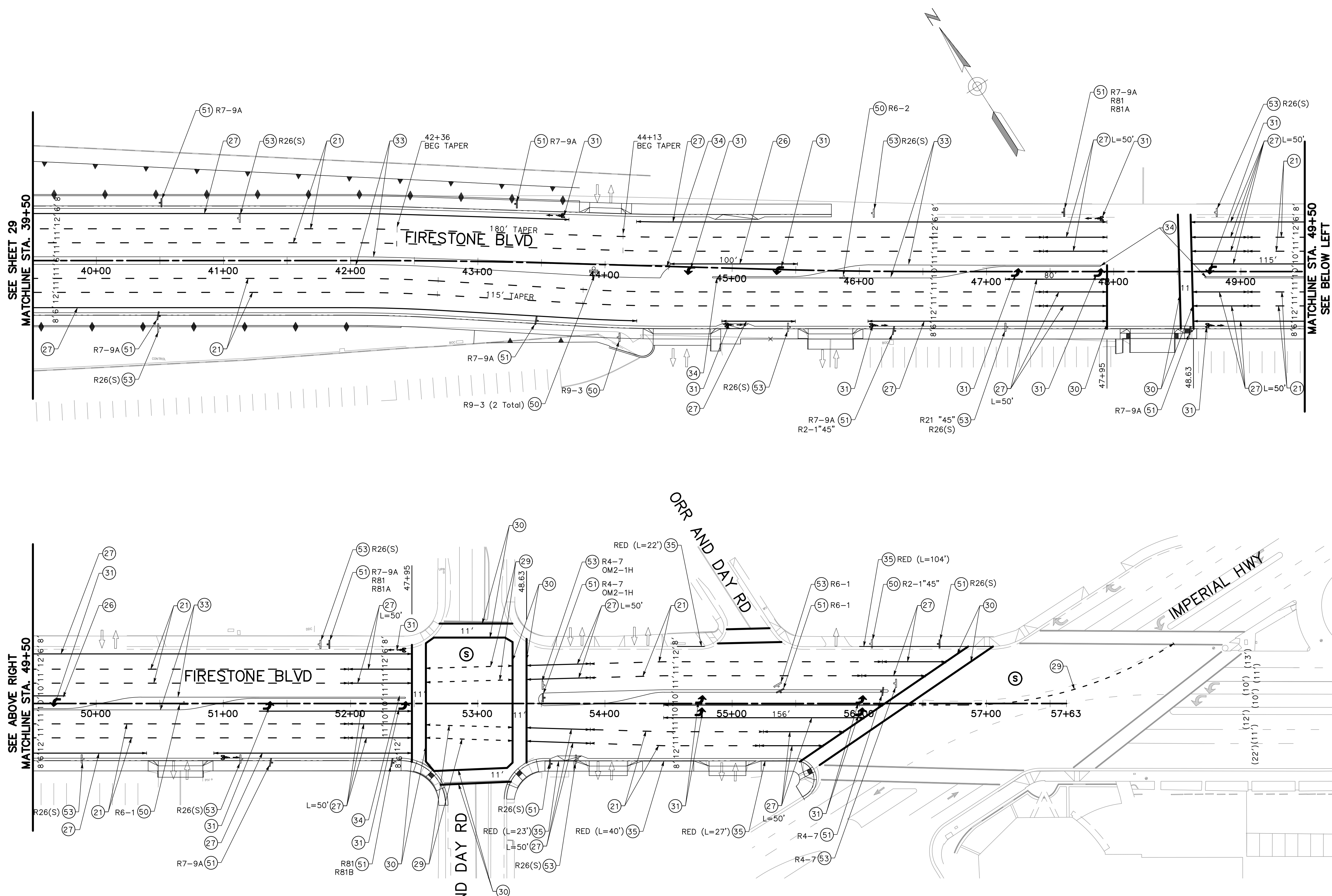
MATCHLINE STA. 39+50
SEE SHEET 30

engineering division		CITY OF NORWALK	
REVISIONS		TITLE: SIGNING AND STRIPING FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER	
		Checked By A.V.	SHEET 29 OF 75

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SIGNING AND STRIPING LEGEND:

- (S) SIGNALIZED INTERSECTION
- ↑ EXISTING SIGN AND POST
- ↓ PROPOSED SIGN AND POST
- ↕ EXISTING DRIVEWAY

CONSTRUCTION NOTES:

- (21) INSTALL DETAIL 12
- (23) INSTALL DETAIL 27B
- (24) INSTALL DETAIL 29
- (25) INSTALL DETAIL 32
- (26) INSTALL DETAIL 38
- (27) INSTALL 6" WHITE SOLID STRIPE
- (28) INSTALL DETAIL 39A
- (29) INSTALL DETAIL 40
- (30) INSTALL 12" WHITE CROSSWALK- LIMIT LINE
- (31) PAINT PAVEMENT MARKING OR LEGEND AS SHOWN. ARROWS SHALL BE TYPE IV UNLESS OTHERWISE NOTED.
- (32) 24" WHITE CROSSING CONTINENTAL X-WALK
- (33) INSTALL DETAIL 26
- (34) INSTALL OBJECT MARKER, TYPE 2 (OM2-2V)
- (35) PAINT CURB, COLOR PER PLAN.
- (50) EXISTING SIGN PANEL AND POST TO REMAIN PROTECT IN PLACE.
- (51) FURNISH AND INSTALL NEW SIGN AND POST.
- (52) FURNISH AND INSTALL NEW SIGN ON EXISTING POST.
- (53) REMOVE EXISTING SIGN.
- (54) REPLACE EXISTING SIGN IN-KIND.

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engineering division		CITY OF NORWALK	
REVISIONS		TITLE: SIGNING AND STRIPING FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO. X-XXXX
FIELD BOOK REF.		Recommended	CITY ENGINEER RCE 20568 DATE
PLAN REF.			DATE
		Drawn By P.B.	Checked By A.V.
		SHEET 30 OF 75	

NOTES

1. LOCATION OF CONSTRUCTION AREA SIGNS SHOW ARE APPROXIMATE. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.
2. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE CONSTRUCTION STAGING PLANS.
3. THE PCMS SHOULD BE INSTALLED AND TURNED ON FOURTEEN (14) DAYS PRIOR TO TRAFFIC HANDLING IMPLEMENTATION.

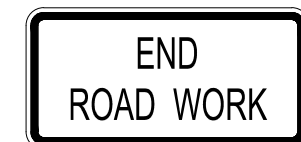
LEGEND

- CAS (ONE POST)
- CAS (TWO POST)
- PORTABLE CHANGEABLE MESSAGE SIGN
- TRAFFIC DIRECTION

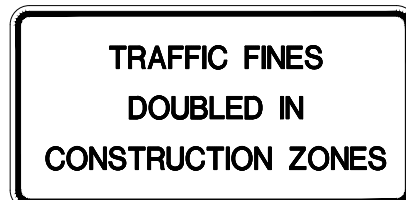
SIGN DETAILS



W20-1
(36X36)



G20-2
(36X18)



C40A(CA)
(36X36)

PCMS DETAILS

R	O	A	D	W	A	Y
W	O	R	K			
A	H	E	A			

1ST PHASE

D	A	T	E			
T	O					
D	A	T	E			

2nd PHASE

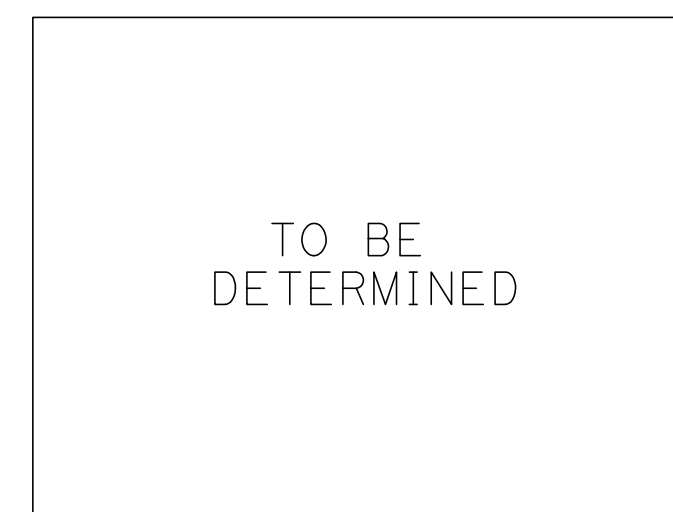
2 WEEKS PRIOR
TO CONSTRUCTION

R	O	A	D	W	A	Y
W	O	R	K			
A	H	E	A			

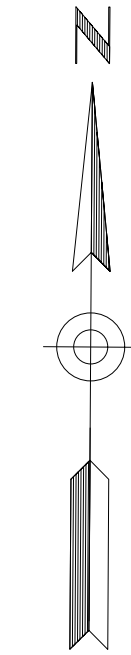
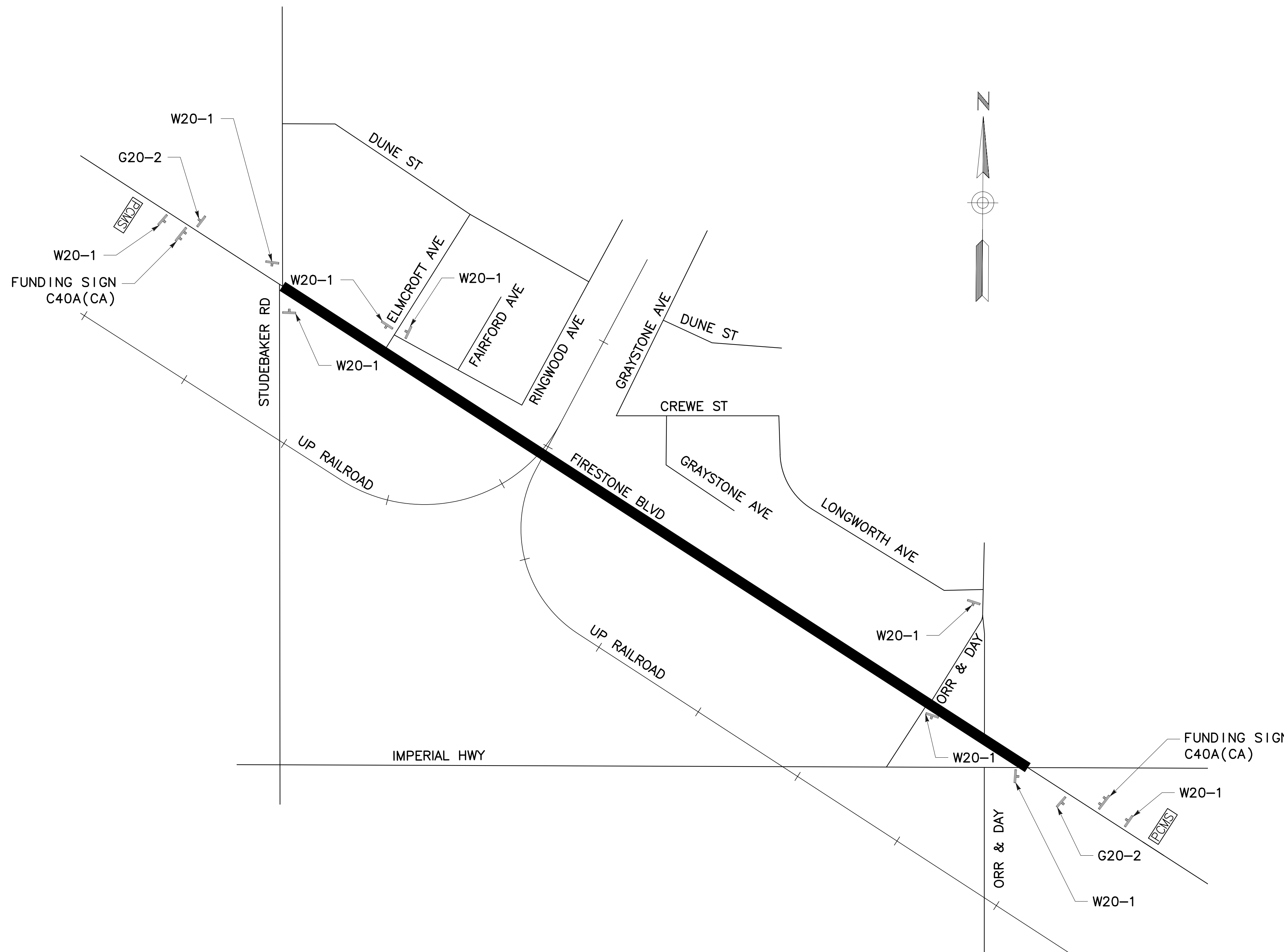
1ST PHASE

U	S	E				
A	L	T	E	R	N	A
R	O	U	T	E	S	

2nd PHASE



FUNDING SIGN



NO SCALE

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MARK THOMAS
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 (949) 477-9000



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: CONSTRUCTION AREA SIGNS FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		Recommended	DRAWING NO.
	AS BUILT	CITY ENGINEER RCE 20568 DATE	
FIELD BOOK REF.		Drawn By P.B.	Checked By A.V.
PLAN REF.			SHEET 31 OF 75

NOTES

- ONE (1) LANE IN EACH DIRECTION SHALL REMAIN OPEN AT ALL TIMES, UNLESS OTHERWISE NOTED AND APPROVED BY THE ENGINEER.
- REDUCE SPEED THROUGH AREAS UNDER CONSTRUCTION TO 35 MILES PER HOUR.
- CONTRACTOR TO PLACE AND MAINTAIN A 4:1 WEDGE WHERE THE EXISTING ROADWAY HAS BEEN EXCAVATED. DRIVEWAY ACCESS IS TO BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE APPROVED BY ENGINEER. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE CONSTRUCTION AREA SIGN PLAN.
- ALL TEMPORARY STRIPING AND TEMPORARY PAVEMENT MARKINGS SHALL BE PAINT UNLESS OTHERWISE NOTED.
- EXACT LOCATION & POSITION OF CONSTRUCTION SIGNS SHALL BE SET BY THE RESIDENT ENGINEER AND APPROVED BY THE ENGINEER.
- ALL SIGN CODES ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
- ALL W1-4 (R) AND W1-4 (L) SIGNS SHALL BE INSTALLED WITH HLWD PER SECTION 7-2.4.3 OF THE WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH), DATED 2009.
- COVER ALL EXISTING CONFLICTING SIGNS.
- CONTRACTOR SHALL BACKFILL OR PLACE STEEL PLATES OVER EXPOSED TRENCHES WHENEVER WORK IS NOT BEING DONE.
- REMOVE ALL CONFLICTING EXISTING STRIPING.

CONSTRUCTION THIS STAGE

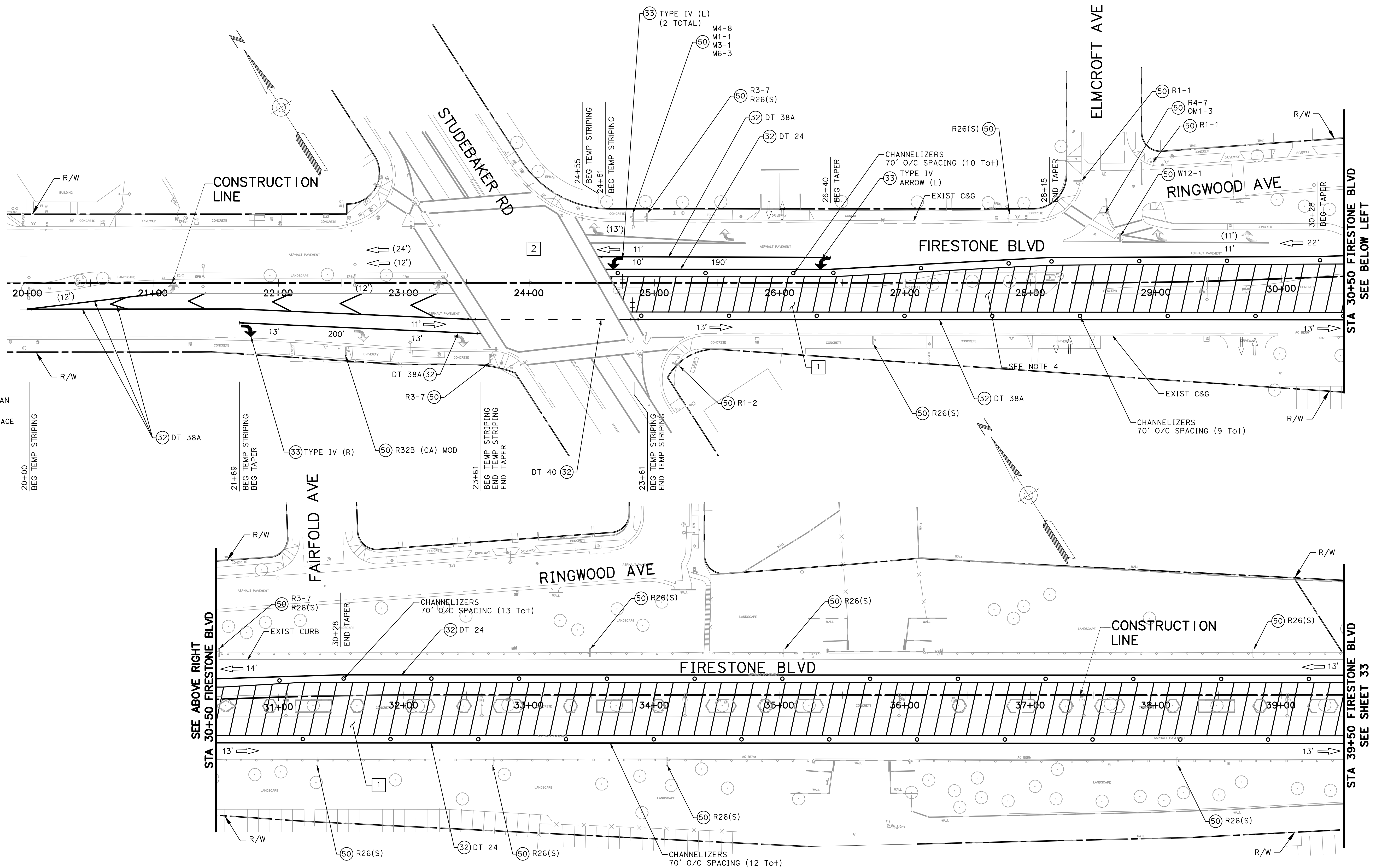
- CONSTRUCT PORTION OF ROADWAY AND MEDIAN.
- ADJUST TRAFFIC SIGNAL DETECTION ZONES AND/OR LOOPS.

CONSTRUCTION NOTES

- (32) PAINT TEMPORARY STRIPE, DETAIL PER PLAN
- (33) PAINT TEMPORARY PAVEMENT MARKINGS, DETAIL PER PLAN
- (50) EXISTING SIGN PANEL AND POST TO REMAIN, PROTECT IN PLACE
- (55) INSTALL TEMPORARY SIGN ON TEMPORARY POST
- (56) INSTALL TEMPORARY SIGN ON EXISTING POST

LEGENDS

- CONSTRUCTION AREA (THIS STAGE)
- CONSTRUCTION AREA (NIGHT OR WEEKEND WORK)
- RIGHT OF WAY
- TEMPORARY CONSTRUCTION EASEMENT
- DIRECTION OF TRAVEL
- CHANNELIZER (SURFACE MOUNTED)
- (12') EXISTING LANE WIDTH
- CONSTRUCTION SIGN
- BARRICADE (TYPE III) WITH SIGN (C30(CA))
- ARROW BOARD



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STAGE CONSTRUCTION STAGE 1 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 32 OF 75

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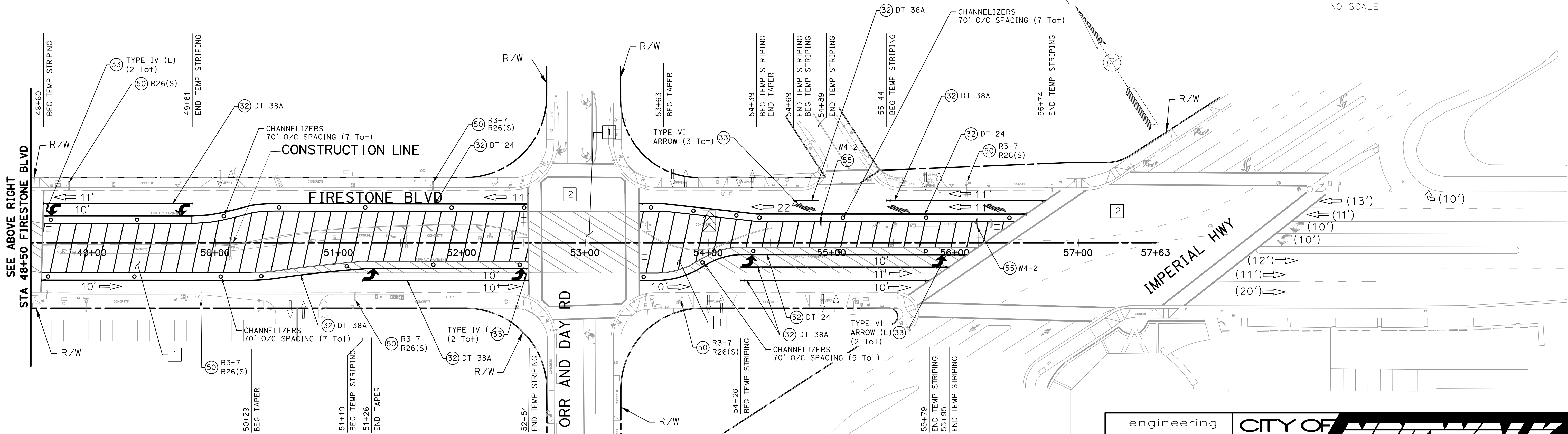
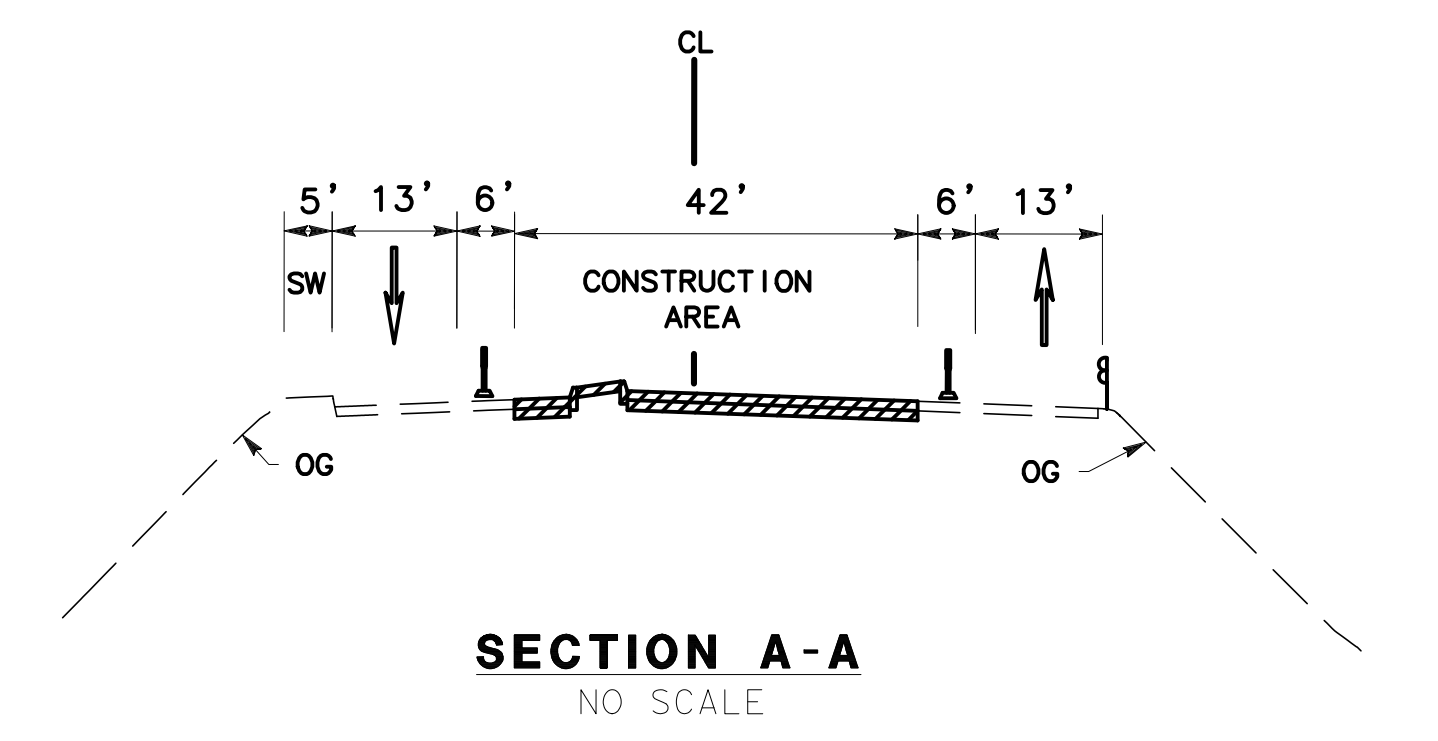
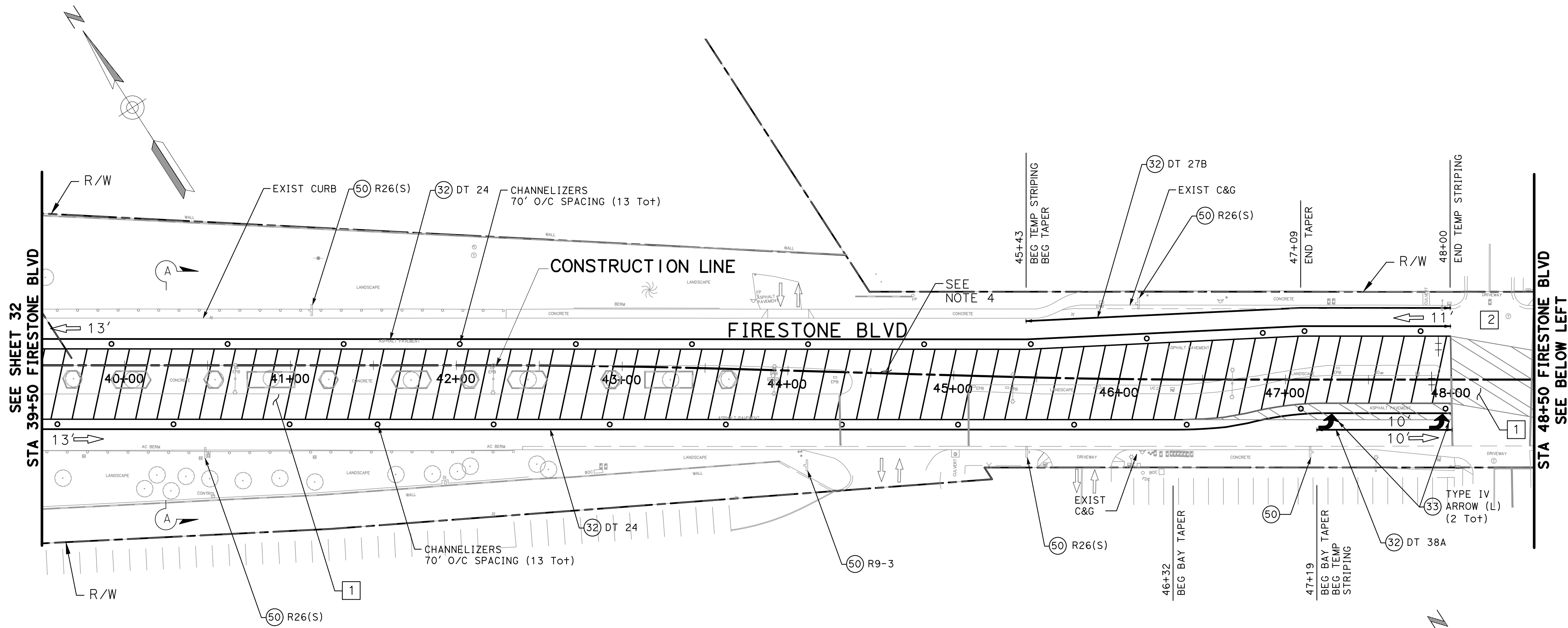
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CONSTRUCTION THIS STAGE

- 1 CONSTRUCT PORTION OF ROADWAY AND MEDIAN.
- 2 ADJUST TRAFFIC SIGNAL DETECTION ZONES AND/OR LOOPS.

CONSTRUCTION NOTES

- 32 PAINT TEMPORARY STRIPE, DETAIL PER PLAN
- 33 PAINT TEMPORARY PAVEMENT MARKINGS, DETAIL PER PLAN
- 50 EXISTING SIGN PANEL AND POST TO REMAIN, PROTECT IN PLACE
- 55 INSTALL TEMPORARY SIGN ON TEMPORARY POST
- 56 INSTALL TEMPORARY SIGN ON EXISTING POST



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STAGE CONSTRUCTION STAGE 1 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	CITY ENGINEER RCE 20568 DATE
PLAN REF.			DATE
		Drawn By P.B.	Checked By A.V.
		SHEET 33 OF 75	

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NOTES

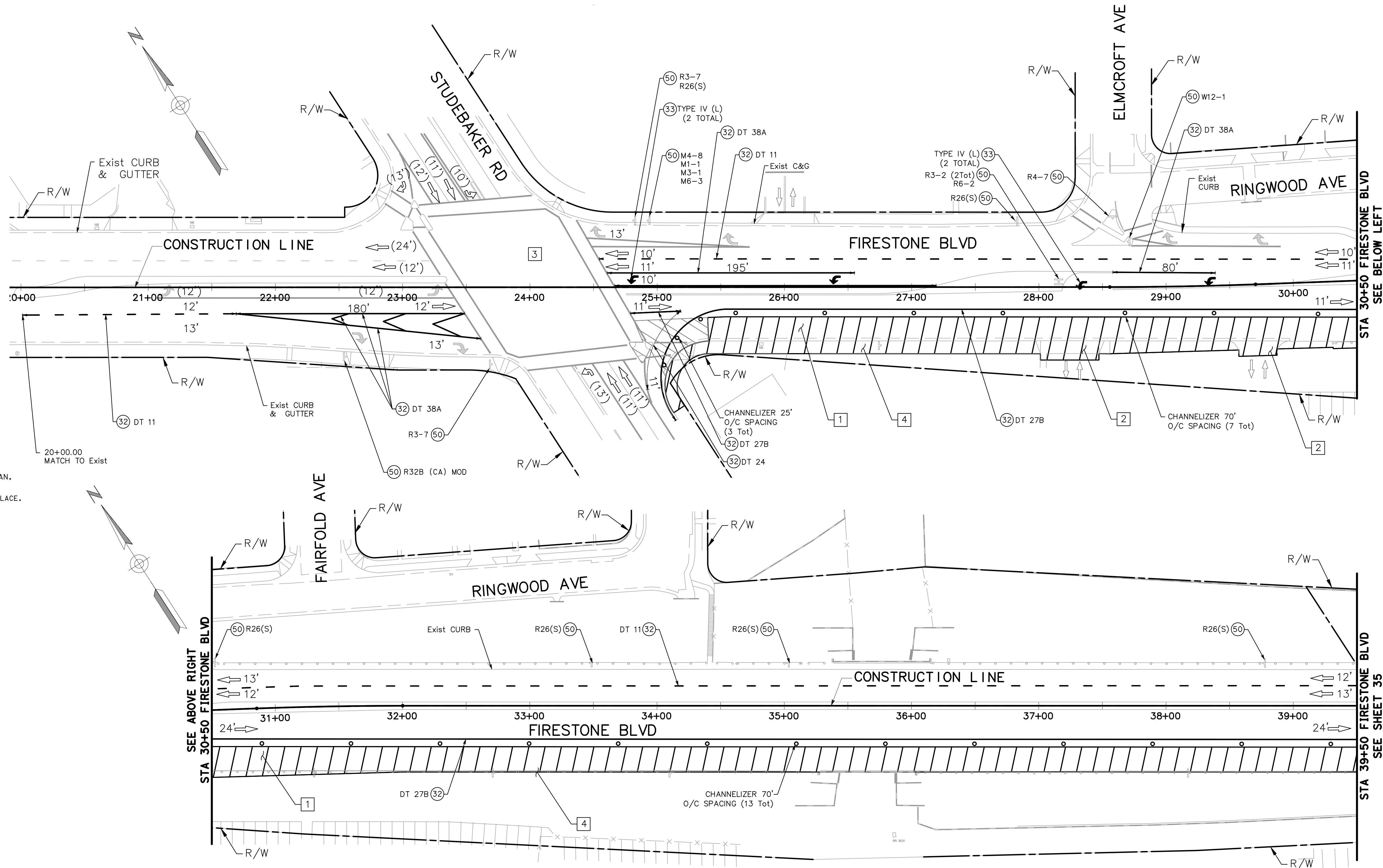
- ONE (1) LANE IN EACH DIRECTION SHALL REMAIN OPEN AT ALL TIMES, UNLESS OTHERWISE NOTED AND APPROVED BY THE ENGINEER.
- REDUCE SPEED THROUGH AREAS UNDER CONSTRUCTION TO 35 MILES PER HOUR.
- CONTRACTOR TO PLACE AND MAINTAIN A 4:1 WEDGE WHERE THE EXISTING ROADWAY HAS BEEN EXCAVATED.
- DRIVEWAY ACCESS IS TO BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE APPROVED BY ENGINEER.
- FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE CONSTRUCTION AREA SIGN PLAN.
- ALL TEMPORARY STRIPING AND TEMPORARY PAVEMENT MARKINGS SHALL BE PAINT UNLESS OTHERWISE NOTED.
- EXACT LOCATION & POSITION OF CONSTRUCTION SIGNS SHALL BE SET BY THE RESIDENT ENGINEER AND APPROVED BY THE ENGINEER.
- ALL SIGN CODES ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
- ALL W1-4 (R) AND W1-4 (L) SIGNS SHALL BE INSTALLED WITH HLWD PER SECTION 7-2.4.3 OF THE WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH), DATED 2009.
- COVER ALL EXISTING CONFLICTING SIGNS.
- CONTRACTOR SHALL BACKFILL OR PLACE STEEL PLATES OVER EXPOSED TRENCHES WHENEVER WORK IS NOT BEING DONE.
- REMOVE ALL CONFLICTING EXISTING STRIPING.
- FOR SIGN THAT NEED TO BE REMOVED OR RELOCATED SEE SIGN AND STRIPING PLANS.

CONSTRUCTION THIS STAGE:

- CONSTRUCT PORTION OF ROADWAY.
- CONSTRUCT DRIVEWAY (COORDINATE WITH OWNER/OPERATOR)
- ADJUST TRAFFIC SIGNAL DETECTION ZONES AND/OR LOOPS.
- CONSTRUCT ROADSIDE IMPROVEMENTS.

CONSTRUCTION NOTES:

- (32) PAINT TEMPORARY STRIPE, DETAIL PER PLAN.
- (33) PAINT TEMPORARY PAVEMENT MARKING, DETAIL PER PLAN.
- (50) EXISTING SIGN PANEL AND POST TO REMAIN, PROTECT IN PLACE.
- (65) INSTALL TEMPORARY SIGN ON TEMPORARY POST.
- (66) INSTALL TEMPORARY SIGN ON EXISITNG POST.



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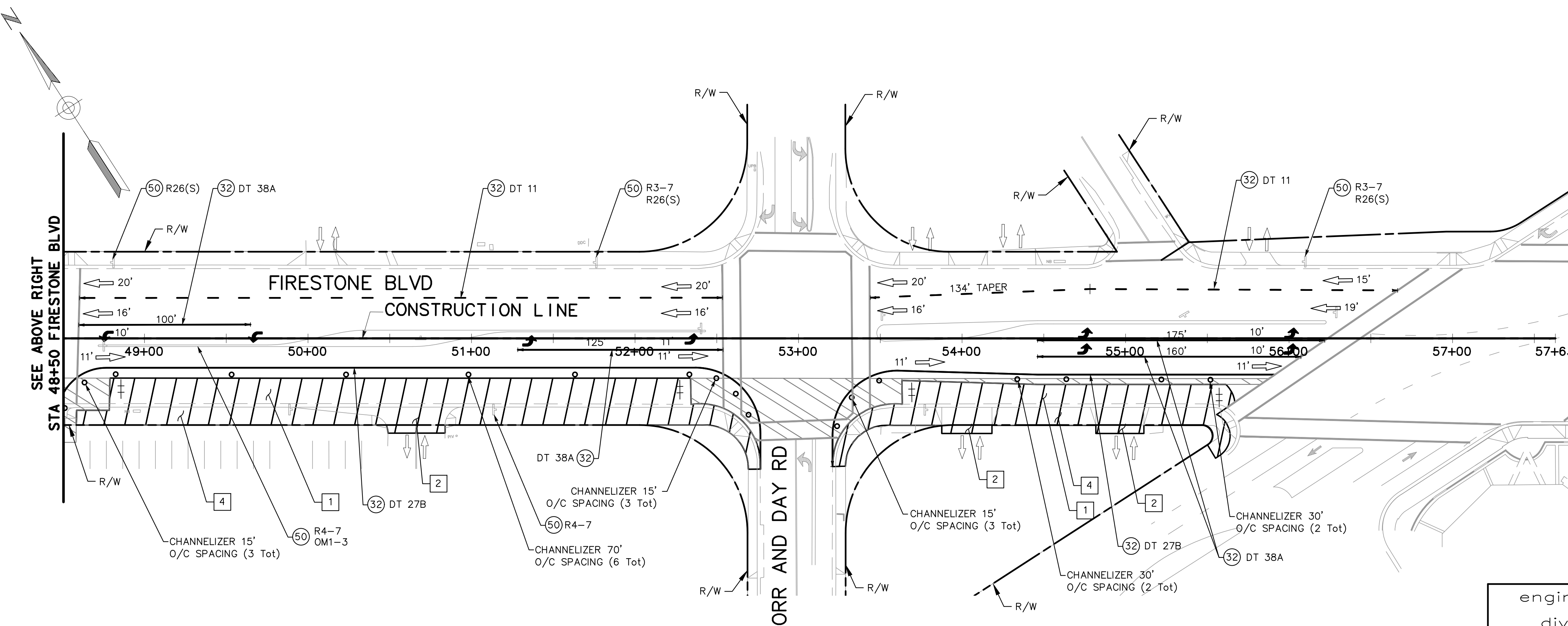
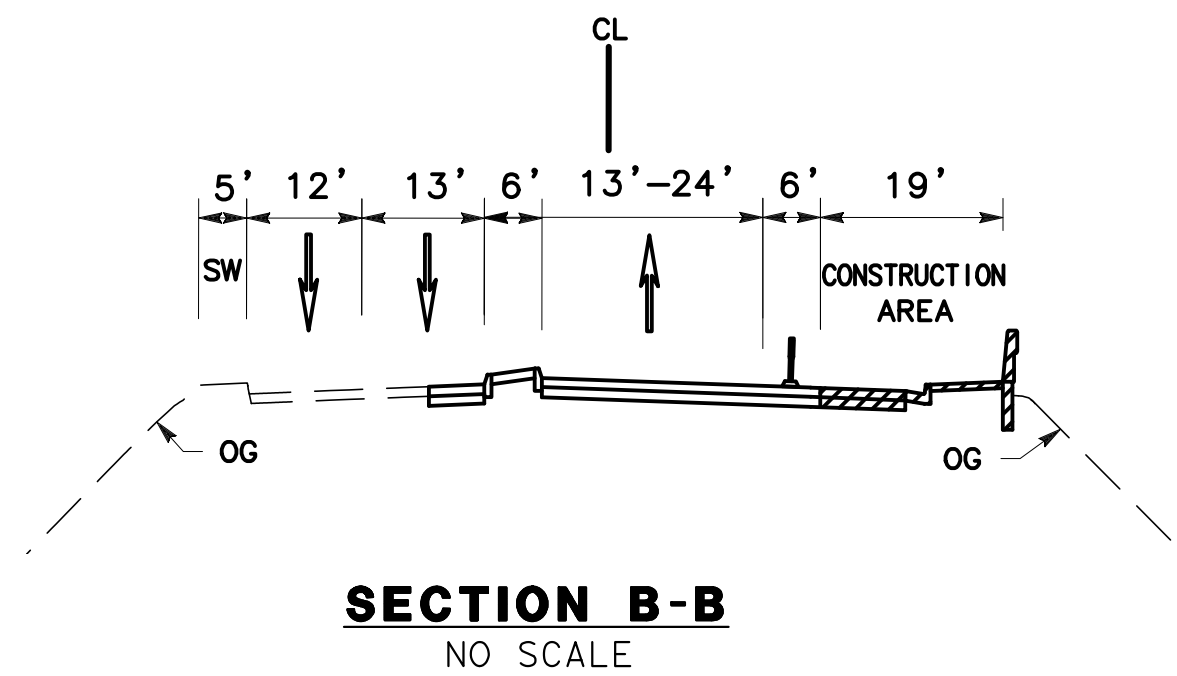
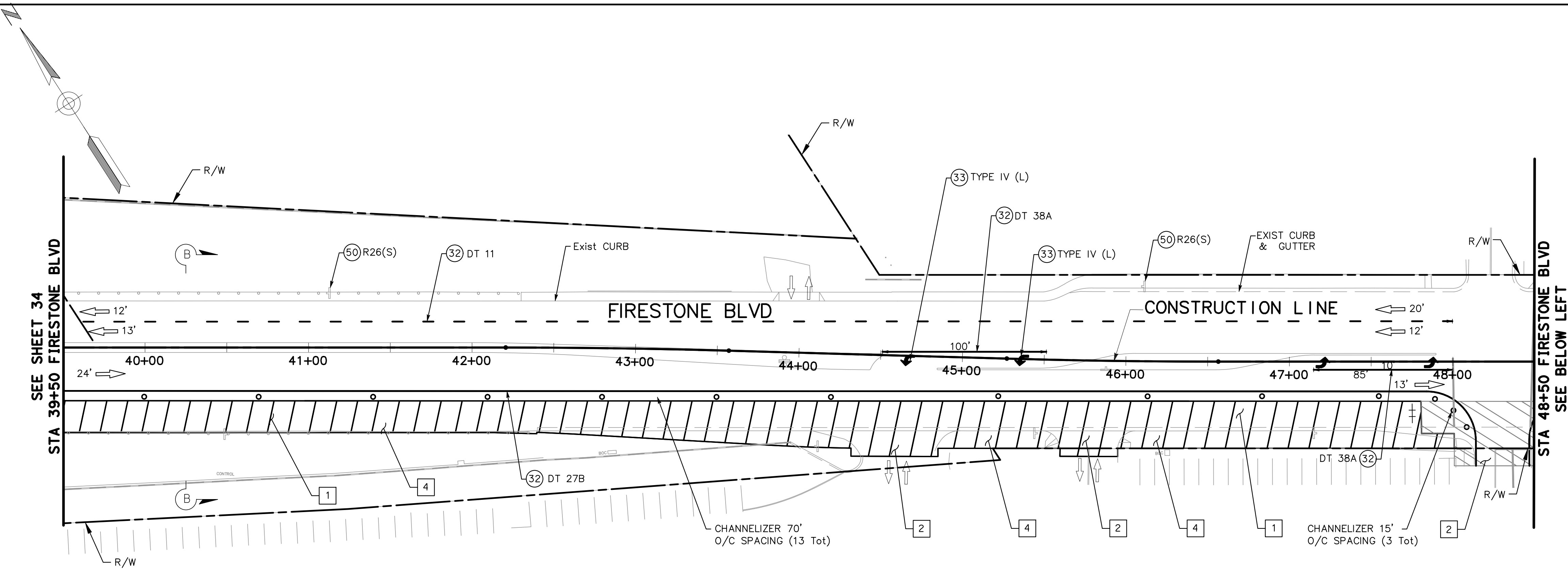
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STAGE CONSTRUCTION STAGE 2 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 34 OF 75

CONSTRUCTION THIS STAGE:

- 1 CONSTRUCT PORTION OF ROADWAY.
- 2 CONSTRUCT DRIVEWAY (COORDINATE WITH OWNER/OPERATOR)
- 3 ADJUST TRAFFIC SIGNAL DETECTION ZONES AND/OR LOOPS.
- 4 CONSTRUCT ROADSIDE IMPROVEMENTS.

CONSTRUCTION NOTES:

- 32 PAINT TEMPORARY STRIPE, DETAIL PER PLAN.
- 33 PAINT TEMPORARY PAVEMENT MARKING, DETAIL PER PLAN.
- 50 EXISTING SIGN PANEL AND POST TO REMAIN, PROTECT IN PLACE.
- 55 INSTALL TEMPORARY SIGN ON TEMPORARY POST.
- 56 INSTALL TEMPORARY SIGN ON EXISTING POST.



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STAGE CONSTRUCTION STAGE 2 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By P.B.	Checked By A.V.
			SHEET 35 OF 75

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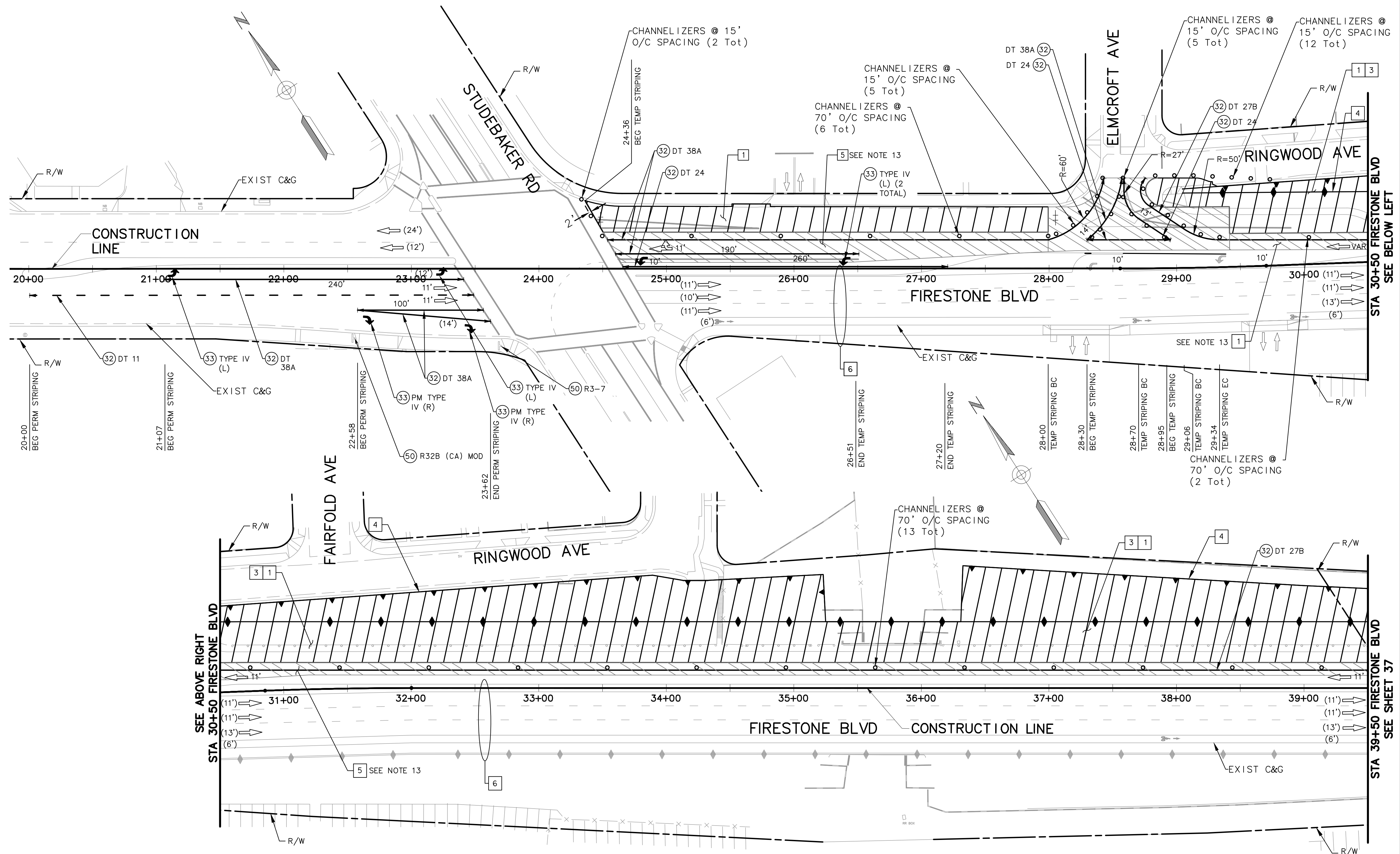
1. ONE (1) LANE IN EACH DIRECTION SHALL REMAIN OPEN AT ALL TIMES, UNLESS OTHERWISE NOTED AND APPROVED BY THE ENGINEER.
2. REDUCE SPEED THROUGH AREAS UNDER CONSTRUCTION TO 35 MILES PER HOUR.
3. CONTRACTOR TO PLACE AND MAINTAIN A 4:1 WEDGE WHERE THE EXISTING ROADWAY HAS BEEN EXCAVATED.
4. DRIVEWAY ACCESS IS TO BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE APPROVED BY ENGINEER.
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8. ALL SIGN CODES ARE FEDERAL SIGN CODES UNLESS OTHERWISE DESIGNATED AS CALIFORNIA SIGN CODES.
9. ALL W1-4 (R) AND W1-4 (L) SIGNS SHALL BE INSTALLED WITH HLWD PER SECTION 7-2.4.3 OF THE WORK AREA TRAFFIC CONTROL HANDBOOK (WATCH), DATED 2009.
10. COVER ALL EXISTING CONFLICTING SIGNS.
11. CONTRACTOR SHALL BACKFILL OR PLACE STEEL PLATES OVER EXPOSED TRENCHES WHENEVER WORK IS NOT BEING DONE.
12. REMOVE ALL CONFLICTING EXISTING STRIPING.
13. CONSTRUCT REMAINING PORTION OF PAVEMENT WIDENING, AFTER ROADWAY WIDENING IS COMPLETE.

CONSTRUCTION THIS STAGE

- 1 CONSTRUCT PORTIONS OF ROADWAY AND MEDIAN
- 2 COSTRUCT DRIVEWAY (COORDINATE WITH OWNER/OPERATOR)
- 3 CONSTRUCT ROADSIDE IMPROVEMENTS.
- 4 CONSTRUCT RETAINING WALL.
- 5 CONSTRUCT REMAINING PORTION OF ROADWAY PAVING, LAST ORDER OF WORK.
- 6 INSTALL FINAL SIGNING AND STRIPING.

CONSTRUCTION NOTES:

- 32 PAINT TEMPORARY STRIPE, DETAIL PER PLAN.
- 33 PAINT TEMPORARY PAVEMENT MARKING, DETAIL PER PLAN.
- 50 EXISTING SIGN PANEL AND POST TO REMAIN, PROTECTED IN PLACE.
- 55 INSTALL TEMPORARY SIGN ON TEMPORARY POST.
- 56 INSTALL TEMPORARY SIGN ON EXISTING POST.

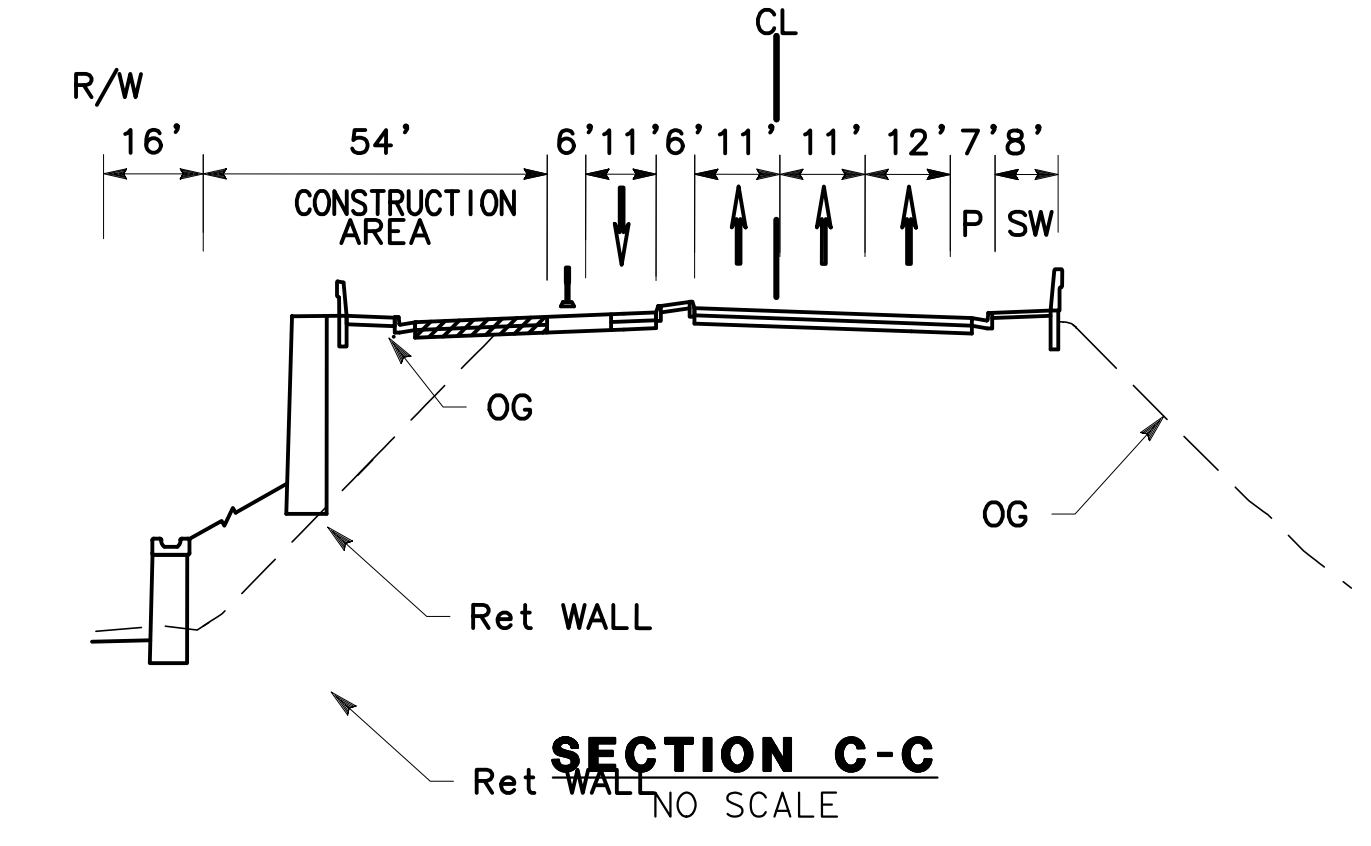
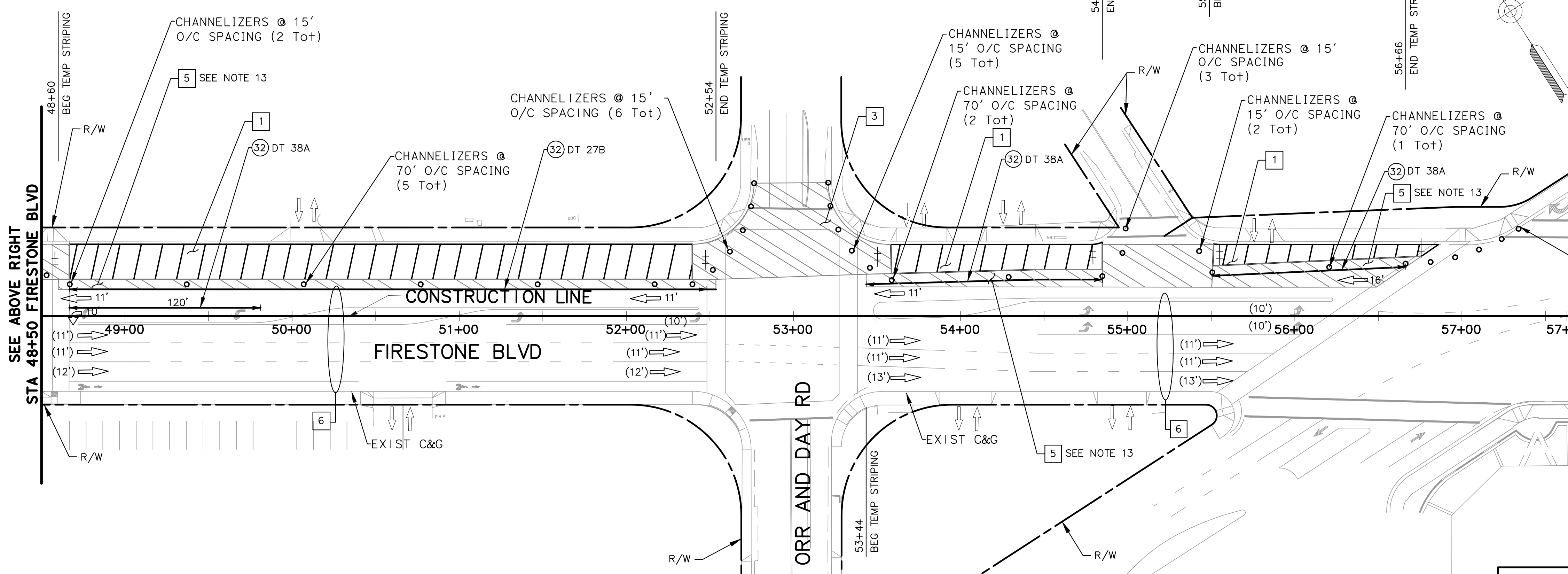
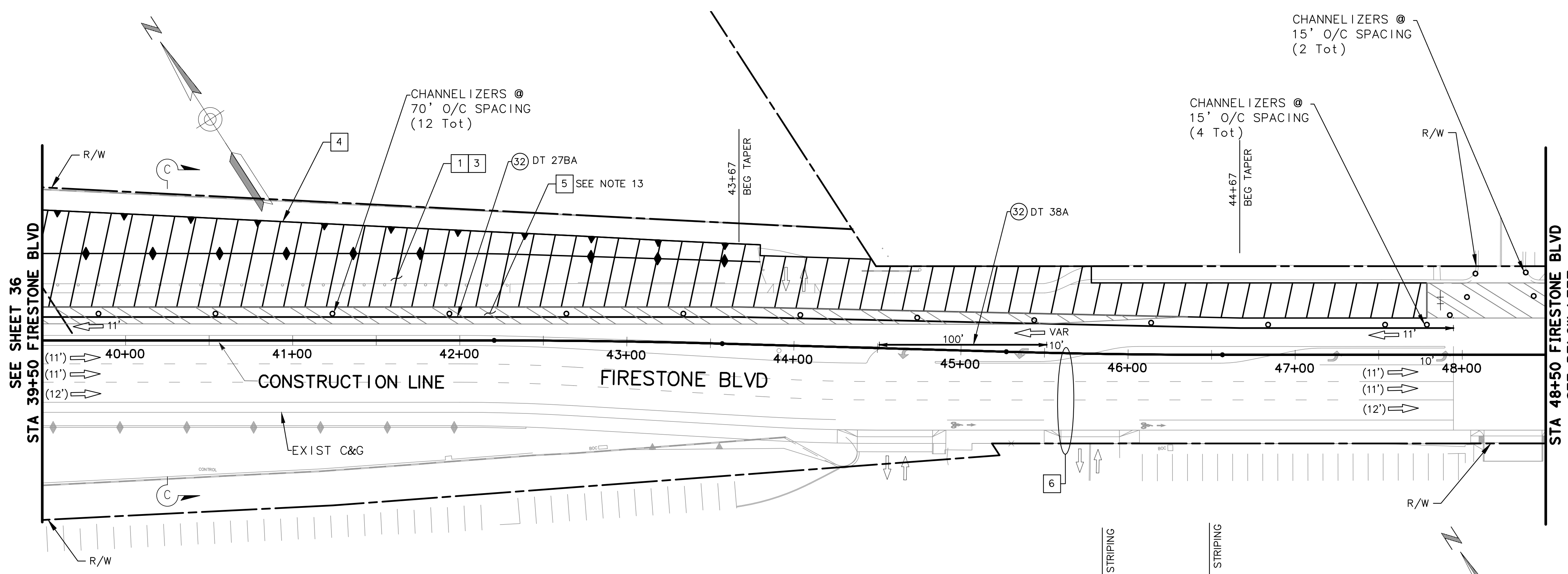


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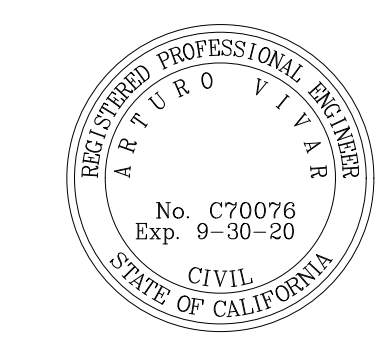
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STAGE CONSTRUCTION STAGE 3 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By P.B.	Checked By A.V.
			SHEET 36 OF 75



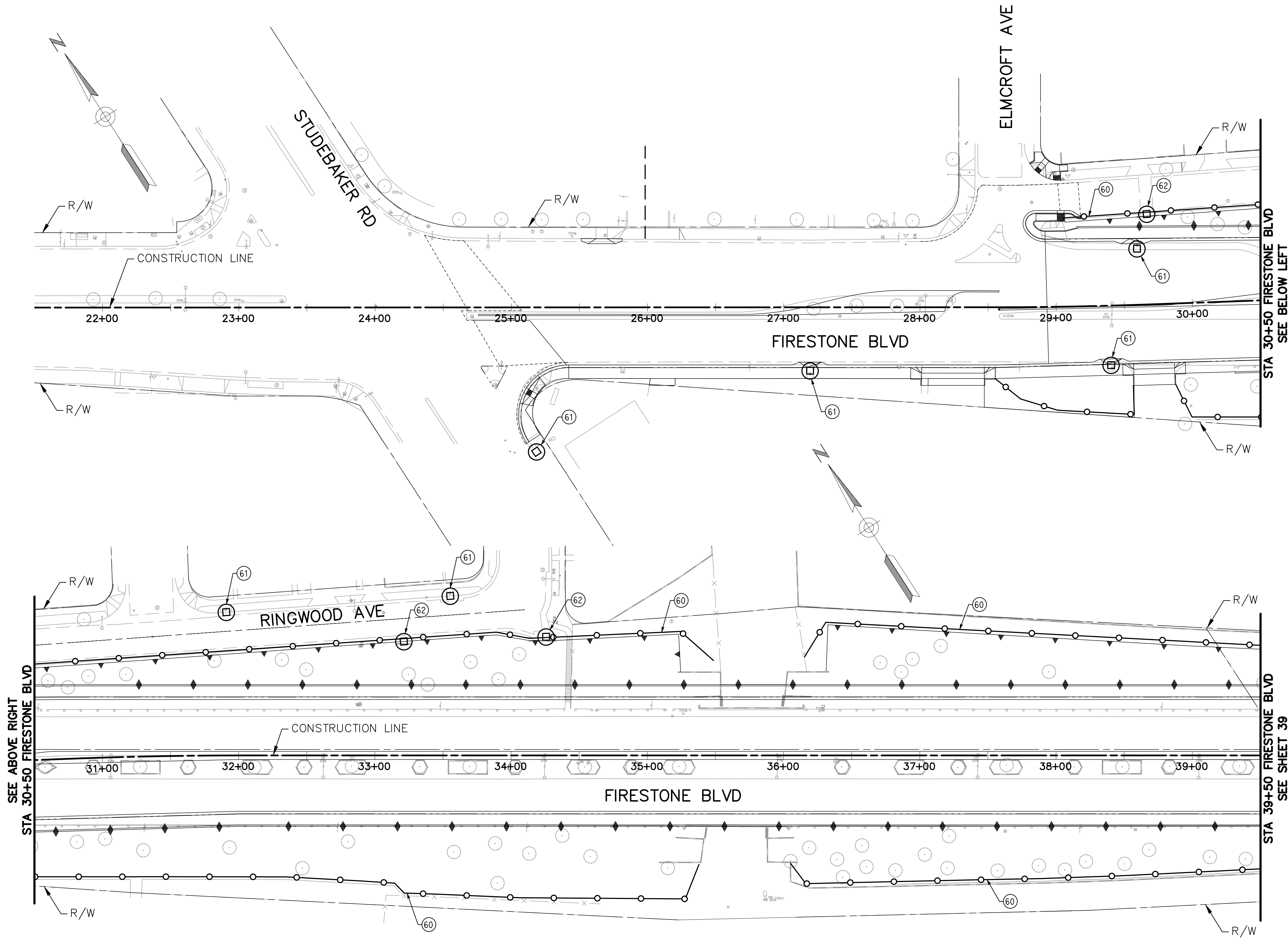
- CONSTRUCTION THIS STAGE**
- 1 CONSTRUCT PORTIONS OF ROADWAY
 - 2 CONSTRUCT DRIVEWAY (COORDINATE WITH OWNER/OPERATOR)
 - 3 CONSTRUCT ROADSIDE IMPROVEMENTS.
 - 4 CONSTRUCT RETAINING WALL.
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engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STAGE CONSTRUCTION STAGE 3 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 37 OF 75

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EROSION CONTROL NOTES:

1. INSTALL TEMPORARY WATER POLLUTION CONTROL FACILITIES, DURING CONSTRUCTION ONLY. REMOVE WHEN NO LONGER NEEDED.
2. THE PROJECT'S SWPPP SHALL CONTROL WHERE CONFLICTS ARISE WITH THESE EROSION CONTROL PLANS.

CONSTRUCTION NOTES:

- (60) INSTALL SEDIMENT BARRIER PER CALTRANS STD PLAN T66.
- (61) INSTALL TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6B) PER CALTRANS STD PLAN T64.
- (62) INSTALL TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) PER CALTRANS STD PLAN T62.

LEGEND:

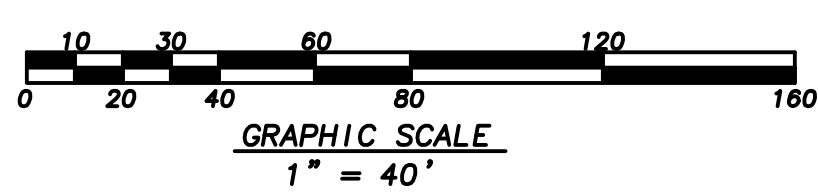
- >--- FLOW LINE
- TEMPORARY FIBER ROLL
- TEMPORARY INLET PROTECTION

SEE ABOVE RIGHT
STA 30+50 FIRESTONE BLVD

SEE BELOW LEFT
STA 30+50 FIRESTONE BLVD

SEE ABOVE RIGHT
STA 39+50 FIRESTONE BLVD

SEE BELOW LEFT
STA 39+50 FIRESTONE BLVD

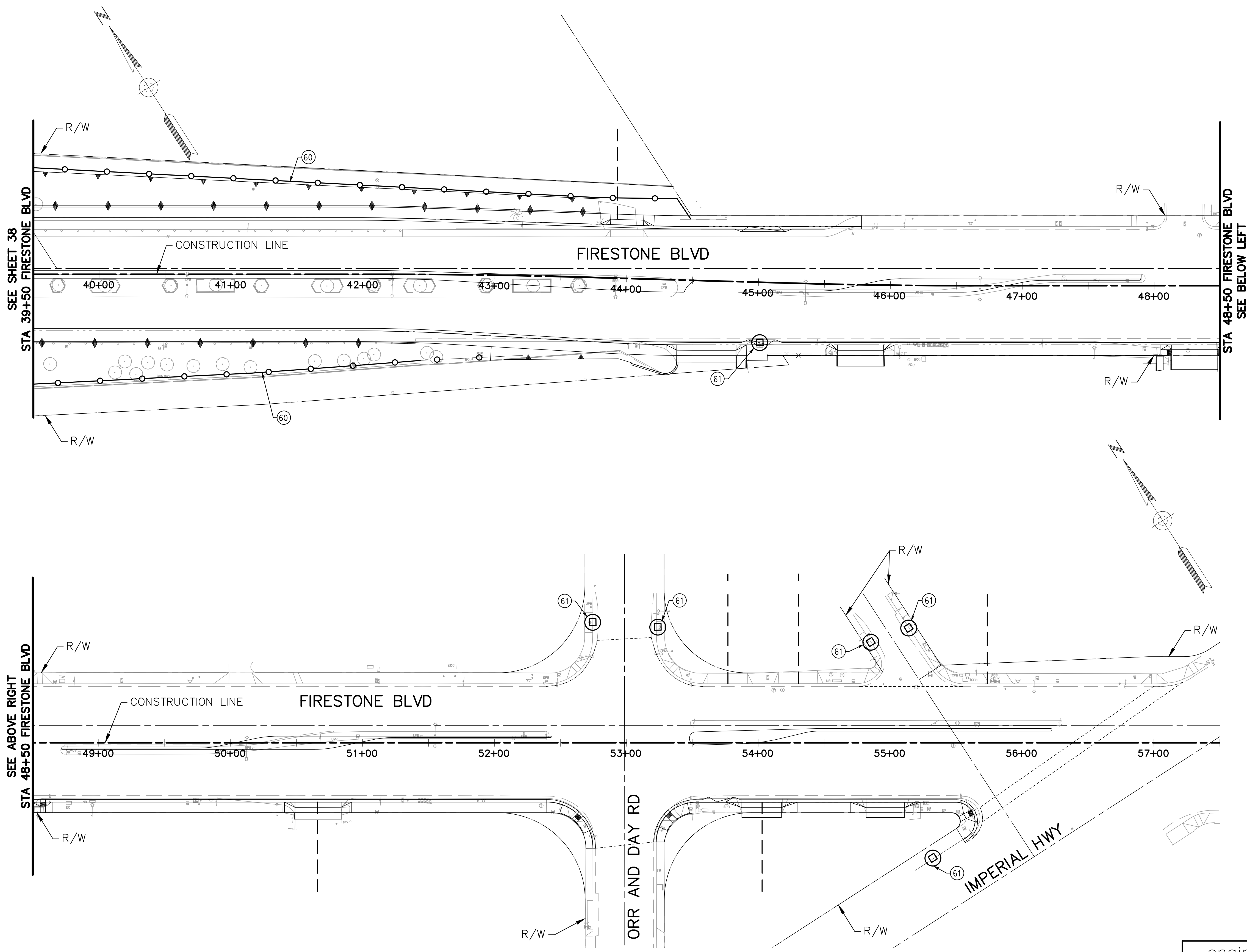


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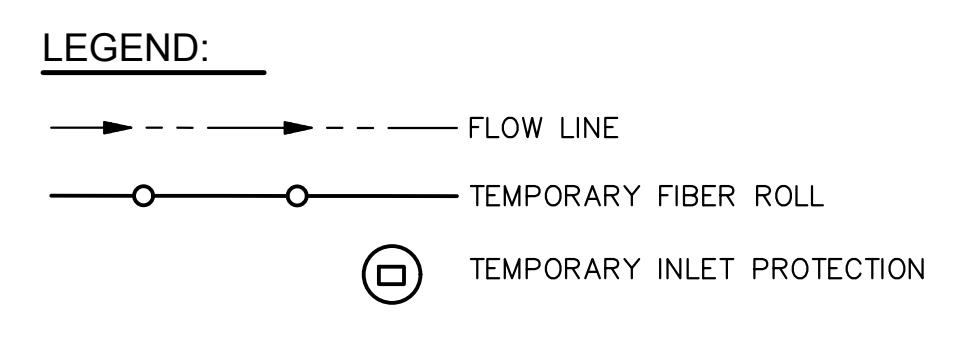
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: TEMPORARY EROSION CONTROL FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY (PHASE 1)	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO.
FIELD BOOK REF.		Recommended	
PLAN REF.		Drawn By P.B.	Checked By A.V.
			SHEET 38 OF 75

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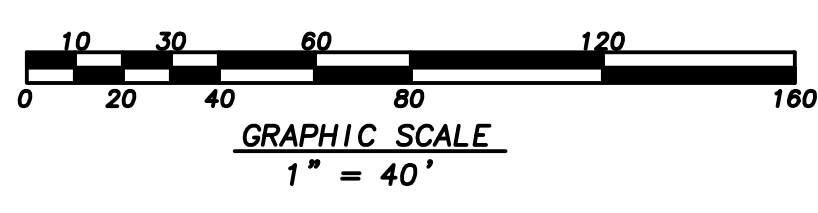


- EROSION CONTROL NOTES:**
1. INSTALL TEMPORARY WATER POLLUTION CONTROL FACILITIES, DURING CONSTRUCTION ONLY. REMOVE WHEN NO LONGER NEEDED.
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- CONSTRUCTION NOTES:**
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 - (61) INSTALL TEMPORARY DRAINAGE INLET PROTECTION (TYPE 6B) PER CALTRANS STD PLAN T64.
 - (62) INSTALL TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) PER CALTRANS STD PLAN T62.



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engineering division		CITY OF NORWALK	
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FIELD BOOK REF.		Recommended	
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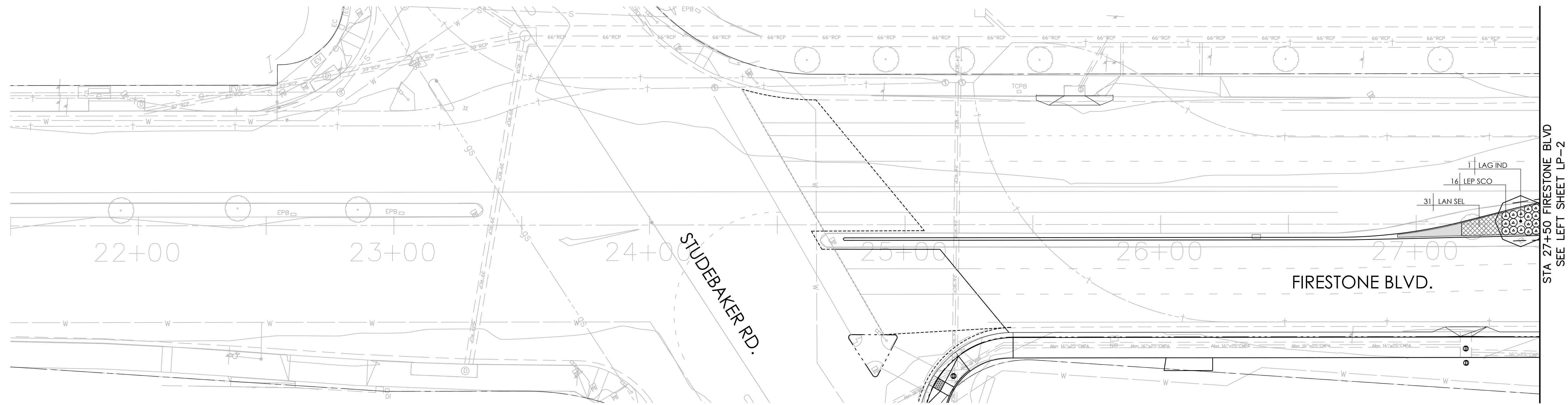
PLANTING LEGEND

LABEL	SCIENTIFIC NAME	COMMON NAME	WATER USAGE (WUCOLS)	SIZE	SPACING
TREE					
CHI TAS	CHITALPA TASHKENTENSIS	CHITALPA 'PINK DAWN'	L	15 GAL	AS SHOWN
CER CAN	CERCIS CANADENSIS VAR TEXENSIS	TEXAS REDBUD	M	15 GAL	AS SHOWN
CER OCC	CERCIS OCCIDENTALIS	WESTERN REDBUD	L	15 GAL	AS SHOWN
LAG IND	LAGERSTROEMIA INDICA 'WHIT II'	DYNAMITE CRAPE MYRTLE	M	15 GAL	AS SHOWN
PIN CAN	PINUS CANARIENSIS	CANARY ISLAND PINE	L	15 GAL	AS SHOWN
QUE AGR	QUECUS AGRIFOLIA	COAST LIVE OAK	VL	15 GAL	AS SHOWN
SHRUB					
HET ARB	HETEROMELES ARBUTIFOLIA	TOYON	VL	5 GAL	AS SHOWN
LEP SCO	LEPTOSPERMUM SCOPARIUM 'NANUM RURU'	DWARF NEW ZEALAND TEA TREE	M	5 GAL	AS SHOWN
MIM AUR	MIMULUS AURANTIACUS VAR. PUNICEUS	RED BUSH MONKEY FLOWER	VL	1 GAL	AS SHOWN
MUH CAP	MUHLENBERGIA CAPILLARIS	PINK MUHLYGRASS	M	5 GAL	AS SHOWN
MYR COM	MYRTUS COMMUNIS 'COMPACTA'	DWARF MYRTLE	L	1 GAL	AS SHOWN
GROUND COVER					
ACH MIL	ACHILLEA MILLEFOLIUM 'CALISTOGA'	YARROW	L	1 GAL	24" O.C.
LAN SEL	LANTANA SELLOWIANA 'MONMA'	TRAILING LANTANA	L	1 GAL	24" O.C.
VINE					
FIC PUM	FICUS PUMILA	CREEPING FIG	M	1 GAL	AS SHOWN

- INSTALL STAMPED CONCRETE AS SHOWN ON PLANS, AND DETAIL 6 PD-1. SEE SPECIFICATIONS FOR COLOR AND PATTERN.
- - - TREE ROOT BARRIER, SEE SPECS. 5 PD-1

PLANTING NOTES

1. **MULCH:** INSTALL A UNIFORM THREE INCH LAYER OF BARK MULCH, 1/4 INCH TO 3/4 INCH PARTICLE SIZE, IN ALL PLANTING AREAS, INCLUDING VINE PLANTING STRIP. MULCH SHALL NOT TOUCH TREE TRUNKS. MULCH SAMPLE SHALL BE SUBMITTED AND APPROVED BY CITY ENGINEER PRIOR TO INSTALLATION.
2. **EXISTING PLANT MATERIAL:** PROTECT ALL EXISTING PLANT MATERIAL TO REMAIN. SEE CIVIL PLANS. AVOID OR MINIMIZE SOIL DISTURBANCE WITHIN OR NEAR EXISTING TREES TO REMAIN. CONTRACTOR TO REPAIR ANY DAMAGES INCURRED AS A DIRECT RESULT OF THIS CONTRACT TO THE OWNER'S SATISFACTION AT NO ADDITIONAL COST.
3. **TOPSOIL:** CONTRACTOR SHALL EXCAVATE ALL PLANTING AREAS, PER CIVIL PLANS. A MINIMUM OF 24" DEPTH. ALL EXISTING GRAVEL, ROADWAY PAVEMENT AND AGGREGATE BASE WITHIN THE PLANTING AREAS SHALL BE REMOVED BEFORE INSTALLING AMENDED TOPSOIL. TOPSOIL SHALL BE INSTALLED 3" BELOW FINISH GRADE OF SURROUNDING HARDSCAPE TO ALLOW FOR 3" LAYER OF MULCH. REFER TO CIVIL PLANS FOR PLANTING AREA GRADING AND SLOPES.
4. **SOILS TESTING:** SEE SPECIFICATIONS FOR TESTING OF TOPSOIL AND AMENDMENTS. IN ADDITION, CONTRACTOR SHALL SUBMIT A FIVE GALLON SAMPLE OF NATIVE TOPSOIL FROM ANY AREAS PREVIOUSLY COVERED BY PAVING, TO WALLACE LABORATORIES, (310) 615-0116, FOR CONTAMINATION TESTING. TESTING REQUIRES FOUR TO FIVE WEEKS. CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR TESTING PRIOR TO CONSTRUCTION.
5. **ROOT BARRIERS:** CONTRACTOR SHALL INSTALL LINEAR ROOT BARRIER ANYWHERE TREES ARE LOCATED WITHIN 5-FEET OF PAVEMENT AS SHOWN ON PLANS, PER SPECIFICATIONS. SEE DETAIL. 5 PD-1
6. **TREES:** INSTALL PER PLANS AND DETAILS. 1 PD-1 4 PD-1
7. **SHRUB AND GROUND COVER:** SHRUBS AND GROUND COVER SHALL NOT BE PLANTED WITHIN 3' MINIMUM OF ANY TREES. INSTALL PER DETAILS. 2 PD-1 3 PD-1
8. **VINE:** A LAYER OF MULCH, AS NOTED ABOVE, SHALL BE PLACED AROUND EACH VINE AND COVER ALL EXPOSED SOIL IN THE NARROW PLANTING AREA ALONG THE MASONRY WALL. INSTALL PER DETAIL. 8 PD-1



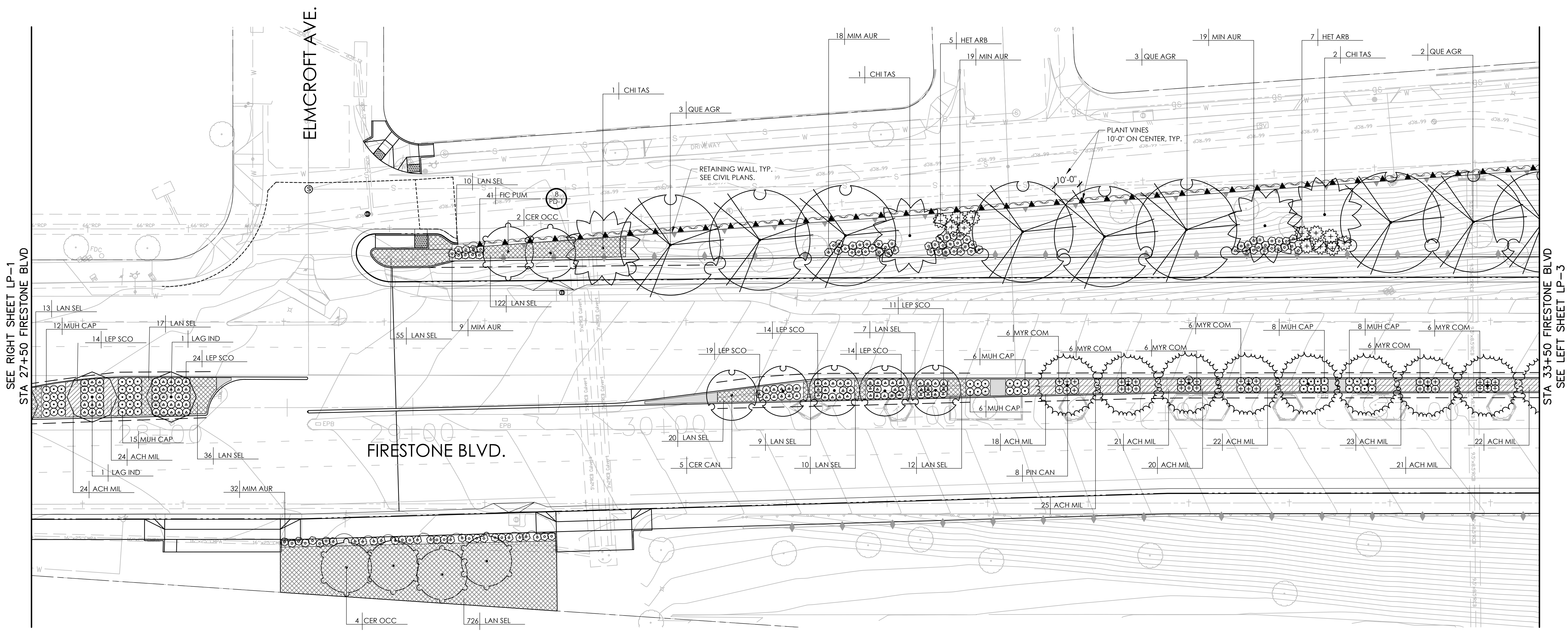
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 IRVINE, CA 92606
 (949) 477-9000



engineering division	CITY OF IRVINE	
TITLE:	LANDSCAPE PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE	BY	AS BUILT
FIELD BOOK REF.	CITY ENGINEER	RCE 20568 DATE
PLAN REF.	Drawn By C.N.	Checked By C.W.
PROJECT NO.	XXXX	
DRAWING NO.	LP-1	
SHEET	40 OF 75	



SEE RIGHT SHEET LP-1
STA 27+50 FIRESTONE BLVD

STA 33+50 FIRESTONE BLVD
SEE LEFT SHEET LP-3



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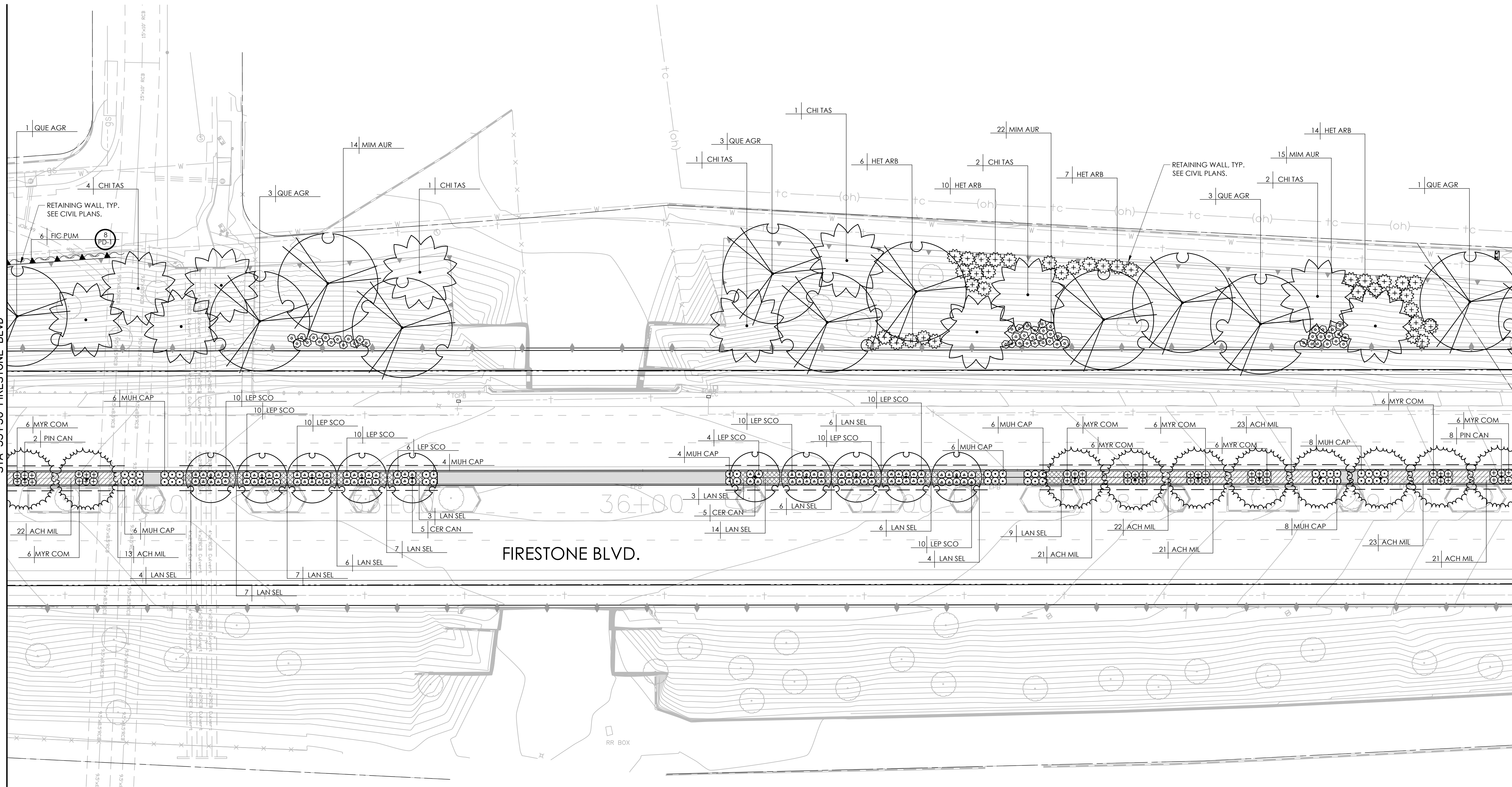


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: LANDSCAPE PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE	BY	Approved	PROJECT NO. XXXX
		CITY ENGINEER	DRAWING NO. LP-2
		Recommended	SHEET 41 OF 75
		Drawn By C.N.	Checked By C.W.
FIELD BOOK REF.	AS BUILT	RCE 20568	DATE
PLAN REF.			

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SEE RIGHT LP-2
STA 33+50 FIRESTONE BLVD

SEE ABOVE LEFT SHEET LP-4
STA 39+50 FIRESTONE BLVD



FIRESTONE BLVD.



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 (949) 477-9000

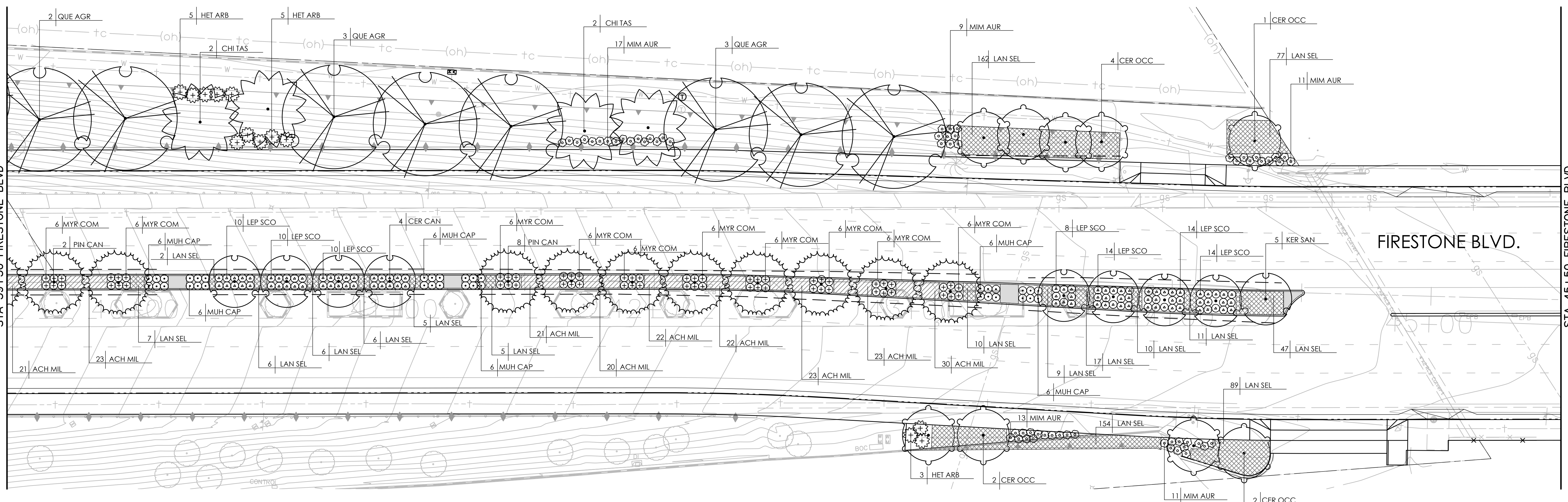


engineering division		CITY OF NORWALK	
REVISIONS		TITLE: LANDSCAPE PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE	BY	Approved	PROJECT NO. XXXX
		CITY ENGINEER	DRAWING NO. LP-3
		Recommended	SHEET 42 OF 75
FIELD BOOK REF.	AS BUILT	Drawn By C.N.	Checked By C.W.
PLAN REF.			

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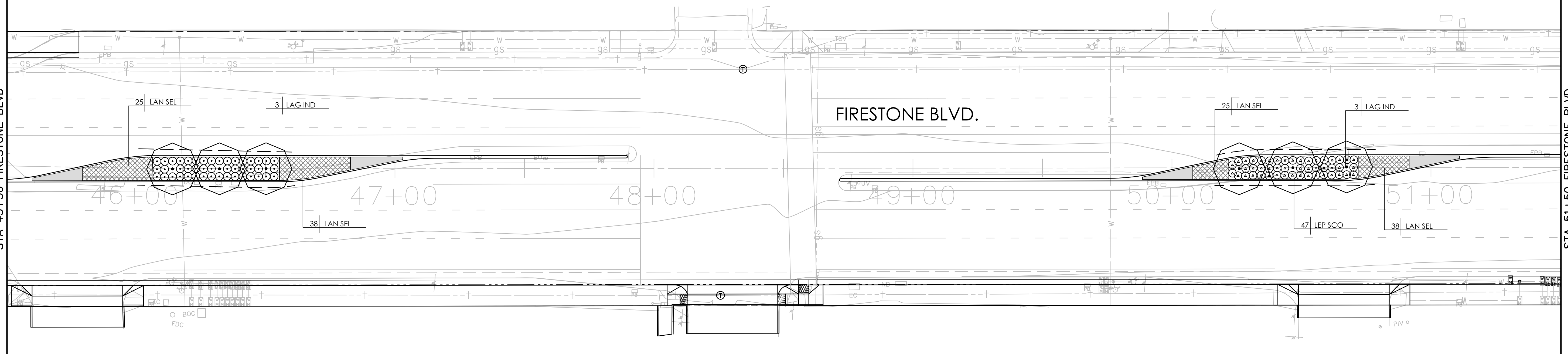
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STA 45+50 FIRESTONE BLVD
SEE BELOW LEFT

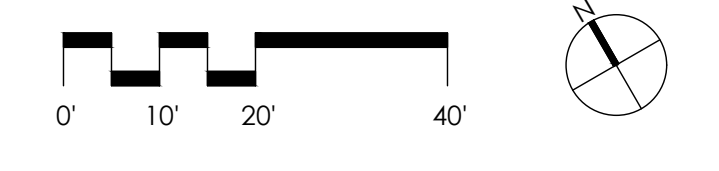


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STA 45+50 FIRESTONE BLVD

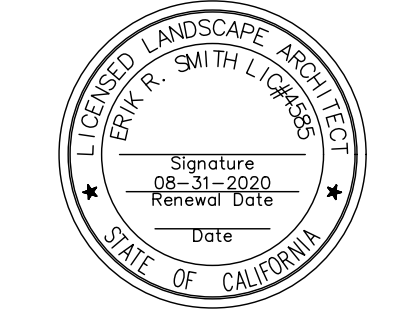
STA 51+50 FIRESTONE BLVD
SEE LEFT SHEET LP-5



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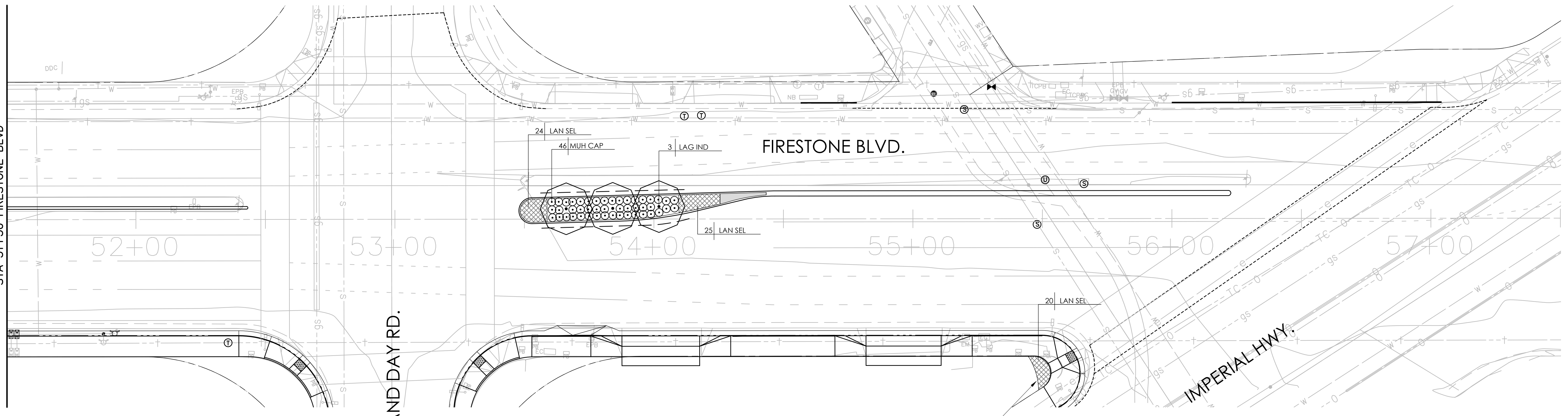


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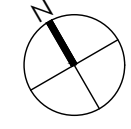
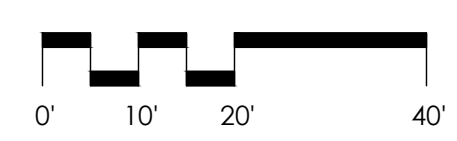
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REVISIONS		TITLE: LANDSCAPE PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE	BY	Approved	PROJECT NO. XXXX
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		Recommended	SHEET 43 OF 75
FIELD BOOK REF.	AS BUILT	DATE	
PLAN REF.		DATE	
	Drawn By C.N.	Checked By C.W.	

SEE BELOW RIGHT SHEET LP-4
STA 51+50 FIRESTONE BLVD

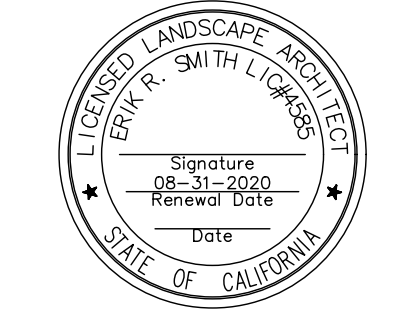


REPLANT DAMAGED SHRUB AND GROUNDCOVER AREA DUE TO CONSTRUCTION OF SIDEWALK AND RETAINING WALL WITH GROUNDCOVER AS SHOWN. QUANTITY SHOWN IS AN ESTIMATE ONLY. CONTRACTOR SHALL FIELD VERIFY QUANTITY REQUIRED TO FILL IN LANDSCAPE AREAS.

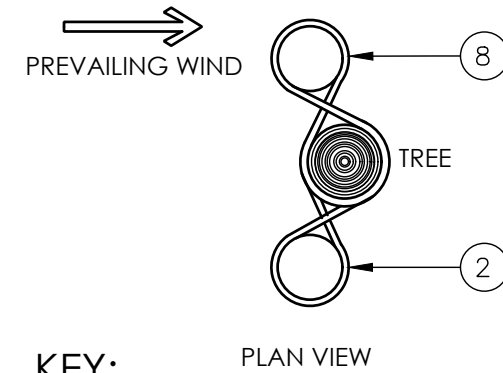
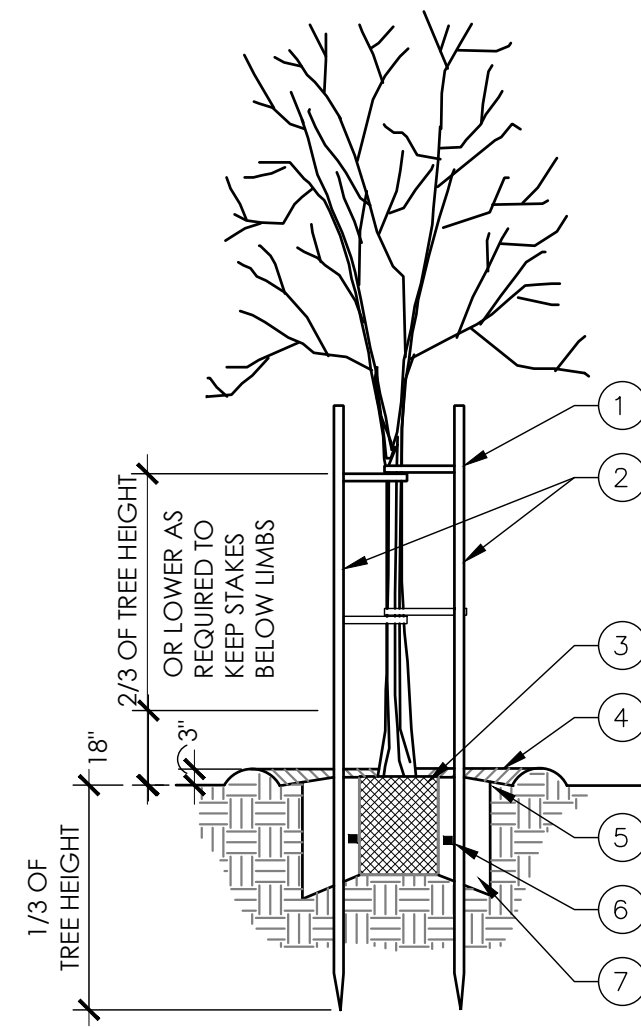
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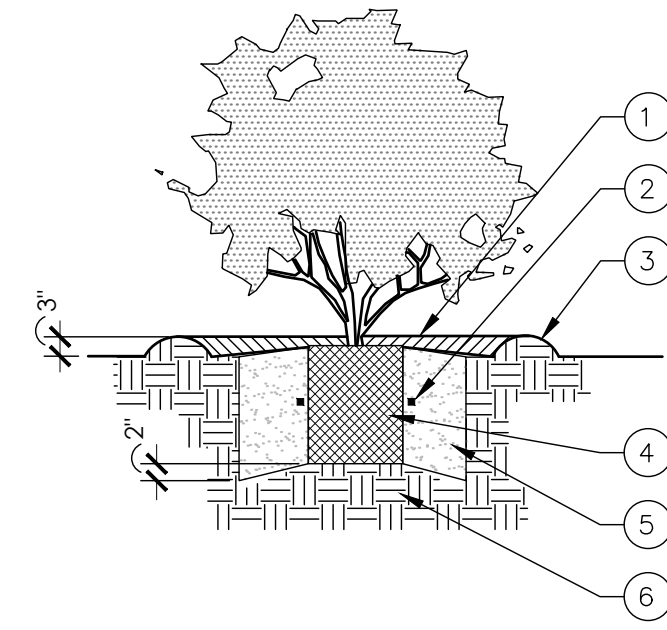
engineering division		CITY OF NORWALK	
REVISIONS		TITLE: LANDSCAPE PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE	BY	Approved	
		CITY ENGINEER RCE 20568 DATE	
		Recommended	
FIELD BOOK REF.		DATE	
PLAN REF.		Drawn By C.N.	Checked By C.W.
		PROJECT NO. XXXX	
		DRAWING NO. LP-5	
		SHEET 44 OF 75	



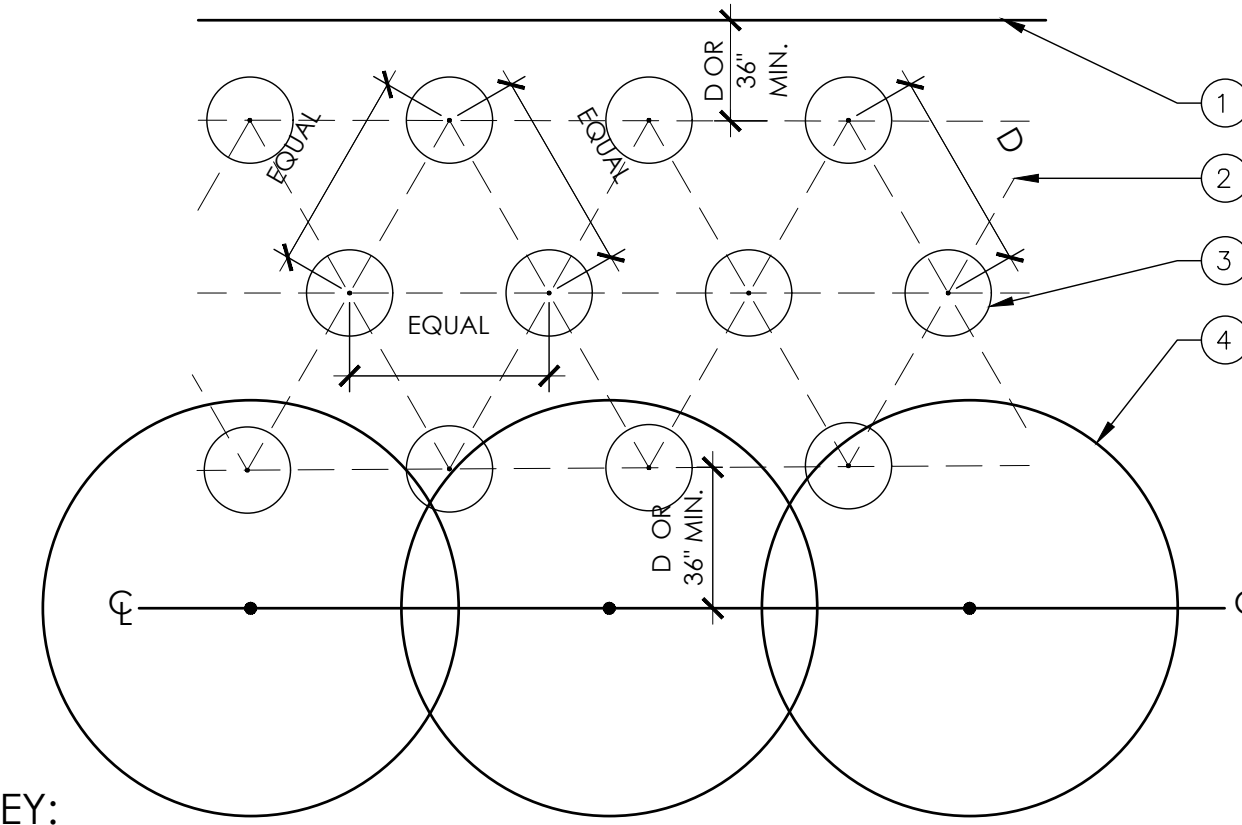
- KEY:**
- TREE TIES AT TWO LOCATIONS, REFER TO SPECIFICATIONS FOR TYPE, (FOUR TOTAL) TYP. PROVIDE 5" - 6" OF SLACK IN TIES TO ALLOW FOR TREE MOVEMENT IN THE WIND.
 - TWO 2" DIA. TREATED LODGEPOLE TREE STAKES (SET PLUMB) DO NOT PENETRATE ROOTBALL.
 - ROOT BALL, SET CROWN 2" ABOVE FINISH GRADE. PROVIDE POSITIVE DRAINAGE AWAY FROM ROOTBALL.
 - WATER RETENTION BERM (EXCEPT IN TURF AREAS).
 - BARK MULCH, REFER TO SPECIFICATIONS.
 - FERTILIZER TABLETS, REFER TO SPECIFICATION TYPE.
 - PLANTING PIT TO BE TWICE THE DIAMETER OF ROOT BALL, FOR BACKFILL MIX, REFER TO SPECIFICATIONS.
 - SECURE TREE TIE WITH GALV. FENCE STAPLE.

NOTES:

- REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.



- NOTES:**
- REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.



- KEY:**
- MOW CURB, PAVEMENT EDGE, OR WOOD HEADER.
 - TYPICAL SPACING (D), SEE PLANTING PLAN.
 - GROUNDCOVER PLANT, SIZE AS DENOTED ON PLANTING PLAN.
 - SHRUB MASS, TYP.

- KEY:**
- BARK MULCH, SEE SPECIFICATIONS.
 - FERTILIZER TABLETS, SEE SPECIFICATIONS.
 - WATER RETENTION BERM.
 - ROOT BALL- SET CROWN 1" ABOVE FINISH GRADE. PROVIDE POSITIVE DRAINAGE AWAY FROM ROOTBALL.
 - PLANTING PIT TO BE TWICE THE DIAMETER OF ROOTBALL, FOR BACKFILL MIX, REFER TO SPECIFICATIONS.
 - UNDISTURBED NATIVE SOIL UNDER ROOTBALL. PROVIDE POSITIVE DRAINAGE AWAY FROM ROOTBALL.

1 TREE PLANTING
LD-1

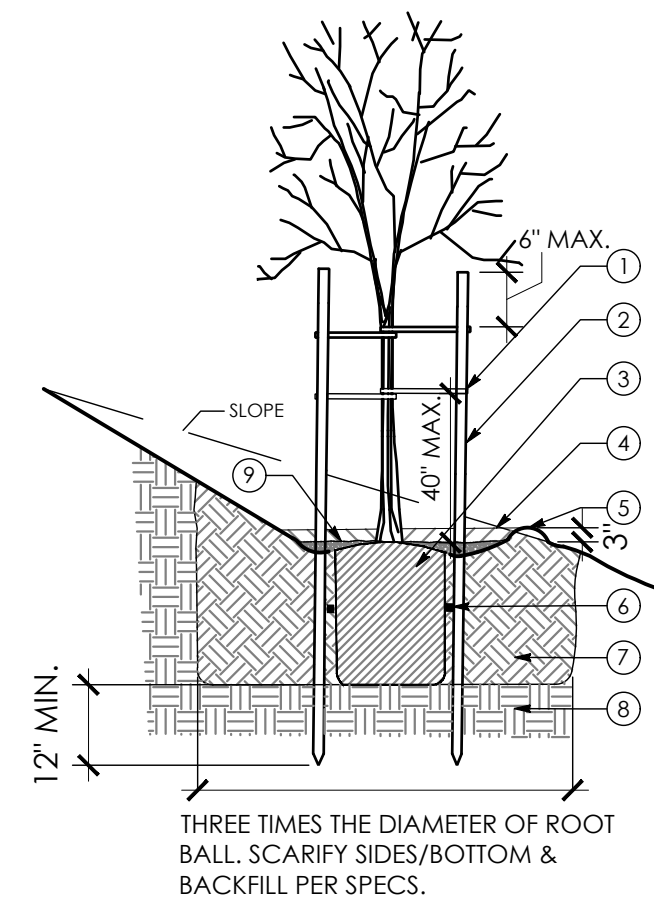
N.T.S.

2 SHRUB PLANTING
LD-1

N.T.S.

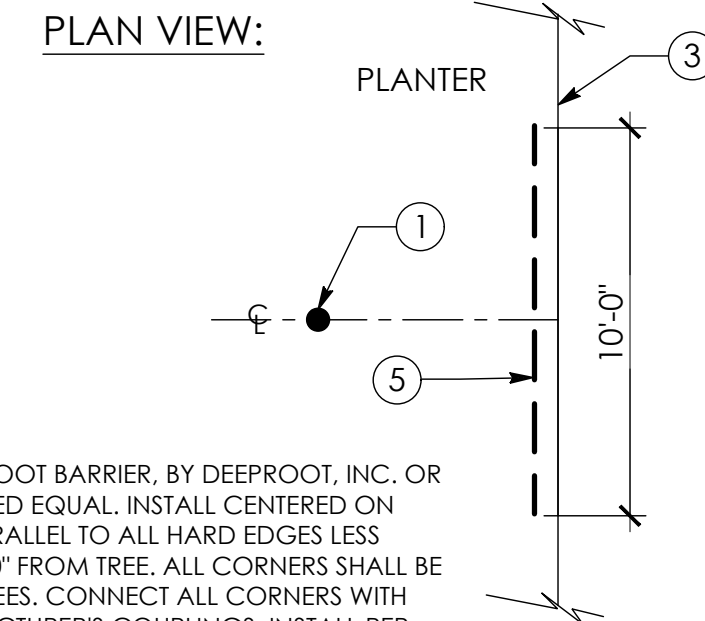
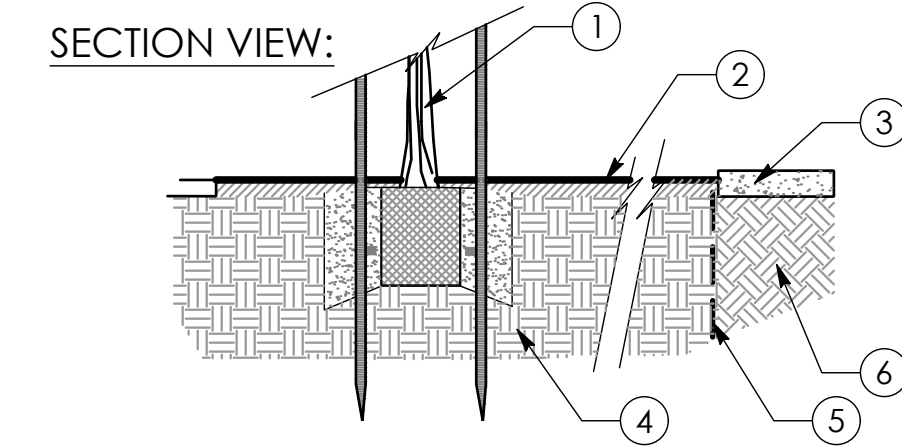
3 GROUNDCOVER PLANTING
LD-1

N.T.S.



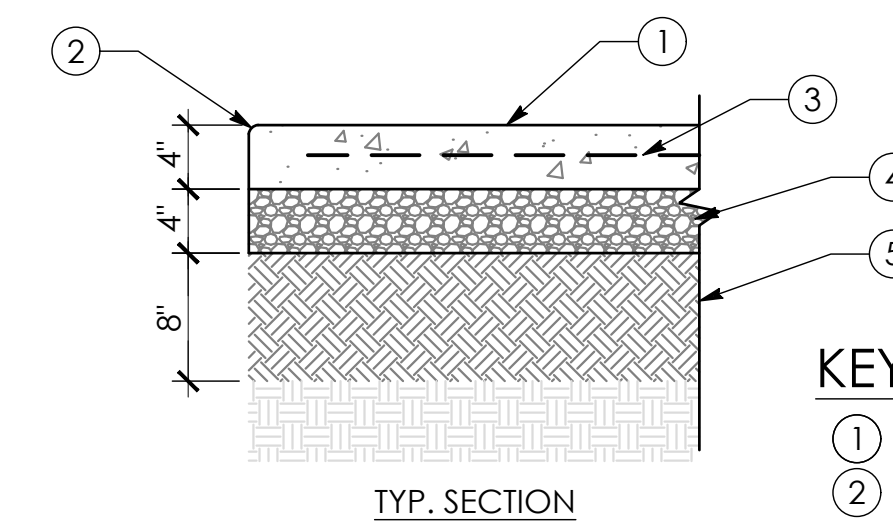
- KEY:**
- RUBBER CINCH TREE TIES, FOUR (4) PER TREE, REFER TO SPECS FOR TYPE, PROVIDE 5"-6" OF SLACK IN TIES TO ALLOW FOR TREE MOVEMENT IN THE WIND.
 - (2) 2" DIA. TREATED LODGEPOLE TREE STAKES, PLACE OUTSIDE OF ROOT BALL, SET 2" BELOW LOWEST BRANCH.
 - ROOT BALL, SET 1"- 2" ABOVE ADJACENT FINISH GRADE.
 - BARK MULCH, KEEP 3" AWAY FROM TREE CROWN, REFER TO SPECS.
 - SOIL WATERING BASIN.
 - FERTILIZER TABLETS, SEE SPECS.
 - AMENDED BACKFILL, SEE SPECS.
 - UNDISTURBED NATIVE SOIL.
 - FINISH GRADE.

- NOTES:**
- MAXIMUM SLOPE 2:5:1 WITHOUT A BENCH, OR A MAXIMUM SLOPE OF 2:1 WITH A BENCH. PLACE JUTE MESH ON SLOPES GREATER THAN 3:1.



- KEY:**
- TREE PLANTING, SEE TREE PLANTING DETAIL.
 - BARK MULCH, REFER TO SPECIFICATIONS.
 - ADJACENT CURB OR PAVEMENT, SEE PLAN.
 - NATIVE OR IMPORT SOIL.
 - LINEAR ROOT BARRIER, BY DEEPROOT, INC. OR APPROVED EQUAL, INSTALL CENTERED ON TREE, PARALLEL TO ALL HARD EDGES LESS THAN 5'-0" FROM TREE. ALL CORNERS SHALL BE 90 DEGREES. CONNECT ALL CORNERS WITH MANUFACTURER'S COUPLINGS. INSTALL PER MANUFACTURER'S SPECIFICATIONS. ALIGN TOP OF ROOT BARRIER PANELS FLUSH WITH FINISHED GRADE IN PLANTER.
 - COMPACTED SUBGRADE, SEE PLANS AND SPECS.

- NOTES:**
- REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.



- KEY:**
- CONCRETE PAVING.
 - R 1/2" TYP. AT EDGE JOINING SOIL OR ADJACENT CURB
 - WELDED WIRE MESH FABRIC, CENTERED IN SLAB.
 - AGGREGATE BASE, COMPACT TO 95%.
 - SUBGRADE, COMPACT TO 95%.

- NOTES:**
- REFER TO GEOTECHNICAL SOILS REPORT FOR MORE INFORMATION.

4 TREE PLANTING ON SLOPE
LD-1

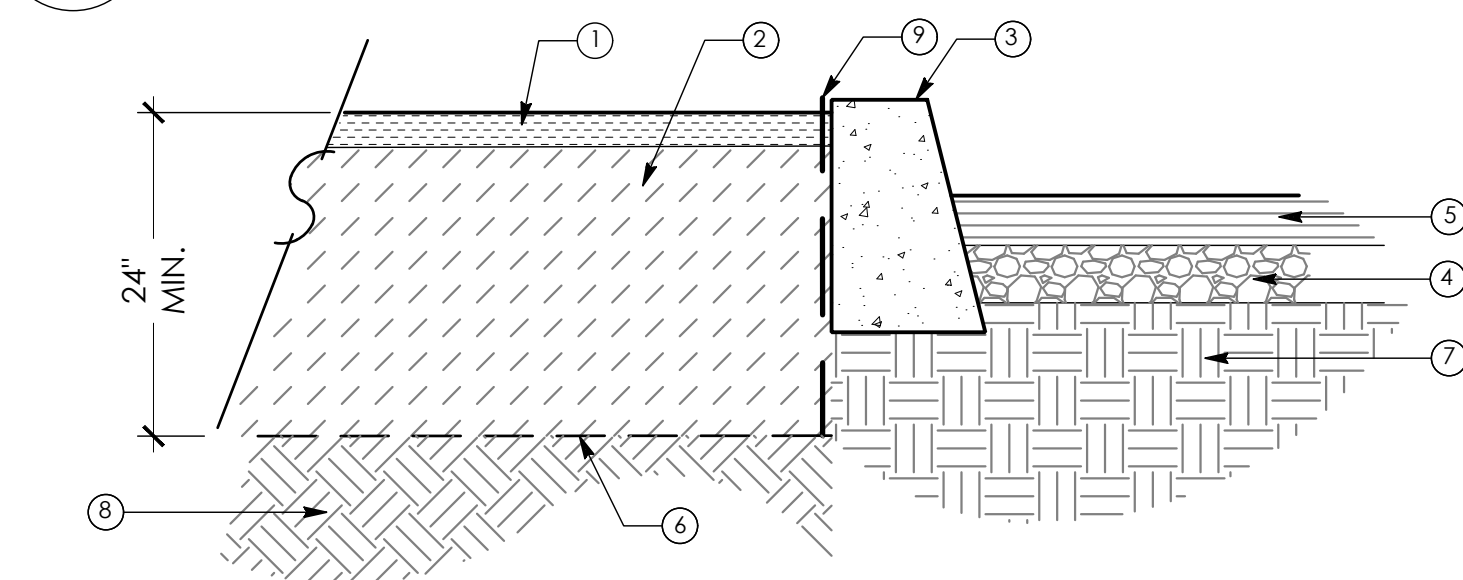
N.T.S.

5 ROOT BARRIER
LD-1

N.T.S.

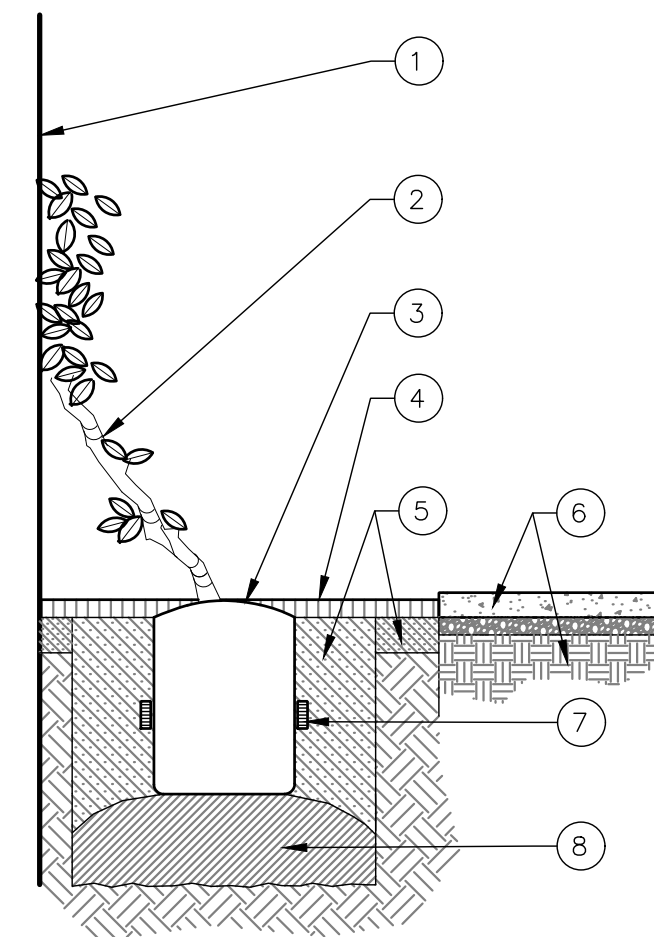
6 CONCRETE PAVEMENT
LD-1

N.T.S.



- KEY:**
- BARK MULCH, PER SPECS.
 - IMPORT TOPSOIL, PER SPECS.
 - CONCRETE CURB, PER CIVIL PLANS
 - AGGREGATE BASE, PER CIVIL PLANS
 - ASPHALT PAVEMENT, PER CIVIL PLANS
 - LIMITS OF EXCAVATION, PER CIVIL PLANS, SEE NOTES.
 - EXISTING SUBGRADE
 - UN-COMPACTED NATIVE SOIL
 - LINEAR ROOT BARRIER, SEE SPECS. AND DETAIL

- NOTES:**
- IN MEDIAN PLANTING AREA, CONTRACTOR SHALL EXCAVATE EXISTING ASPHALT CONCRETE, AGGREGATE BASE AND SUBGRADE TO THE DEPTH OF UN-COMPACTED NATIVE SOIL, MINIMUM OF 24". ALL ASPHALT AND AGGREGATE BASE MATERIAL SHALL BE REMOVED.
 - CONTRACTOR SHALL THEN SCARIFY EXISTING SUBGRADE TO REMAIN TO 6" DEPTH.
 - CONTRACTOR SHALL PLACE AND INCORPORATE IMPORT TOPSOIL PER SPECS.



- KEY:**
- WALL - SEE PLAN.
 - VINE, TRAIN TO FENCE AND TIE.
 - ROOT BALL, SET 1" ABOVE FINISH GRADE.
 - MULCH, 3" LAYER.
 - PLANT PIT, 2 X CONTAINER WIDTH, FOR BACKFILL MIX, REFER TO SPECS.
 - SIDEWALK AND COMPACTED SUBGRADE, SEE CIVIL PLANS.
 - FERTILIZER TABLETS, SEE SPECS.
 - UNDISTURBED NATIVE SOIL UNDER ROOTBALL. PROVIDE POSITIVE DRAINAGE AWAY FROM ROOTBALL.
 - 6" TOPSOIL IN ALL PLANTER AREAS FOR VINE PLANTING

8 VINE PLANTING ON WALL
LD-1

N.T.S.

7 MEDIAN PLANTER
LD-1

N.T.S.

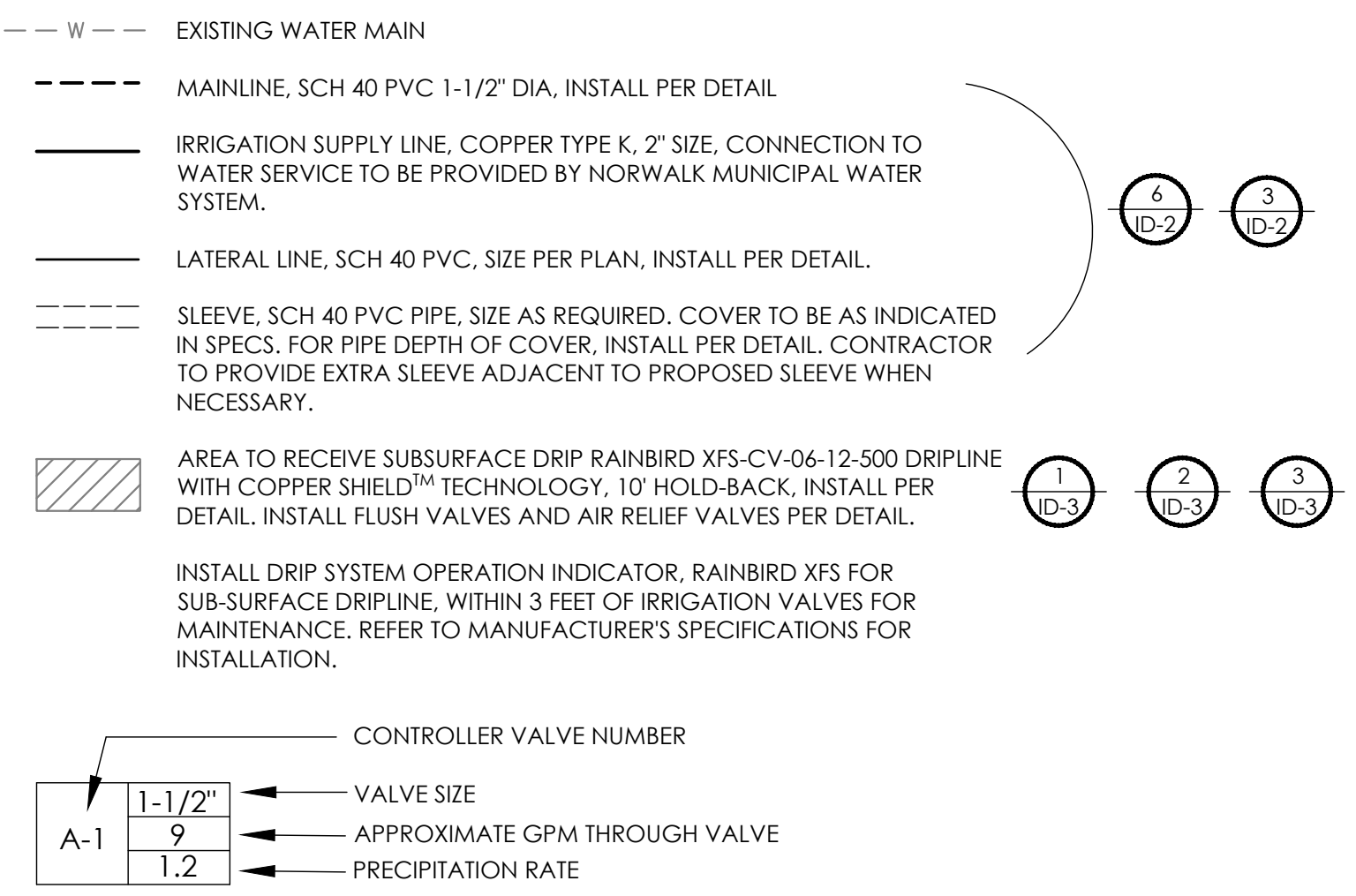
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(949) 477-9000



engineering division		CITY OF IRVINE	
REVISIONS		TITLE: LANDSCAPE DETAILS	
DATE	BY	PROJECT NO. XXXX	
		DRAWING NO. LD-1	
		SHEET 45 OF 75	
	AS BUILT	Approved	
FIELD BOOK REF.		CITY ENGINEER	RCE 20568 DATE
PLAN REF.		Recommended	
		Drawn By C.N. Checked By C.W.	

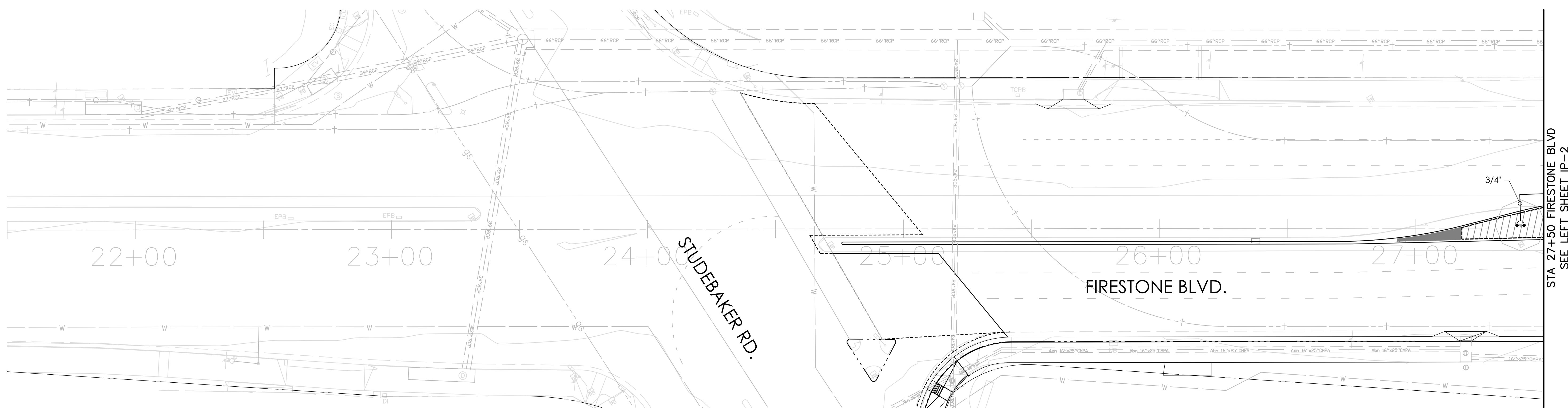
IRRIGATION LEGEND

- IRRIGATION CONTROLLER, CALSENSE CS3000, CONTROLLER "A" - 16 STATION, CONTROLLER "B" - 24 STATION 2 ID-1
- WATER METER, 1" SIZE. SEE IRRIGATION PLANS FOR LOCATION. INSTALL PER DETAIL. 1 ID-1
- REDUCED PRESSURE BACKFLOW ASSEMBLY, WILKINS 975-XL2, 1" SIZE. . SEE IRRIGATION PLANS FOR LOCATION. INSTALL PER DETAIL. PROVIDE STRONG BOX POLAR BARRIER SLIP-ON INSULATING BLANKET AND STAINLESS STEEL BACKFLOW ENCLOSURES, STRONGBOX MODEL SBBC-30SS FOR ALL UNITS. POLAR BARRIER SHALL BE SIZED PER MANUFACTURER'S SPECIFICATIONS. 4 ID-1
- MASTER VALVE, SUPERIOR 3200100, 1" SIZE NORMALLY CLOSED, FLOW REQUIREMENTS 0-20 GPM. INSTALL PER DETAIL. 3 ID-1
- FLOW SENSOR, CALSENSE FM-B, 1" SIZE, WITH OPERATING RANGE OF 2-50 GPM. INSTALL PER DETAIL. 5 ID-1
- GATE VALVE, NIBCO T-113, BRONZE, SIZE PER LINE. INSTALL PER DETAIL. 7 ID-2
- REMOTE CONTROL VALVE ASSEMBLY, RAINBIRD 100-PEB-PRS-D, 1" SIZE, WITH PRESSURE REGULATING MODULE. BALL VALVE, WATTS LFB6001, SIZE AS REQUIRED. INSTALL PER DETAIL. 2 ID-2
- DRIP VALVE ASSEMBLY, RAINBIRD XCZ-100-PRB-LC, 1" SIZE, WITH OPERATING RANGE OF 0.3-20 GPM. BALL VALVE, WATTS LFB6001, SIZE AS REQUIRED. INSTALL PER DETAIL. 1 ID-2
- VINE BUBBLER, RAINBIRD 1401, 0.25, FULL CIRCLE, TRICKLE PATTERN, LOCATE ON PER VINE, REFER TO DETAIL. 4 ID-3
- QUICK COUPLING VALVE ASSEMBLY, RAINBIRD 3-RC WITH YELLOW LOCKING RUBBER COVER, 3/4" SIZE. INSTALL PER DETAIL. 5 ID-2
- DEEP WATER BUBBLER ASSEMBLY, RAINBIRD RWS-B-C-1401, 0.25 GPM, FULL CIRCLE, TRICKLE PATTERN. LOCATE AT TREE PLANTING, TWO PER TREE. INSTALL PER DETAIL. 5 ID-3
- AIR RELIEF VALVE, RAINBIRD ARV050. INSTALL PER DETAIL. 2 ID-3



IRRIGATION NOTES

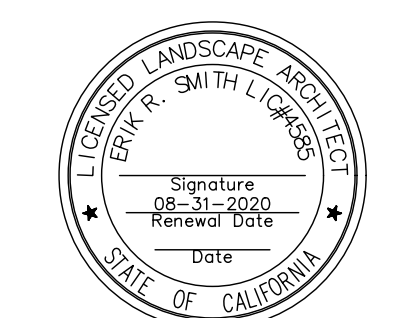
1. THE IRRIGATION SYSTEM IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT TO THE LANDSCAPE ARCHITECT ANY DIFFERENCE BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE POINT OF CONNECTION. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED IN WRITING PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS.
2. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC., SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY. INSTALL PIPING AND VALVES IN PLANTING AREAS WHERE POSSIBLE, AND LOCATE ELECTRIC CONTROL AND QUICK COUPLING VALVES IN GROUND COVER/SHRUB AREAS, 6" TO 12" AWAY FROM EDGE OF SIDEWALK FOR EASY ACCESS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE THEMSELVES WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, AND UTILITIES. THE CONTRACTOR SHALL EXERCISE EXTREME CARE AND BE RESPONSIBLE FOR ANY DAMAGE IN EXCAVATING AND WORKING NEAR EXISTING UTILITIES. THEY SHALL COORDINATE THEIR WORK FOR THE LOCATION OF UTILITIES AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, AND NEAR STRUCTURES. PRIOR TO CONSTRUCTION, CONTACT ALL APPLICABLE AGENCIES AND U.S.A. AT (800) 642-2444 TO FIELD LOCATE ALL EXISTING UTILITIES.
4. THE FINAL LOCATION OF THE CONTROLLER SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION.
5. THE CONTRACTOR SHALL FLUSH AND ADJUST ALL LINES, VALVES AND NOZZLES FOR OPTIMUM PERFORMANCE. ADJUST ALL NOZZLES TO ELIMINATE SPRAYING ONTO WALKS, STREETS, BUILDINGS, ETC.
6. FIELD ADJUSTMENTS MAY BE REQUIRED TO PROVIDE OPTIMUM OPERATING EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LANDSCAPE ARCHITECT TO REVIEW PROPOSED FIELD ADJUSTMENTS PRIOR TO INSTALLATION. IN THE EVENT THAT NO WRITTEN REQUEST IS RECEIVED BY THE LANDSCAPE ARCHITECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS.
7. SLEEVE ALL PRESSURE MAINLINE PIPE, LATERAL PIPE, AND CONTROL WIRES UNDER STREETS AND CONCRETE WALKWAYS WITH THE PROPER SIZE SCH 40 PVC AND DEPTH AS SPECIFIED.
8. INSTALL A COPPER TRACE WIRE FROM THE WATER METER TO THE BACKFLOW PREVENTER, BURIED IN THE SAME TRENCH AS THE PRESSURE SUPPLY LINE PIPING.
9. DO NOT WILLFULLY INSTALL THE SPRINKLER SYSTEM AS DIAGRAMMATICALLY SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN SITE DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN FORESEEN AND CONSIDERED IN THE ENGINEERING. THE CITY ENGINEER SHOULD BE INFORMED IN WRITING OF SUCH OBSTRUCTIONS AND DIFFERENCES, BUT IN THE EVENT THAT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS AND REPAIR WORK NECESSARY.
10. INSTALL ALL PIPE MATERIALS AND EQUIPMENT AS SHOWN IN THE CONSTRUCTION DETAILS. USE "TEFLON" TAPE ON ALL PVC MALE THREADS OF ALL SPRINKLER SWING JOINTS AND VALVE ASSEMBLIES EXCEPT MARLEX STYLED FITTINGS.
11. CONTRACTOR SHALL VERIFY OPERABILITY OF ALL EXISTING IRRIGATION SYSTEM SHOWN TO REMAIN.
12. FOR ADDITIONAL INFORMATION, SEE PROJECT DETAILS AND SPECIFICATIONS.
13. NO DISRUPTION OF THE EXISTING IRRIGATION SYSTEM'S WATERING WILL BE ALLOWED DURING CONSTRUCTION. ALL ADJACENT SYSTEM SHALL MAINTAIN AUTOMATIC PROGRAMMED WATERING SCHEDULES THROUGHOUT CONSTRUCTION. IF DISTRIBUTION OF AUTOMATIC IRRIGATION IS INEVITABLE, CONTRACTOR SHALL PROVIDE AND MAINTAIN SUPPLEMENTAL IRRIGATION FOR EXISTING TREES TO REMAIN THROUGHOUT CONSTRUCTION.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING & ADJUSTING ANY PORTIONS OF THE EXISTING ADJACENT IRRIGATION SYSTEMS DAMAGED DURING CONSTRUCTION OF THE IMPROVEMENTS IN THIS CONTRACT.



STA 27+50 FIRESTONE BLVD
SEE LEFT SHEET IP-2

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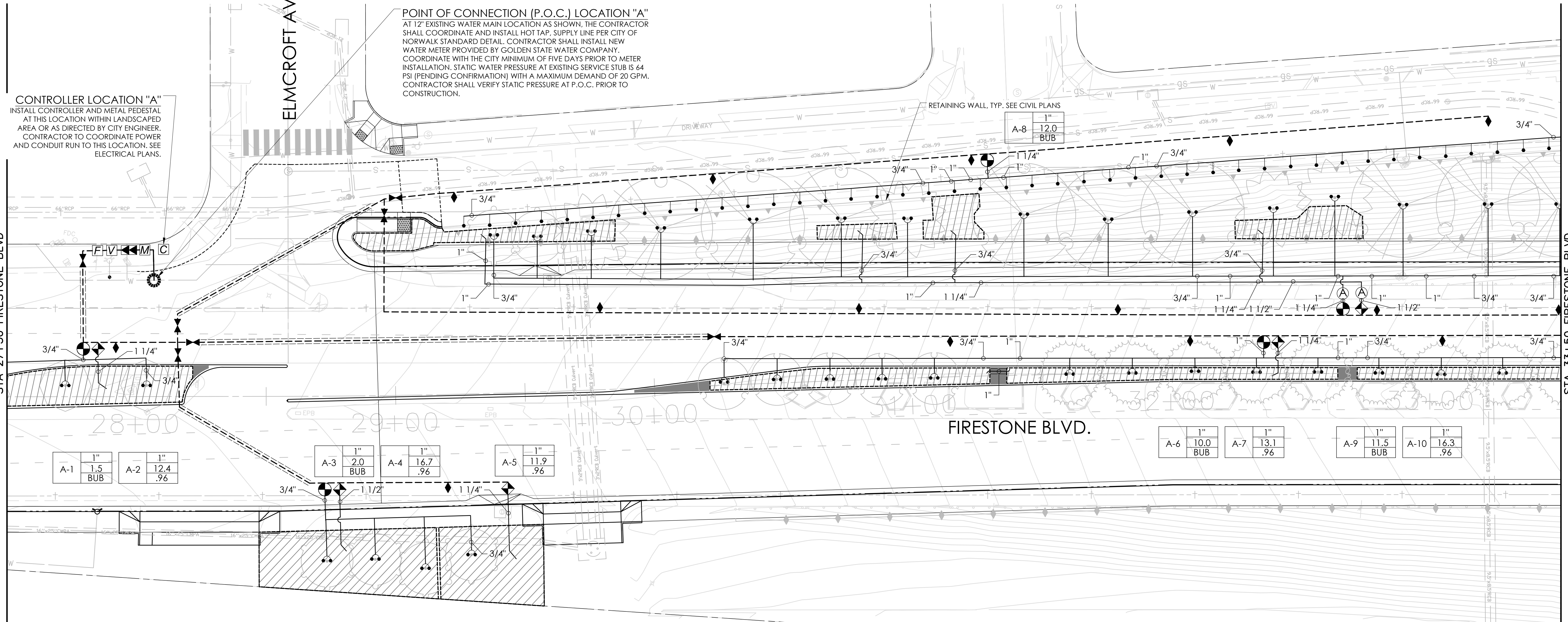
engineering division	CITY OF NORWALK	
REVISIONS	TITLE: IRRIGATION PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE BY	Approved	PROJECT NO. XXXX
FIELD BOOK REF.	CITY ENGINEER RCE 20568 DATE	DRAWING NO. IP-1
PLAN REF.	Recommended	SHEET 46 OF 75
	Drawn By B.O. Checked By C.W.	

POINT OF CONNECTION (P.O.C.) LOCATION "A"
 AT 12" EXISTING WATER MAIN LOCATION AS SHOWN, THE CONTRACTOR SHALL COORDINATE AND INSTALL HOT TAP, SUPPLY LINE PER CITY OF NORWALK STANDARD DETAIL. CONTRACTOR SHALL INSTALL NEW WATER METER PROVIDED BY GOLDEN STATE WATER COMPANY. COORDINATE WITH THE CITY MINIMUM OF FIVE DAYS PRIOR TO METER INSTALLATION. STATIC WATER PRESSURE AT EXISTING SERVICE STUB IS 64 PSI (PENDING CONFIRMATION) WITH A MAXIMUM DEMAND OF 20 GPM. CONTRACTOR SHALL VERIFY STATIC PRESSURE AT P.O.C. PRIOR TO CONSTRUCTION.

CONTROLLER LOCATION "A"
 INSTALL CONTROLLER AND METAL PEDESTAL AT THIS LOCATION WITHIN LANDSCAPED AREA OR AS DIRECTED BY CITY ENGINEER. CONTRACTOR TO COORDINATE POWER AND CONDUIT RUN TO THIS LOCATION. SEE ELECTRICAL PLANS.

SEE RIGHT SHEET IP-1
 STA 27+50 FIRESTONE BLVD

STA 33+50 FIRESTONE BLVD
 SEE LEFT SHEET IP-3



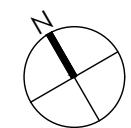
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	BUB	.96			

A-3	1"	2.0	A-4	1"	16.7
	BUB	.96			
A-5	1"	11.9			.96

A-6	1"	10.0	A-7	1"	13.1
	BUB	.96			.96

A-9	1"	11.5	A-10	1"	16.3
	BUB	.96			.96

1 1/2" — 3/4"

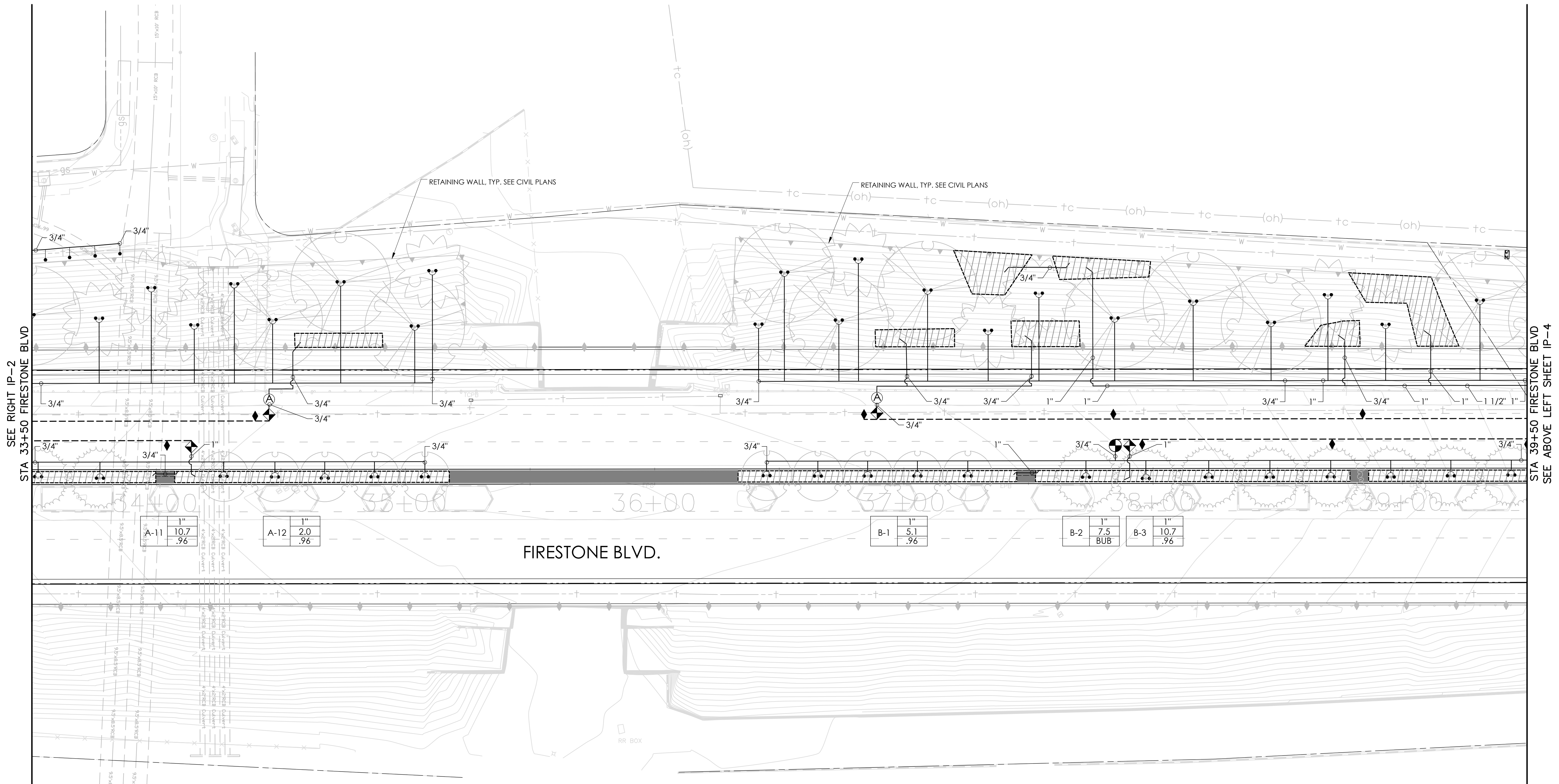


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engineering division	CITY OF NORWALK	
TITLE:	IRRIGATION PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE	BY	AS BUILT
FIELD BOOK REF.	DATE	DATE
PLAN REF.	DATE	DATE
Approved	CITY ENGINEER	RCE 20568 DATE
Recommended	DATE	DATE
PROJECT NO.	XXXX	
DRAWING NO.	IP-2	
SHEET	47	OF 75

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SEE RIGHT IP-2
STA 33+50 FIRESTONE BLVD

SEE ABOVE LEFT SHEET IP-4
STA 39+50 FIRESTONE BLVD

A-11	1"	10.7	.96
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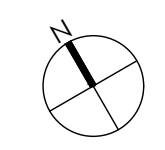
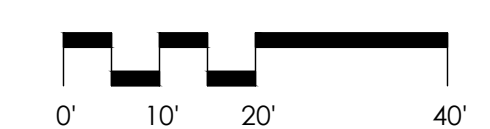
A-12	1"	2.0	.96
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B-1	1"	5.1	.96
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B-2	1"	7.5	BUB
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B-3	1"	10.7	.96
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FIRESTONE BLVD.

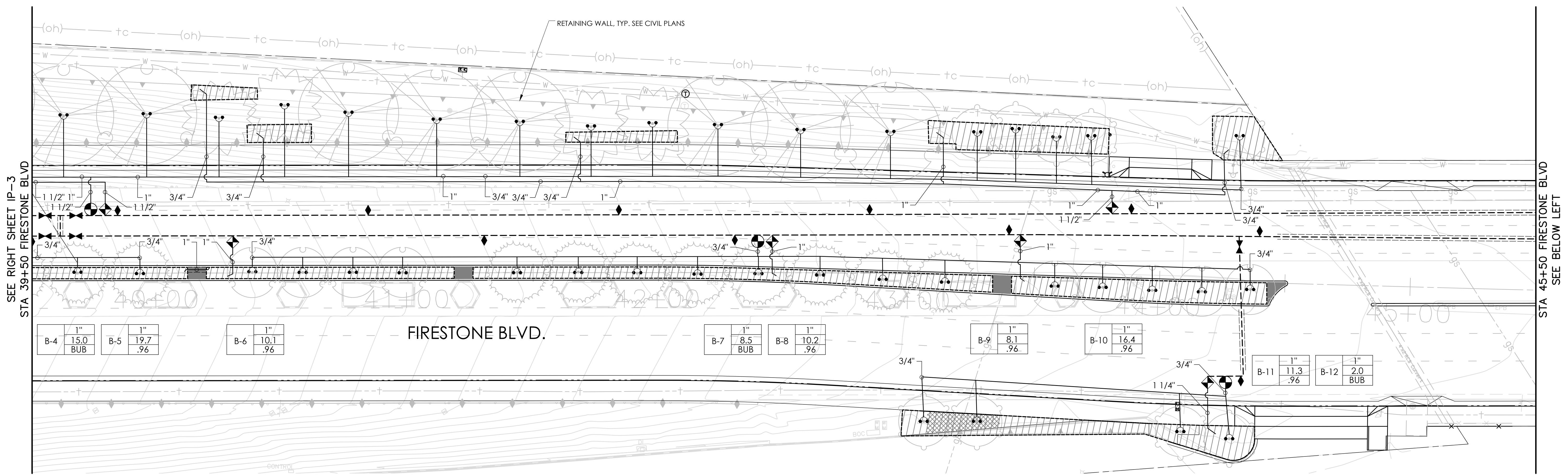


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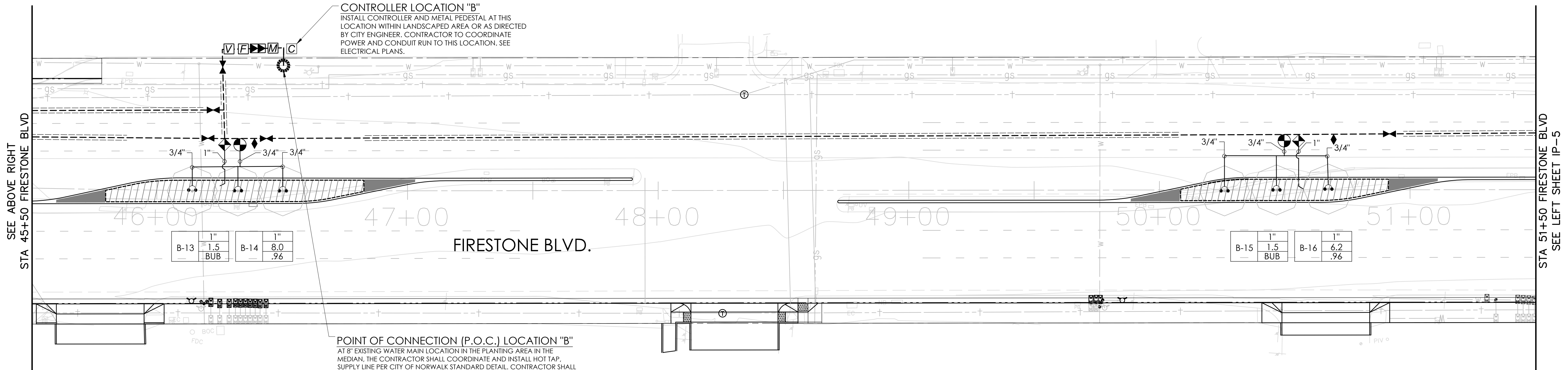
engineering division	CITY OF NORWALK	
TITLE:	IRRIGATION PLAN FIRESTONE BOULEVARD - PHASE 1	
DATE	BY	AS BUILT
FIELD BOOK REF.	DATE	
PLAN REF.	Drawn By <u>B.O.</u>	Checked By <u>C.W.</u>
PROJECT NO.	XXXX	
DRAWING NO.	IP-3	
SHEET	48 OF 75	

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SEE RIGHT SHEET IP-3
STA 39+50 FIRESTONE BLVD

STA 45+50 FIRESTONE BLVD
SEE BELOW LEFT



SEE ABOVE RIGHT
STA 45+50 FIRESTONE BLVD

STA 51+50 FIRESTONE BLVD
SEE LEFT SHEET IP-5

CONTROLLER LOCATION "B"
INSTALL CONTROLLER AND METAL PEDESTAL AT THIS LOCATION WITHIN LANDSCAPED AREA OR AS DIRECTED BY CITY ENGINEER. CONTRACTOR TO COORDINATE POWER AND CONDUIT RUN TO THIS LOCATION. SEE ELECTRICAL PLANS.

POINT OF CONNECTION (P.O.C.) LOCATION "B"
AT 8" EXISTING WATER MAIN LOCATION IN THE PLANTING AREA IN THE MEDIAN, THE CONTRACTOR SHALL COORDINATE AND INSTALL HOT TAP, SUPPLY LINE PER CITY OF NORWALK STANDARD DETAIL. CONTRACTOR SHALL INSTALL NEW WATER METER PROVIDED BY GOLDEN STATE WATER COMPANY. COORDINATE WITH THE CITY MINIMUM OF FIVE DAYS PRIOR TO METER INSTALLATION. STATIC WATER PRESSURE AT EXISTING SERVICE STUB IS 64 PSI (PENDING CONFIRMATION) WITH A MAXIMUM DEMAND OF 20 GPM. CONTRACTOR SHALL VERIFY STATIC PRESSURE AT P.O.C. PRIOR TO CONSTRUCTION.



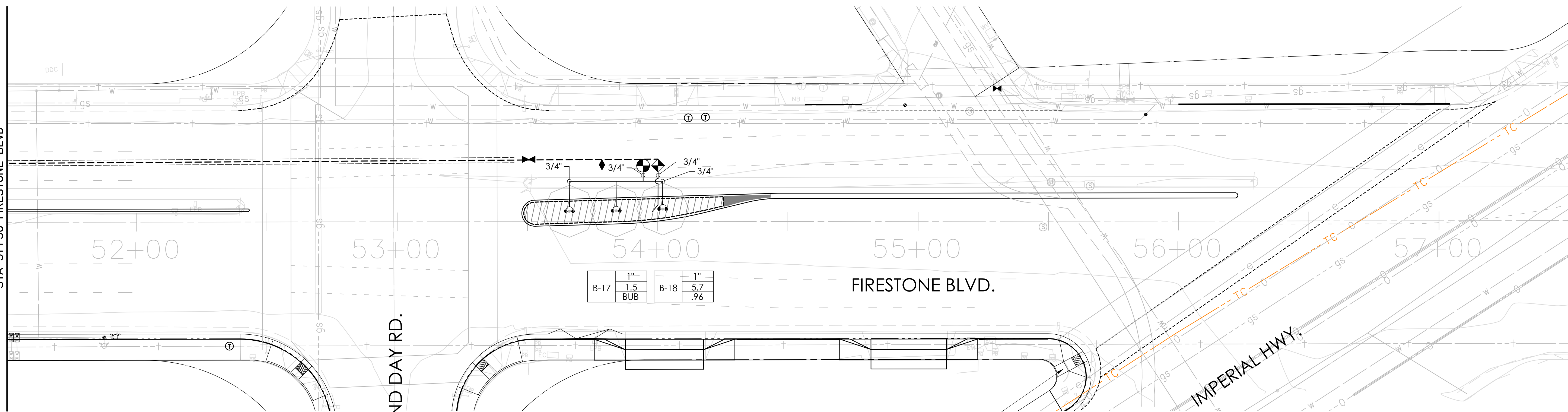
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engineering division		CITY OF NORWALK	
TITLES		IRRIGATION PLAN	
FIRESTONE BOULEVARD - PHASE 1		PROJECT NO. XXXX	
DATE	BY	CITY ENGINEER	RCE 20568 DATE
AS BUILT		DRAWING NO. IP-4	
FIELD BOOK REF.	DATE	Drawn By B.O.	Checked By C.W.
PLAN REF.	DATE	SHEET 49 OF 75	

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SEE BELOW RIGHT SHEET IP-4
STA 51+50 FIRESTONE BLVD



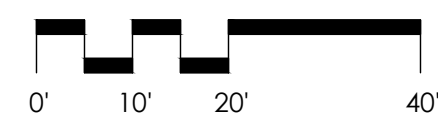
ORR AND DAY RD.

FIRESTONE BLVD.

IMPERIAL HWY.

CONTRACTOR SHALL REPLACE IRRIGATION HEADS AND ANY EXISTING IRRIGATION EQUIPMENTS REMOVED OR DAMAGED AS A DIRECT RESULT OF THIS CONTRACT. CONNECT IRRIGATION EQUIPMENT TO EXISTING LATERAL LINES AND ENSURE OPERABILITY AFTER SIDEWALK AND RETAINING WALL INSTALLATION. ALL LAYOUT SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK. IRRIGATION SYSTEM LAYOUT IN THIS AREA SHALL BE ADJUSTED AS REQUIRED IN FIELD TO PROVIDE PROPER COVERAGE. REPLACEMENTS SHALL MATCH OR BE COMPATIBLE WITH EXISTING IRRIGATION SYSTEM.

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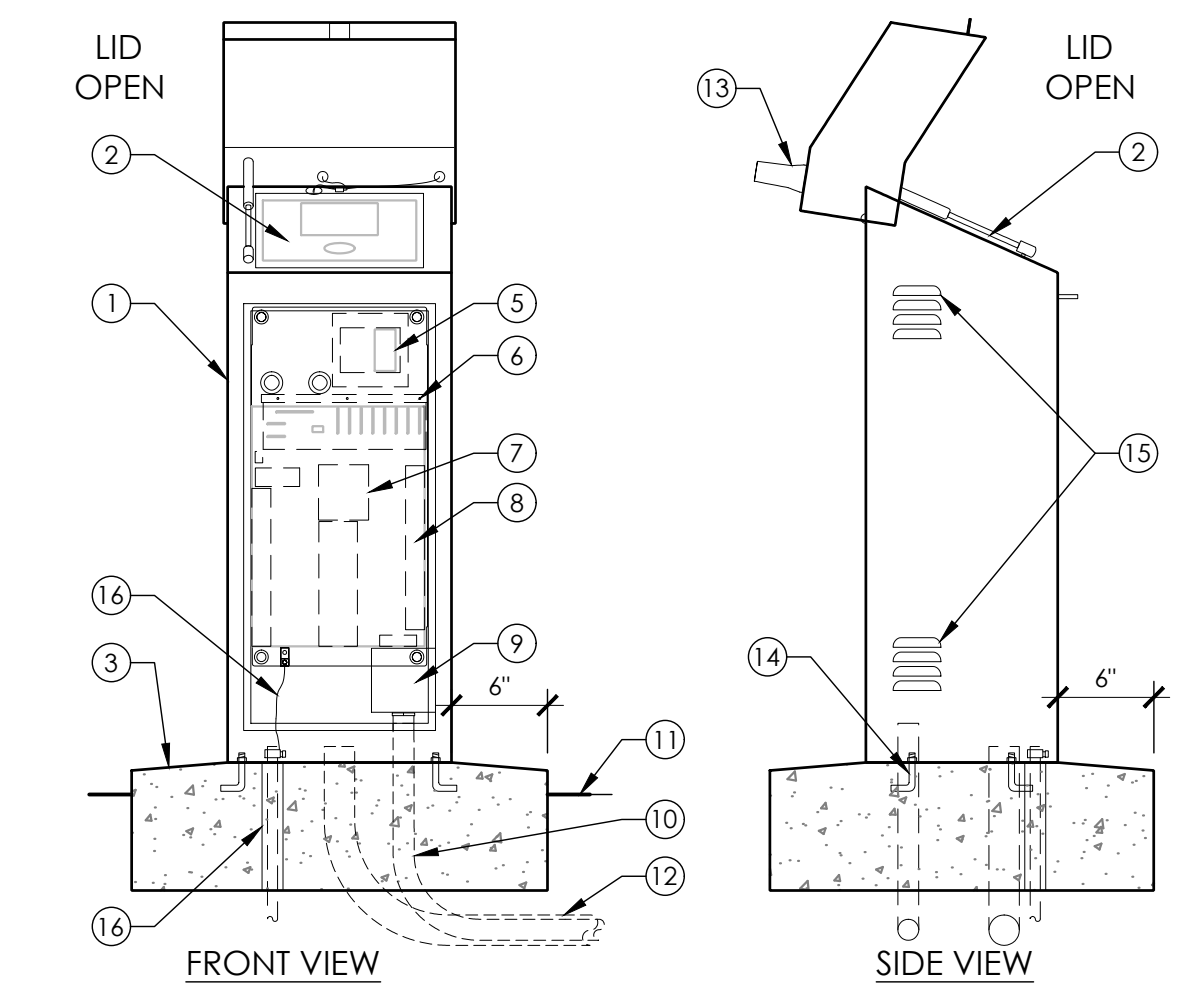
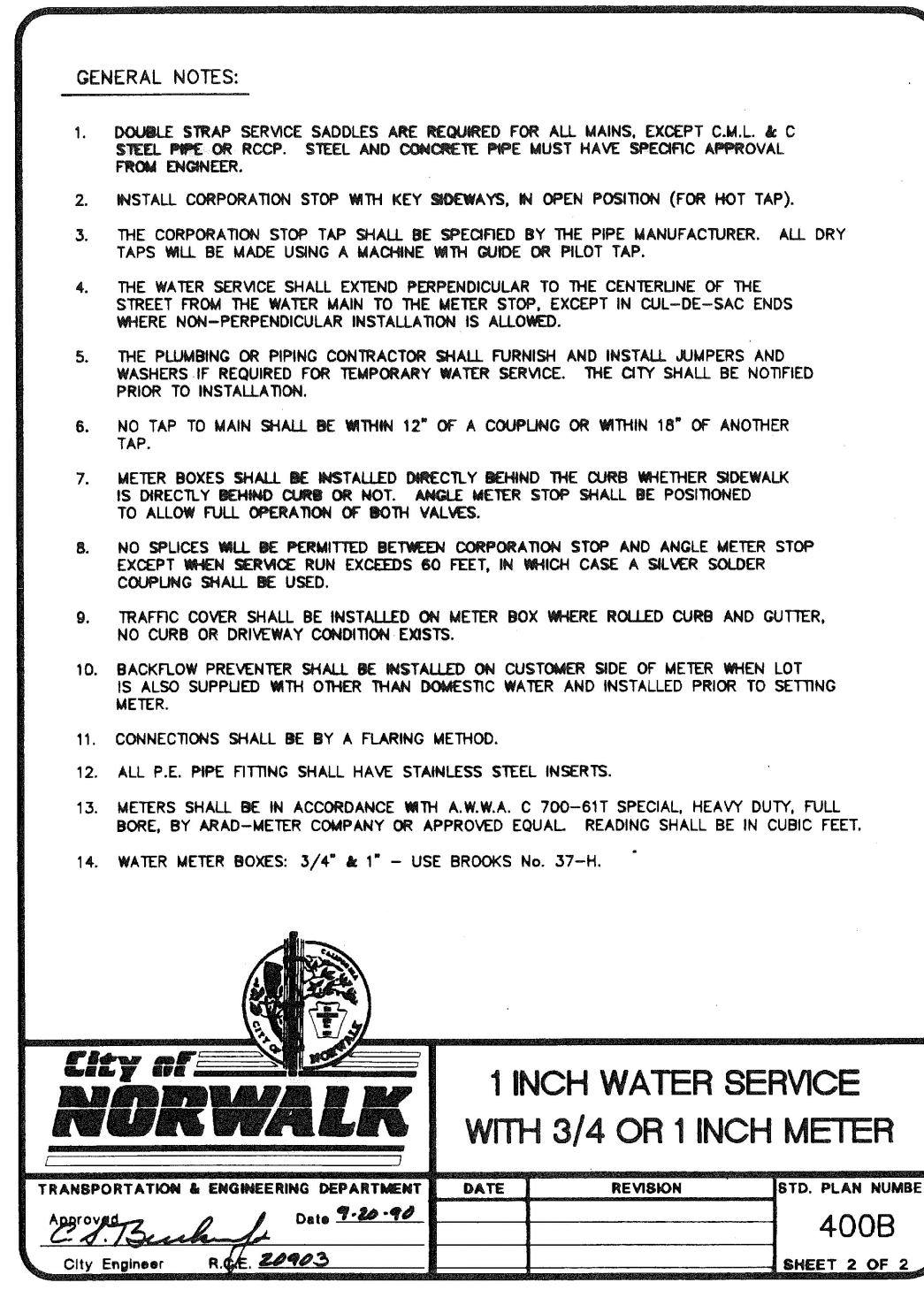
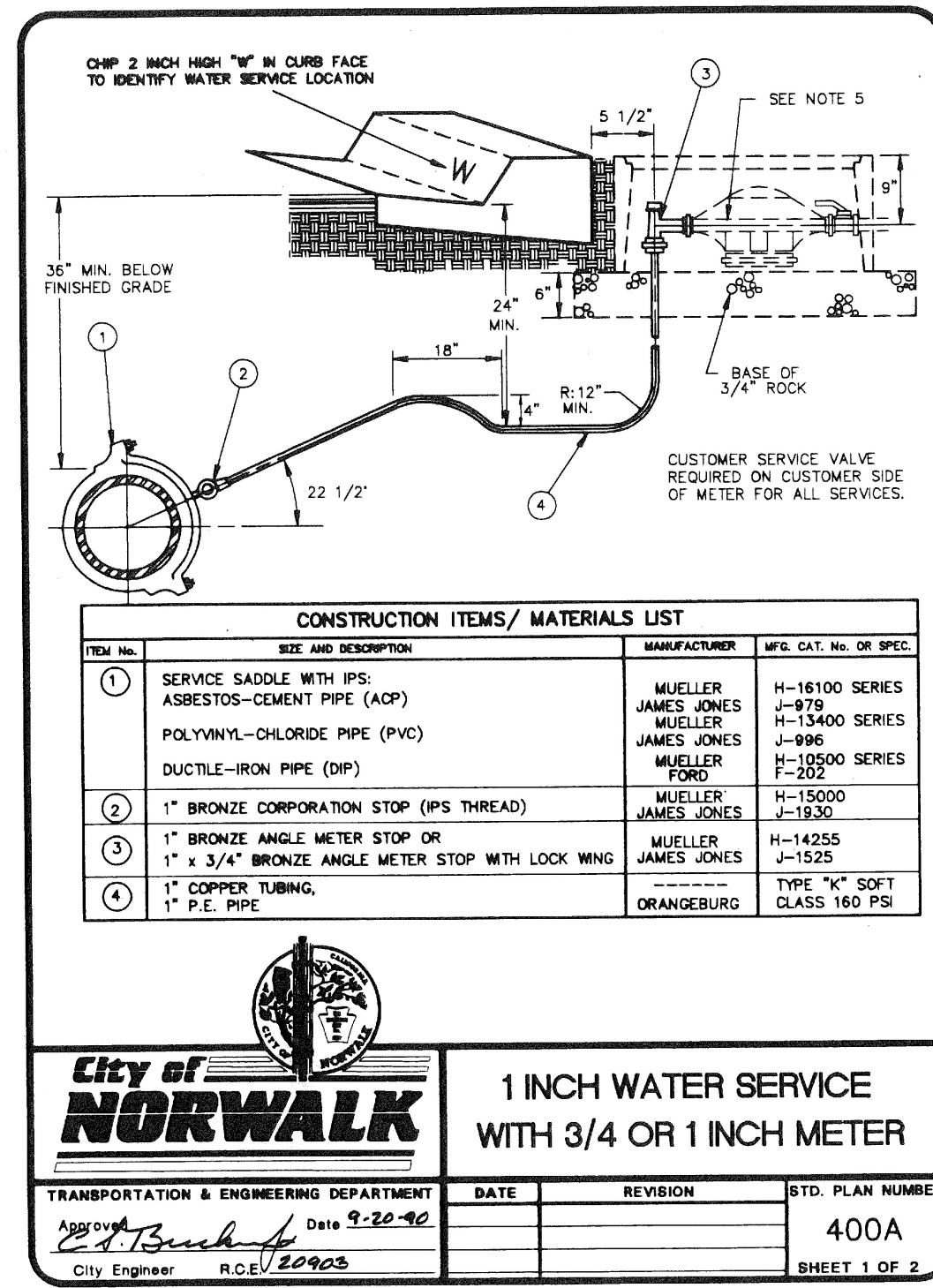


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engineering division	CITY OF NORWALK	
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Approved	CITY ENGINEER	RCE 20568 DATE
Recommended	DATE	PROJECT NO. XXXX
Drawn By B.O.	Checked By C.W.	DRAWING NO. IP-5
		SHEET 50 OF 75

REVISIONS		
DATE	BY	
		AS BUILT
FIELD BOOK REF.		
PLAN REF.		



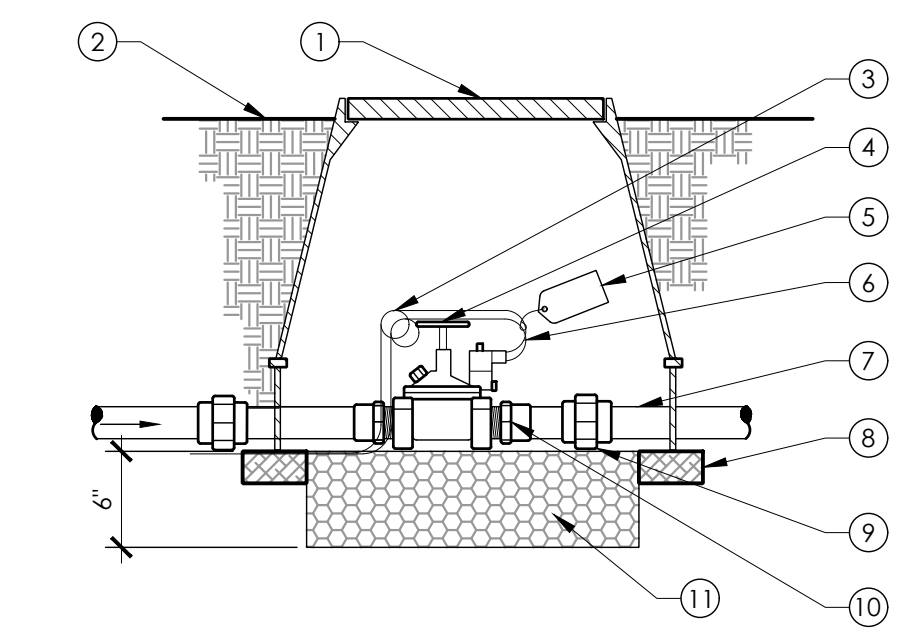
- KEY:**
- 1 STAINLESS STEEL ENCLOSURE
 - 2 SECURE IRRIGATION CONTROLLER TO A VANDAL RESISTANT ENCLOSURE AND SECURE ENCLOSURE TO A CONCRETE PAD. SEE IRRIGATION LEGEND FOR MANUFACTURER AND MODEL NUMBER OF CONTROLLER AND ENCLOSURE.
 - 3 CONCRETE PAD - INSTALL ABOVE GRADE, AND SLOPE TOP TO DRAIN AT A MINIMUM OF 2% WITH A 6-INCH MINIMUM THICKNESS.
 - 4 PVC SLEEVE WITH 3/8" COPPER GROUND ROD INSIDE
 - 5 GFI OUTLET & SWITCH
 - 6 PLASTIC SHIELD FOR STATION/OPTION CARDS
 - 7 OPTIONAL TWO-WIRE TERMINAL
 - 8 CONVENTIONAL WIRED STATION AND OPTION TERMINALS
 - 9 120 VAC JUNCTION BOX (INCLUDED WITH ENCLOSURE)
 - 10 SCH 40 PVC ELECTRICAL SWEEP FOR 120 VAC POWER
 - 11 FINISHED GRADE
 - 12 SCH 40 PVC ELECTRICAL SWEEP FOR FIELD WIRES, EXTEND 6" BEYOND EDGE OF CONCRETE PAD.
 - 13 OPTIONAL STUBBY ANTENNA(S)
 - 14 MOUNTING J-BOLT (4 TYP)
 - 15 LOUVERED VENTS
 - 16 #6 BARE COPPER GROUND WIRE
- NOTES:**
1. ALLOW MINIMUM OF 7 1/2" OF CLEARANCE BEHIND ENCLOSURE FOR FULLY OPENED LID
 2. 120 VAC POWER AND GROUNDING PER NATIONAL AND LOCAL ELECTRICAL CODES.
 3. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

1 WATER TAP AND METER
ID-1 CITY OF NORWALK STANDARD DETAILS

2 IRRIGATION CONTROLLER - TOP OPENING
ID-1

N.T.S.

N.T.S.

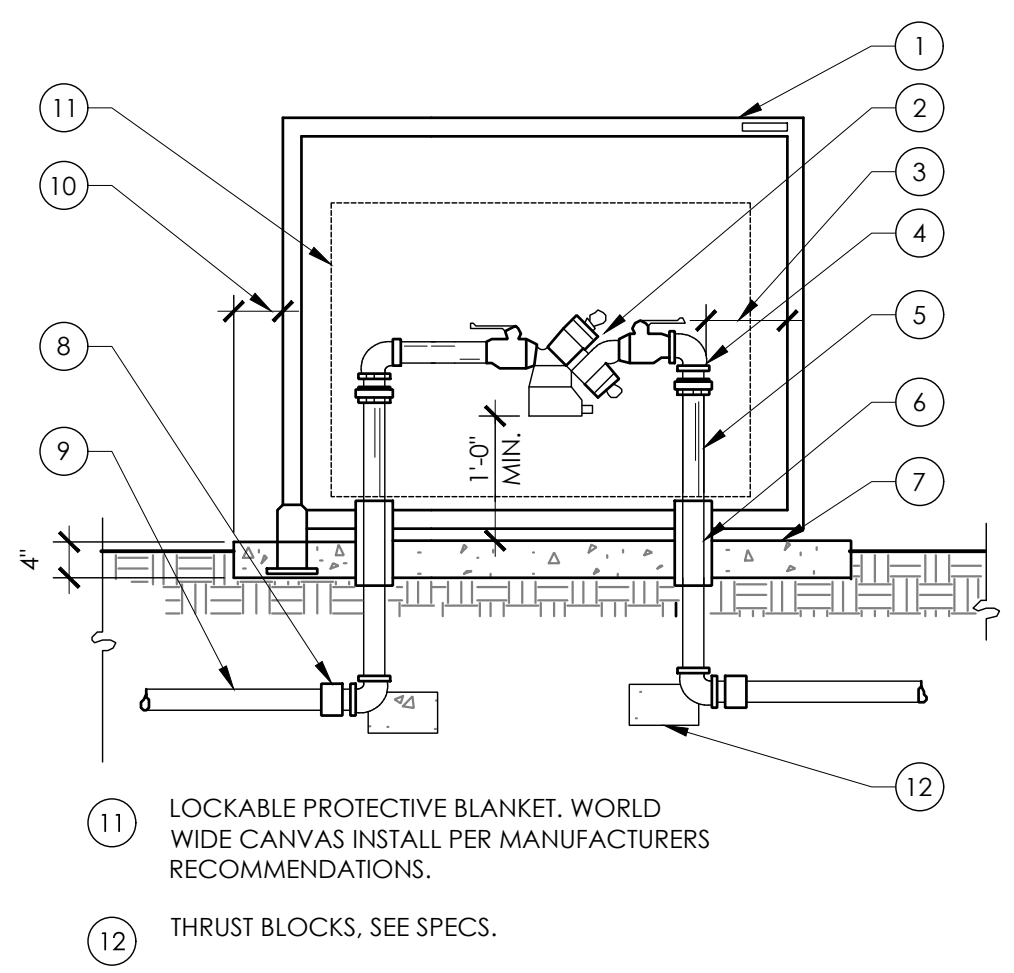


- KEY:**
- 1 VALVE BOX WITH BOLT DOWN COVER AND BOX EXTENSION IF REQUIRED. REFER TO SPECIFICATIONS.
 - 2 FLUSH IN PAVED AREAS, 2" IN PLANTING BEDS.
 - 3 PIG TAIL EXPANSION LOOP, MINIMUM 18".
 - 4 ELECTRIC CONTROL VALVE
 - 5 VALVE IDENTIFICATION TAG.
 - 6 CONTROL AND COMMON WIRES
 - 7 LATERAL LINE, ANGLE TO 12" MINIMUM DEPTH AS REQUIRED.
 - 8 STANDARD BRICK, TYP. FOUR (4) PLACES.
 - 9 SCH 80 PVC UNION DOWNSTREAM OF VALVE
 - 10 SCH 40 PVC MALE ADAPTER, TYP. TWO (2) PLACES.
 - 11 3/4" DIAMETER DRAIN ROCK BELOW VALVE.

- NOTES:**
1. INSTALL VALVES A MINIMUM OF 12" FROM STRUCTURES OR HARDSCAPING.
 2. INSTALL VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
 3. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
 4. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPE.
 5. PLACE 3/4" DIAMETER DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
 6. BALL VALVE AND FITTINGS SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
 7. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

3 MASTER VALVE
ID-1

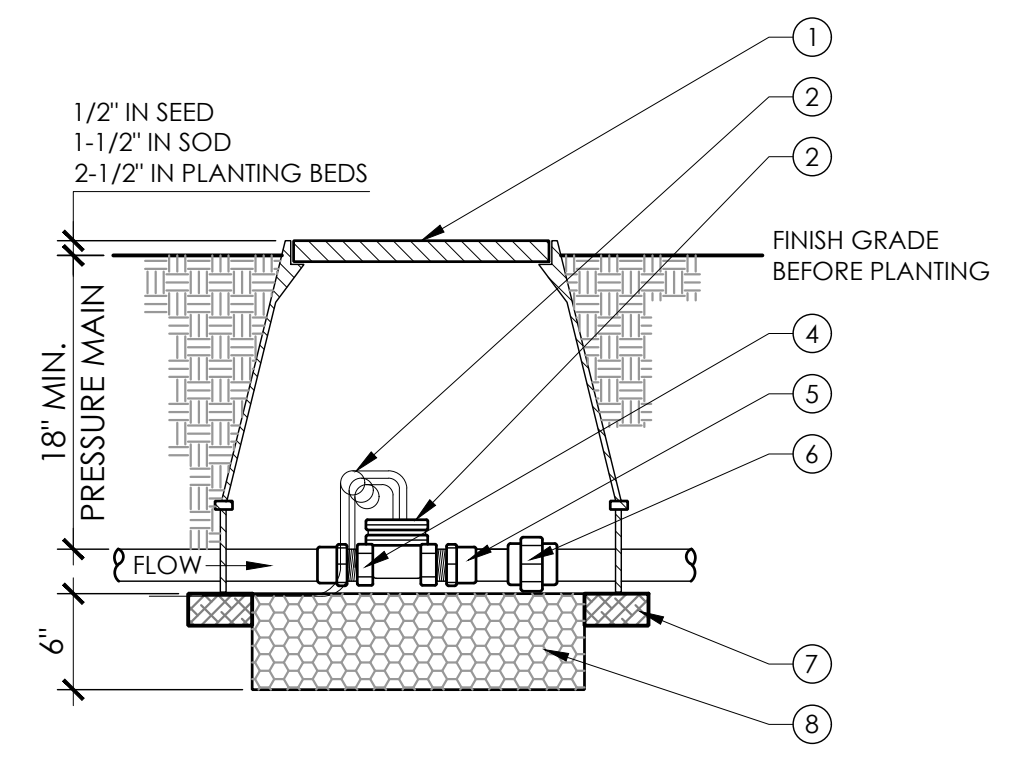
N.T.S.



- KEY:**
- 1 BACKFLOW PREVENTER ENCLOSURE STRONG BOX, SIZE AS REQUIRED. SECURE WITH PRESET ANCHOR BOLTS.
 - 2 REDUCED PRESSURE BACKFLOW DEVICE.
 - 3 MINIMUM 6" CLEARANCE ALL AROUND
 - 4 BRASS FITTINGS, TYP.
 - 5 RISER, COPPER TYPE "K", TYP.
 - 6 PVC SLEEVE
 - 7 4" CONCRETE SLAB, LIGHT WASHED FINISH AND TOOLED EDGES.
 - 8 MALE ADAPTER, SCH. 40 GALVANIZED
 - 9 MAINLINE, TYP.
 - 10 4" CLEARANCE ALL AROUND
 - 11 LOCKABLE PROTECTIVE BLANKET, WORLD WIDE CANVAS INSTALL PER MANUFACTURERS RECOMMENDATIONS.
 - 12 THRUST BLOCKS, SEE SPECS.

4 BACKFLOW PREVENTER AND ENCLOSURE
ID-1

N.T.S.



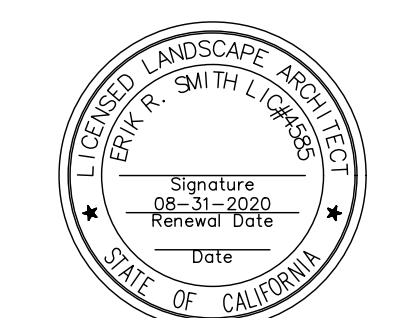
- KEY:**
- 1 PLASTIC VALVE BOX AND BOLT DOWN COVER, AND BOX EXTENSION IS REQUIRED. REFER TO SPECIFICATIONS.
 - 2 PIG TAIL EXPANSION LOOP, 18" MINIMUM.
 - 3 FLOW SENSOR USE WITH PULSE PUTPUT TRANSMITTER OR FLOW MONITOR. SEE IRRIGATION LEGEND AND SPECIFICATIONS.
 - 4 COMMUNICATIONS CABLE, RETURN TO CONTROLLER WITHIN 1" GRAY SCHEDULE 40 PVS CONDUIT.
 - 5 SCH 40 PVC MALE ADAPTOR, TYP. TWO (2) PLACES.
 - 6 SCH 80 PVC UNION DOWNSTREAM OF VALVE.
 - 7 BRICK, TYP. THREE (3) PLACES.
 - 8 3/4" DIAMETER DRAIN ROCK BELOW VALVES.

- NOTES:**
1. REDUCE BENDS, FITTINGS, ETC., FOR DISTANCE EQUAL TO 10X DIAMETER OF PIPE. SIMILAR ON BOTH SIDES OF SENSOR.
 2. INSTALL FLOW SENSOR A MINIMUM OF 12" FROM STRUCTURES OF HARDSCAPING.
 3. INSTALL FLOW SENSOR IN PLANTING BEDS WHEREVER POSSIBLE.
 4. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
 5. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPE.
 6. PLACE 3/4" DIAMETER DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
 7. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

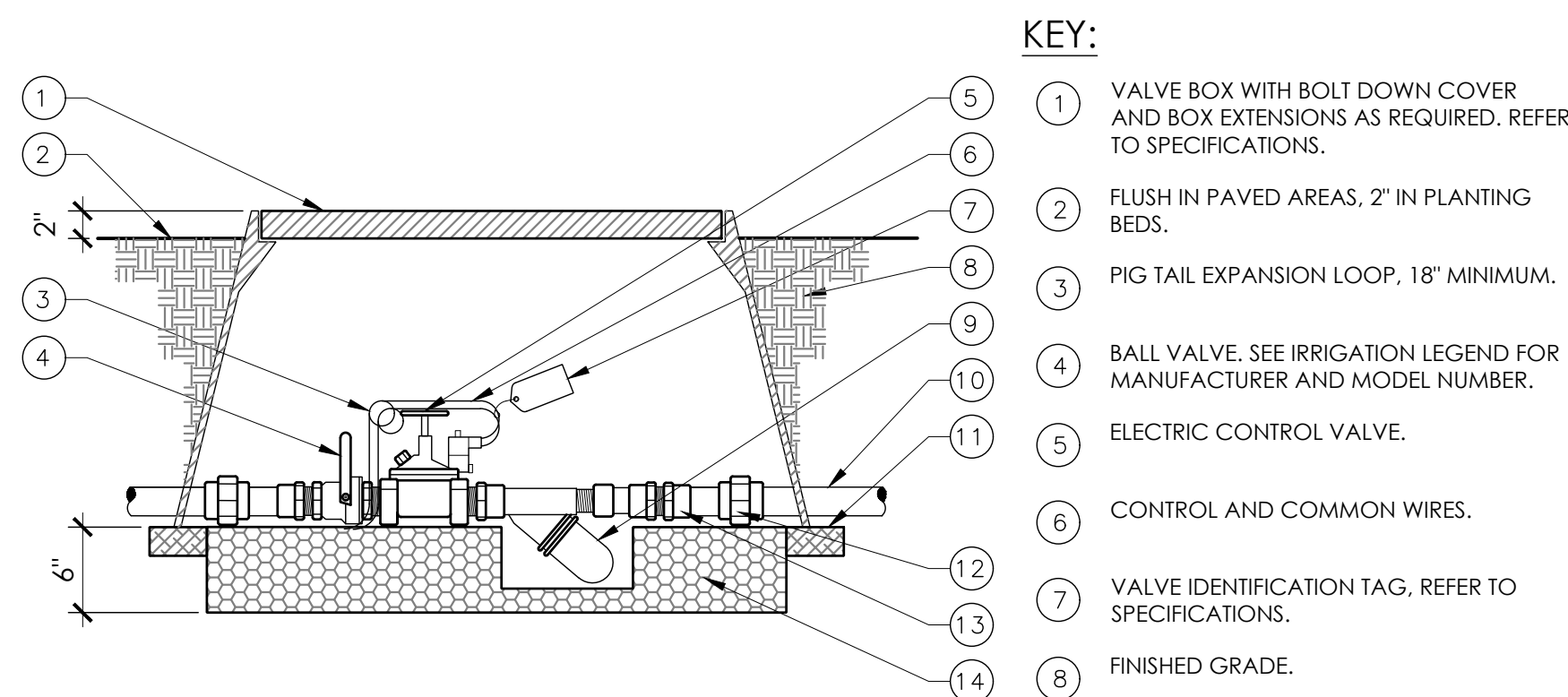
5 FLOW METER
ID-1

N.T.S.

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DATE	BY	FIRESTONE BOULEVARD - PHASE 1	
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FIELD BOOK REF.	AS BUILT	DRAWING NO. ID-1	
PLAN REF.		DATE	
		Drawn By B.O.	Checked By C.W.
		SHEET 51 OF 75	



KEY:

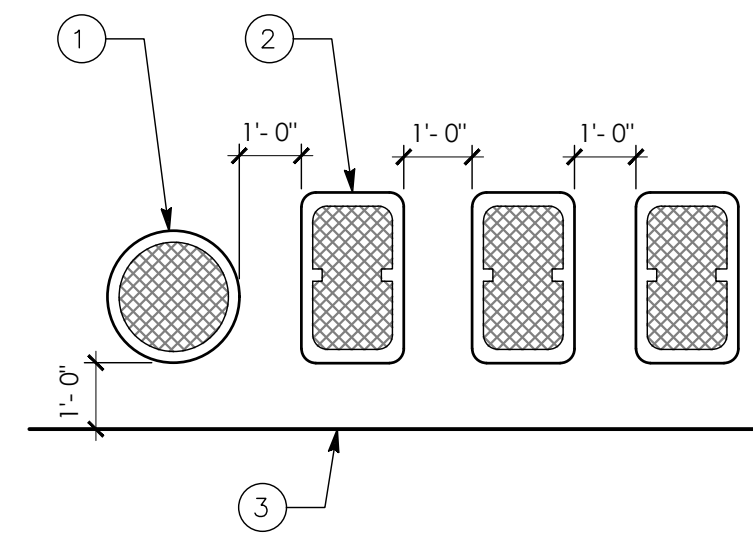
- 1 VALVE BOX WITH BOLT DOWN COVER AND BOX EXTENSIONS AS REQUIRED. REFER TO SPECIFICATIONS.
- 2 FLUSH IN PAVED AREAS, 2" IN PLANTING BEDS.
- 3 PIG TAIL EXPANSION LOOP, 18" MINIMUM.
- 4 BALL VALVE, SEE IRRIGATION LEGEND FOR MANUFACTURER AND MODEL NUMBER.
- 5 ELECTRIC CONTROL VALVE.
- 6 CONTROL AND COMMON WIRES.
- 7 VALVE IDENTIFICATION TAG, REFER TO SPECIFICATIONS.
- 8 FINISHED GRADE.
- 9 DRIP FILTER.
- 10 LATERAL LINE, ANGLE TO 12° MINIMUM DEPTH AS REQUIRED.
- 11 STANDARD BRICK, TYP. FOUR (4).
- 12 SCH 80 PVC UNION DOWNSTREAM OF VALVE.
- 13 SCH 40 PVC ADAPTER, TYP.
- 14 3/4" DIAMETER DRAIN ROCK BELOW VALVE.

NOTES:

- 1. INSTALL VALVES A MINIMUM OF 1'-0" FROM STRUCTURES OR HARDSCAPING.
- 2. INSTALL VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
- 3. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
- 4. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPING.
- 5. PLACE DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
- 6. BALL VALVE & FITTINGS SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
- 7. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

1 DRIP REMOTE CONTROL VALVE ASSEMBLY

ID-2



KEY:

- 1 CIRCULAR VALVE BOX.
- 2 JUMBO RECTANGULAR VALVE BOX.
- 3 EDGE OF PLANTER.

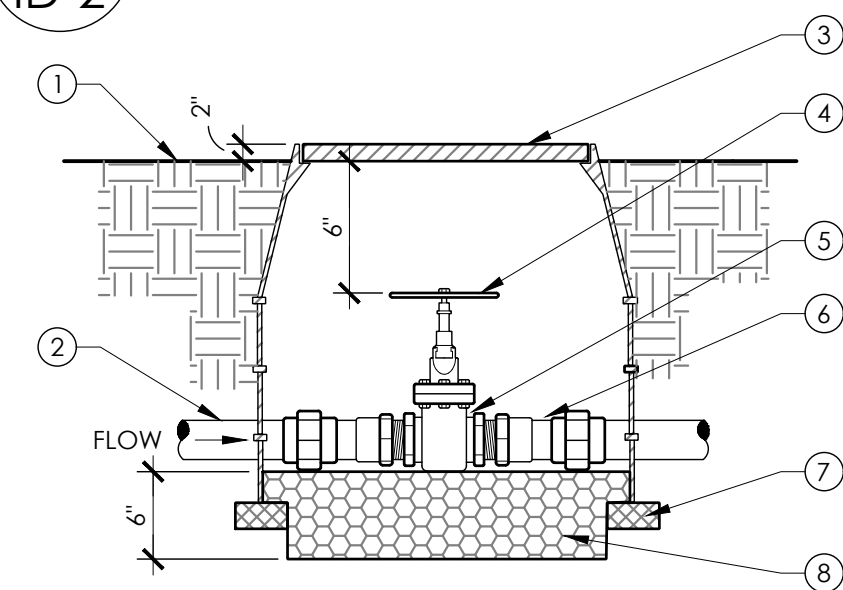
NOTES:

- 1. CENTER VALVE BOX OVER VALVE.
- 2. PLACE REMOTE CONTROL VALVE ASSEMBLY SHRUB/GROUNDCOVER AREA WHENEVER POSSIBLE. INSTALL IN TURF AREA ONLY IF SHRUB/GROUNDCOVER AREA DOES NOT EXIST ADJACENT TO LAWN NOTES
- 3. SET VALVE BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE OF PLANTER. SET ALL GROUPINGS OF VALVE BOXES LEVEL WITH EACH OTHER OR AT THE SAME HEIGHT ABOVE GRADE.

4 VALVE BOX LAYOUT

ID-2

N.T.S.



KEY:

- 1 FINISH GRADE.
- 2 MAINLINE.
- 3 VALVE BOX AND LOCKING COVER, W/ BOX EXTENSIONS AS REQUIRED. SEE SPECS.
- 4 GATE VALVE, SEE IRRIGATION LEGEND.
- 5 SCH 40 PVC MALE ADAPTOR, FIPTXSLIP, TYP. (2) PLACES.
- 6 SCH 80 PVC UNION DOWNSTREAM OF VALVE.
- 7 BRICK, TYP. THREE (3) PLACES.
- 8 3/4" DIA. DRAIN ROCK (NOT TO EXCEED BOTTOM OF VALVE).

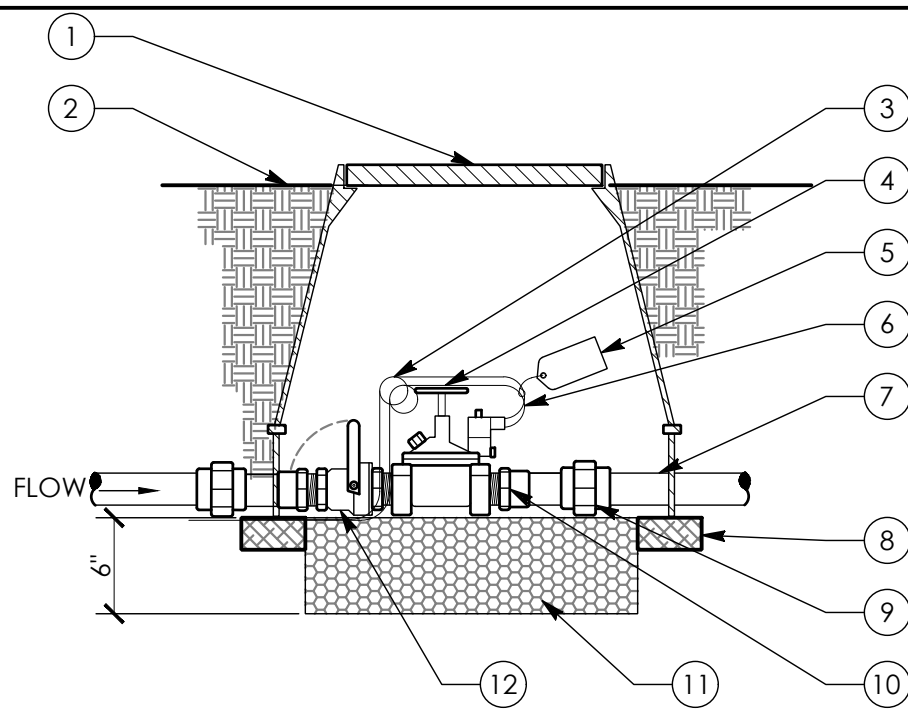
NOTES:

- 1. INSTALL GATE VALVES A MINIMUM OF 12" FROM STRUCTURES OR HARDSCAPING.
- 2. INSTALL GATE VALVES IN PLANTING AREAS WHEREVER POSSIBLE.
- 3. USE TEFLON TAPE ON ALL THREADED FITTINGS.
- 4. PLACE 3/4" DIAMETER DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
- 5. FINISH GRADE BEFORE PLANTING.
- 6. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

7 GATE VALVE ASSEMBLY

ID-2

N.T.S.



KEY:

- 1 VALVE BOX WITH BOLT DOWN COVER AND BOX EXTENSION IF REQUIRED. REFER TO SPECIFICATIONS.
- 2 FLUSH IN PAVED AREAS, 2" IN PLANTING BEDS.
- 3 PIG TAIL EXPANSION LOOP, MINIMUM 18".
- 4 ELECTRIC CONTROL VALVE.
- 5 VALVE IDENTIFICATION TAG.
- 6 CONTROL AND COMMON WIRES
- 7 LATERAL LINE, ANGLE TO 12° MINIMUM DEPTH AS REQUIRED.
- 8 STANDARD BRICK, TYP. FOUR (4) PLACES.
- 9 SCH 80 PVC UNION DOWNSTREAM OF VALVE.
- 10 SCH 40 PVC MALE ADAPTER, TYP. TWO (2) PLACES.
- 11 3/4" DIAMETER DRAIN ROCK BELOW VALVE.
- 12 BALL VALVE, SEE IRRIGATION LEGEND FOR MANUFACTURER AND MODEL NUMBER.

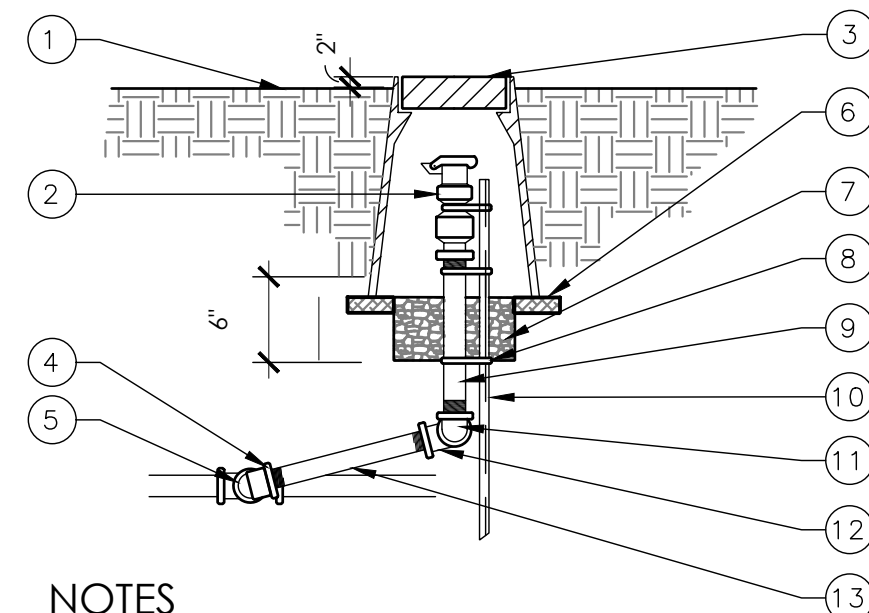
NOTES:

- 1. INSTALL VALVES A MINIMUM OF 12" FROM STRUCTURES OR HARDSCAPING.
- 2. INSTALL VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
- 3. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
- 4. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPE.
- 5. PLACE 3/4" DIAMETER DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
- 6. BALL VALVE AND FITTINGS SHALL BE LINE SIZE UNLESS NOTED OTHERWISE.
- 7. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

2 REMOTE CONTROL VALVE

ID-2

N.T.S.



KEY:

- 1 FINISH GRADE.
- 2 QUICK COUPLING VALVE, SEE IRRIGATION LEGEND.
- 3 VALVE BOX, AND LOCKING COVER, SEE SPECIFICATIONS.
- 4 SCH. 40 PVC 90° ELL (FIPTXMIPT).
- 5 SCH 40 PVC TEE (SLIPXSLIPFIPT).
- 6 BRICK TYP. (3) PLACES.
- 7 3/4" DRAIN ROCK.
- 8 STAINLESS STEEL SCREW CLAMP, MINIMUM (3) PLACES.
- 9 SCH 80 PVC THREADED NIPPLE, 12" LONG.TEXT
- 10 SCH 40 PVC 90° ELL (FIPTXMIPT).
- 11 SCH 40 PVC 90° ELL (FIPTXFIPT).
- 12 SCH 80 PVC THREADED NIPPLE (12" LONG).

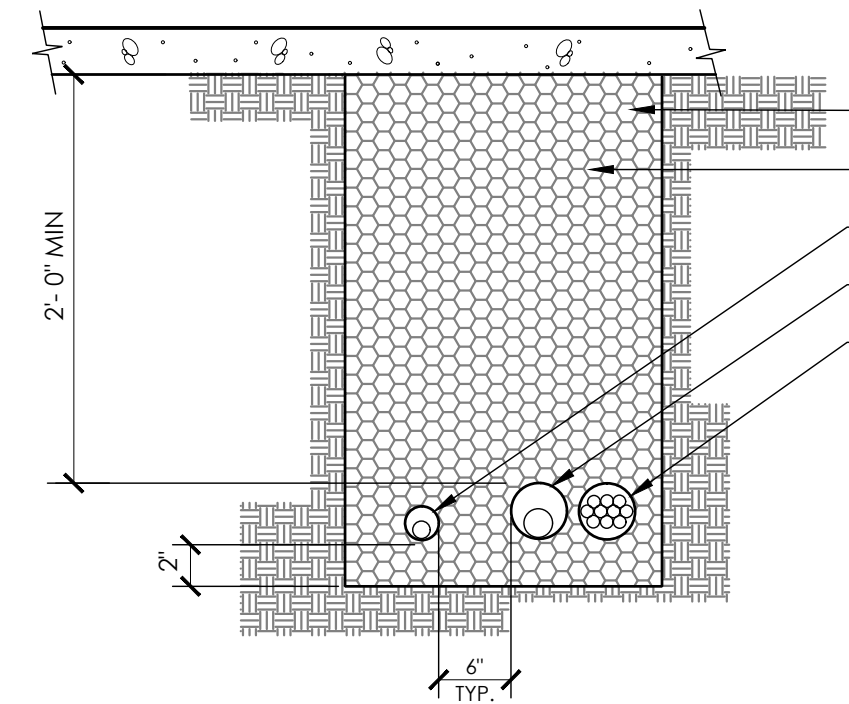
NOTES

- 1. INSTALL QUICK COUPLING VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
- 2. PLACE 3/4" DIAMETER DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
- 3. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.
- 4. SIZE OF ASSEMBLY TO BE EQUAL TO THE FIPT OF THE QUICK COUPLER.

5 QUICK COUPLER

ID-2

N.T.S.



KEY:

- 1 FINISH GRADE OF ASPHALT PAVING, CONCRETE OR OTHER IMPERVIOUS MATERIALS. SEE CIVIL PLANS.
- 2 CLEAN BACKFILL - 95% COMPACTION UNDER PAVING, SEE SPECS.
- 3 LATERAL LINE SLEEVE, UNDER PAVING (TWICE THE DIA. OF LATERAL LINE).
- 4 MAINLINE SLEEVE, UNDER PAVING (TWICE THE DIA. OF MAINLINE).
- 5 CONTROL WIRE CONDUIT UNDER PAVING, SIZE AS REQUIRED, INSTALL ADJACENT TO MAINLINE.

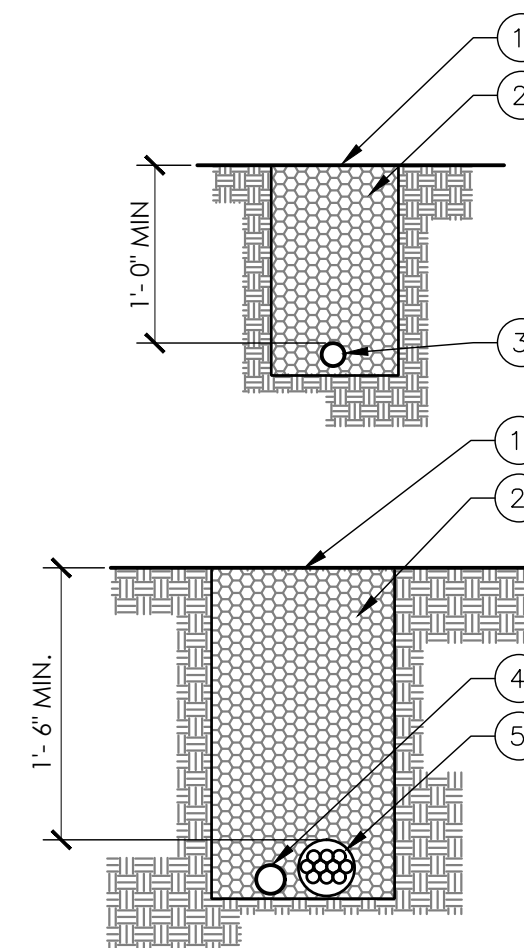
NOTES:

- 1. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

3 PIPE TRENCHING UNDER PAVING

ID-2

N.T.S.



KEY:

- 1 FINISH GRADE.
- 2 CLEAN BACKFILL COMPACTED TO 85%. SEE SPECIFICATIONS.
- 3 LATERAL LINE.
- 4 MAINLINE.
- 5 CONTROL WIRE ADJACENT MAINLINE. SEE SPECIFICATIONS.

NOTES:

- 1. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

6 PIPE TRENCHING UNDER PLANTER AREA

ID-2

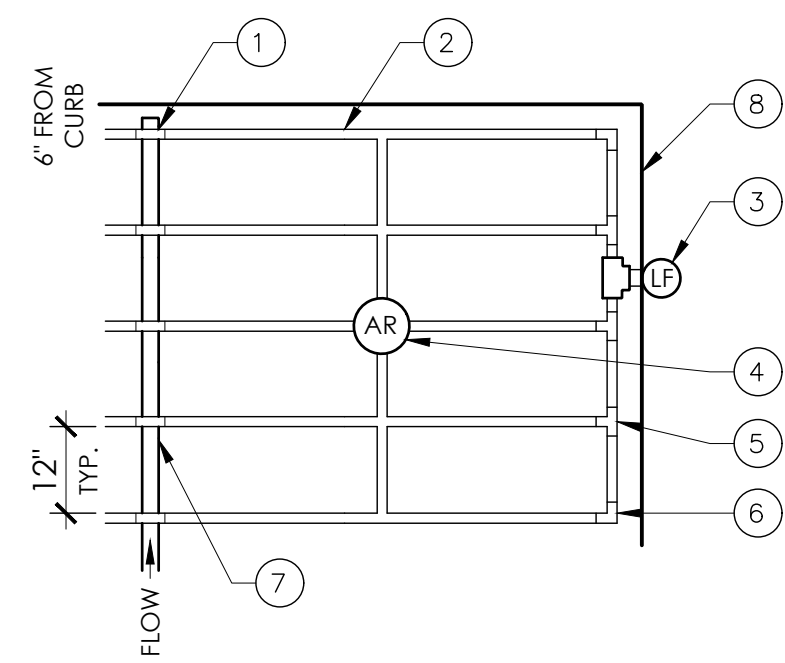
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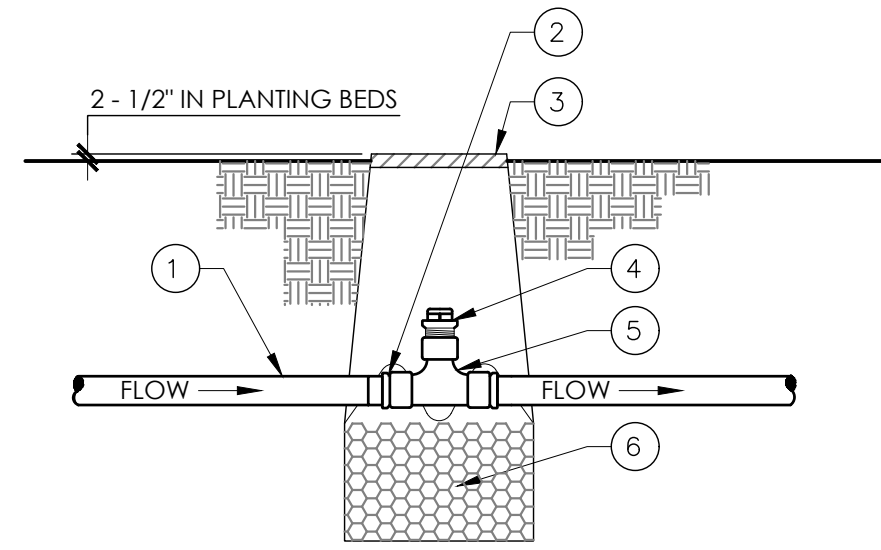
engineering division		CITY OF NORWALK	
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FIELD BOOK REF.		DRAWING NO. ID-2	
PLAN REF.		DATE	
		Drawn By B.O.	Checked By C.W.
		SHEET 52 OF 75	



- KEY:**
- ① PVC TO DRIP LINE CONNECTION POINT (CENTER FEED SHOWN).
 - ② DRIP LINE (BURIED 4") WITH EMITTERS. SEE LEGEND.
 - ③ AUTOMATIC FLUSH VALVE, TYP.
 - ④ AIR RELIEF VALVE AT HIGHEST POINT.
 - ⑤ BARBED TEE, TYP.
 - ⑥ BARBED ELL, TYP.
 - ⑦ PVC LATERAL.
 - ⑧ PERIMETER/EDGE OF PLANTING AREA.

NOTES:

1. SPACING BETWEEN ROWS VARIES IN SLOPED CONDITIONS. REFER TO DRIP NOTES.
2. LOCATE AN AIR-RELIEF VALVE AT THE HIGH POINT OF EACH SYSTEM WITHIN A PLASTIC BOX.
3. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.

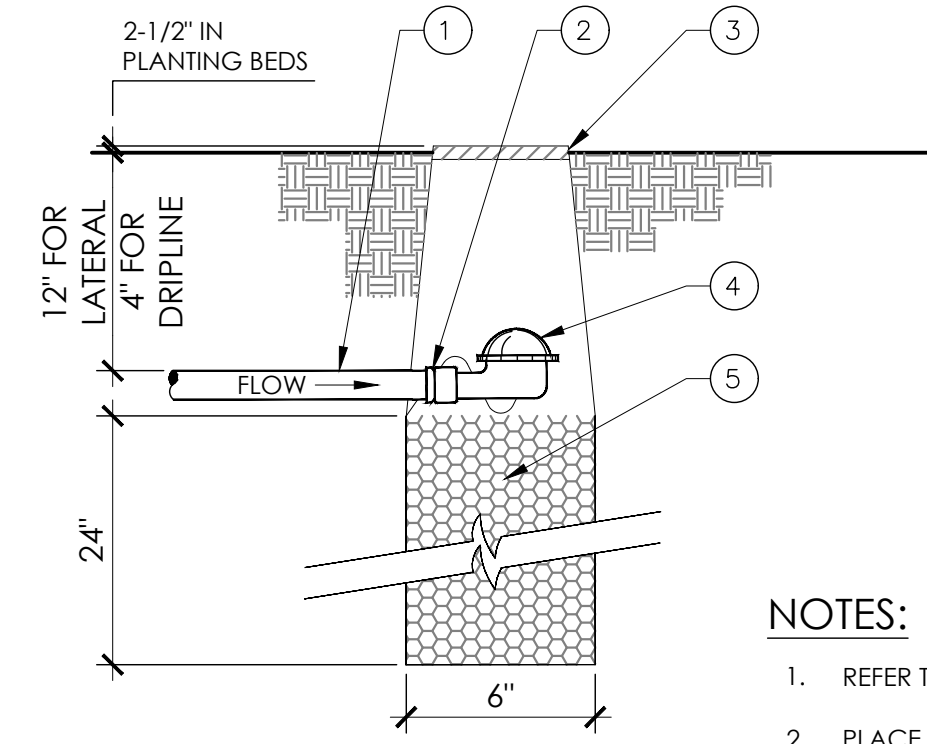


KEY:

- ① DRIP LINE OR PVC LATERAL.
- ② ADAPTER FITTING AS REQUIRED.
- ③ PLASTIC VALVE BOX W/ COVER & EXTENSION IF REQUIRED.
- ④ AUTOMATIC AIR RELIEF VALVE.
- ⑤ 1/2" THREADED PVC TEE.
- ⑥ 3/4" DIAMETER DRAIN ROCK.

NOTES:

1. REFER TO IRRIGATION DETAIL FOR MORE INFO.
2. PLACE 3/4" DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
3. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.
4. DO NOT INSTALL IN PAVED AREAS.



KEY:

- ① DRIP LINE OR PVC LATERAL.
- ② ADAPTER FITTING AS REQUIRED.
- ③ PLASTIC VALVE BOX W/ COVER & EXTENSION IF REQUIRED.
- ④ AUTOMATIC FLUSH VALVE.
- ⑤ 3/4" DIA. DRAIN ROCK.

NOTES:

1. REFER TO IRRIGATION DETAIL FOR MORE INFORMATION.
2. PLACE 3" DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
3. REFER TO SPECIFICATIONS AND PLAN SHEETS FOR MORE INFORMATION.
4. DO NOT INSTALL IN PAVED AREAS.

1
ID-3 SUBSURFACE INLINE DRIP SYSTEM

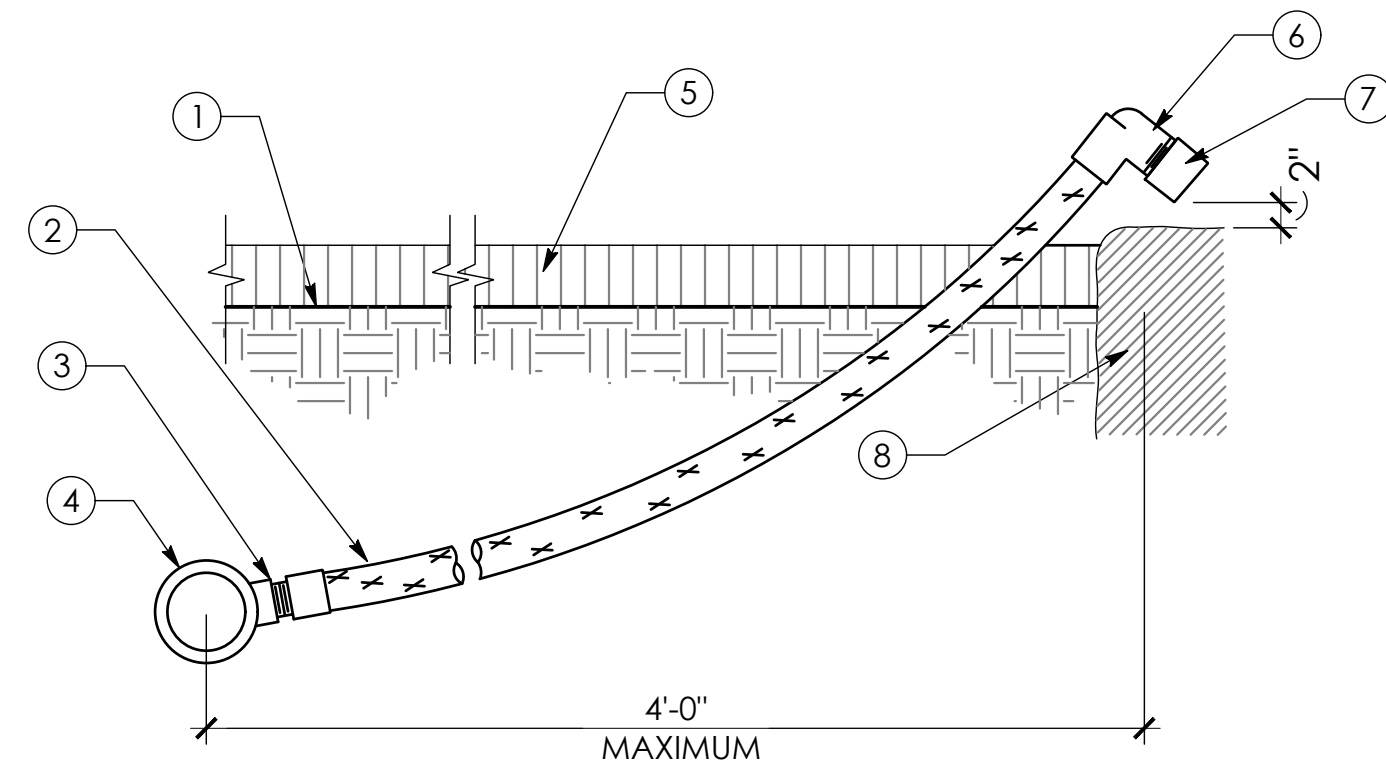
N.T.S.

2
ID-3 AIR RELIEF VALVE ASSEMBLY

N.T.S.

3
ID-3 AUTOMATIC FLUSH VALVE

N.T.S.



KEY:

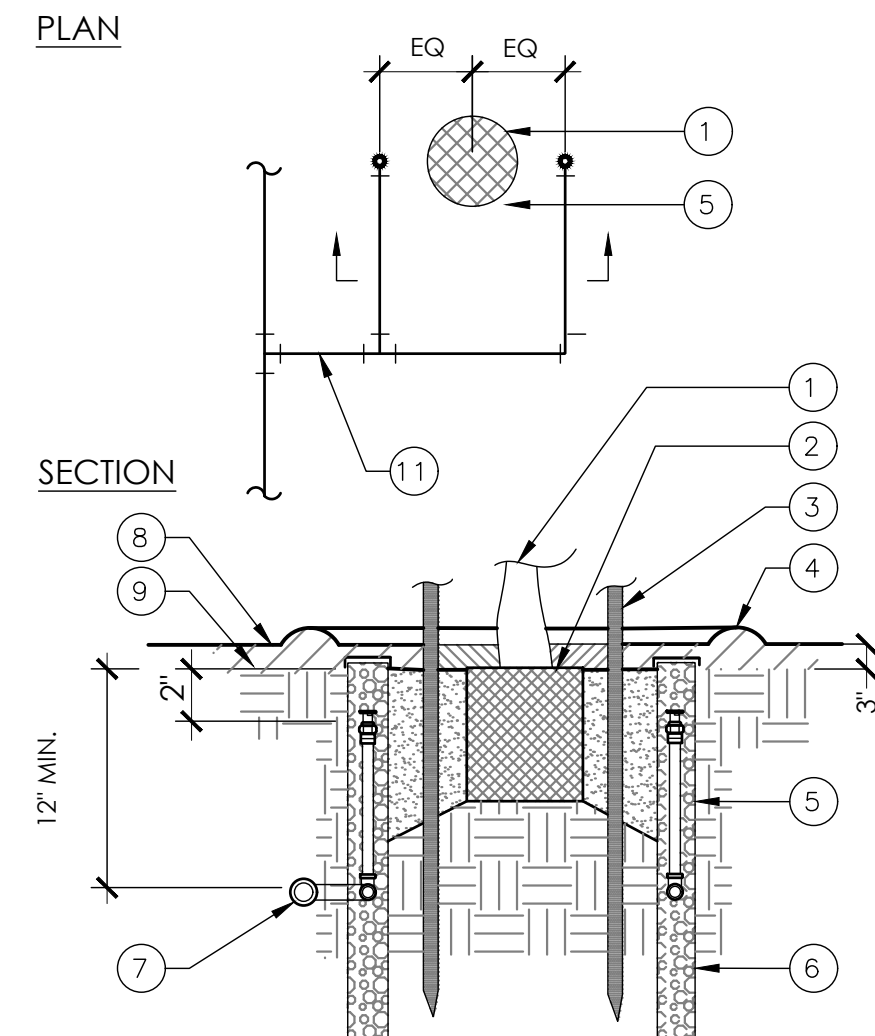
- ① FINISH GRADE.
- ② FLEXIBLE HOSE, MIN. 12" BURIAL.
- ③ PLASTIC ADAPTER EACH END.
- ④ LATERAL LINE, SEE PLANS.
- ⑤ MULCH LAYER
- ⑥ SCH. 40 PVC 90° ELL.
- ⑦ BUBBLER.
- ⑧ ROOT BALL.

NOTES:

SEE PLANS AND SPECIFICATIONS FOR MORE INFORMATION.

4
ID-3 VINE BUBBLER WITH FLEXIBLE RISER

N.T.S.



KEY:

- ① REFER TO TREE PLANTING DETAIL FOR OTHER REQUIREMENTS
- ② ROOTBALL
- ③ TREE STAKES
- ④ WATER RETENTION BERM.
- ⑤ DEEP WATER BUBBLER ASSEMBLY. SEE IRRIGATION LEGEND FOR MANUFACTURER AND MODEL NUMBER. INSTALL TWO PER TREE.
- ⑥ PEA GRAVEL 1/2" DIA.
- ⑦ PVC LATERAL, TYP.
- ⑧ MULCH LAYER
- ⑨ FINISH GRADE

NOTES:

1. REFER TO SPECIFICATIONS & PLAN SHEETS FOR MORE INFORMATION.
2. SEE TREE PLANTING DETAIL.

5
ID-3 DEEP WATER BUBBLER ASSEMBLY

N.T.S.

S:\FIRESTONE\CALTRANS.DWG REV. 07-15-97

MARK THOMAS
16795 VON KARMAN AVE., SUITE 240
IRVINE, CA 92606
(949) 477-9000



engineering division		CITY OF NORWALK	
REVISIONS		TITLE: IRRIGATION DETAILS	
DATE	BY	FIRESTONE BOULEVARD - PHASE 1	
		Approved	
		CITY ENGINEER	RCE 20568 DATE
		PROJECT NO. XXXX	
		Recommended	
FIELD BOOK REF.		DRAWING NO. ID-3	
PLAN REF.		DATE	
Drawn By B.O.		Checked By C.W.	
		SHEET 53 OF 75	

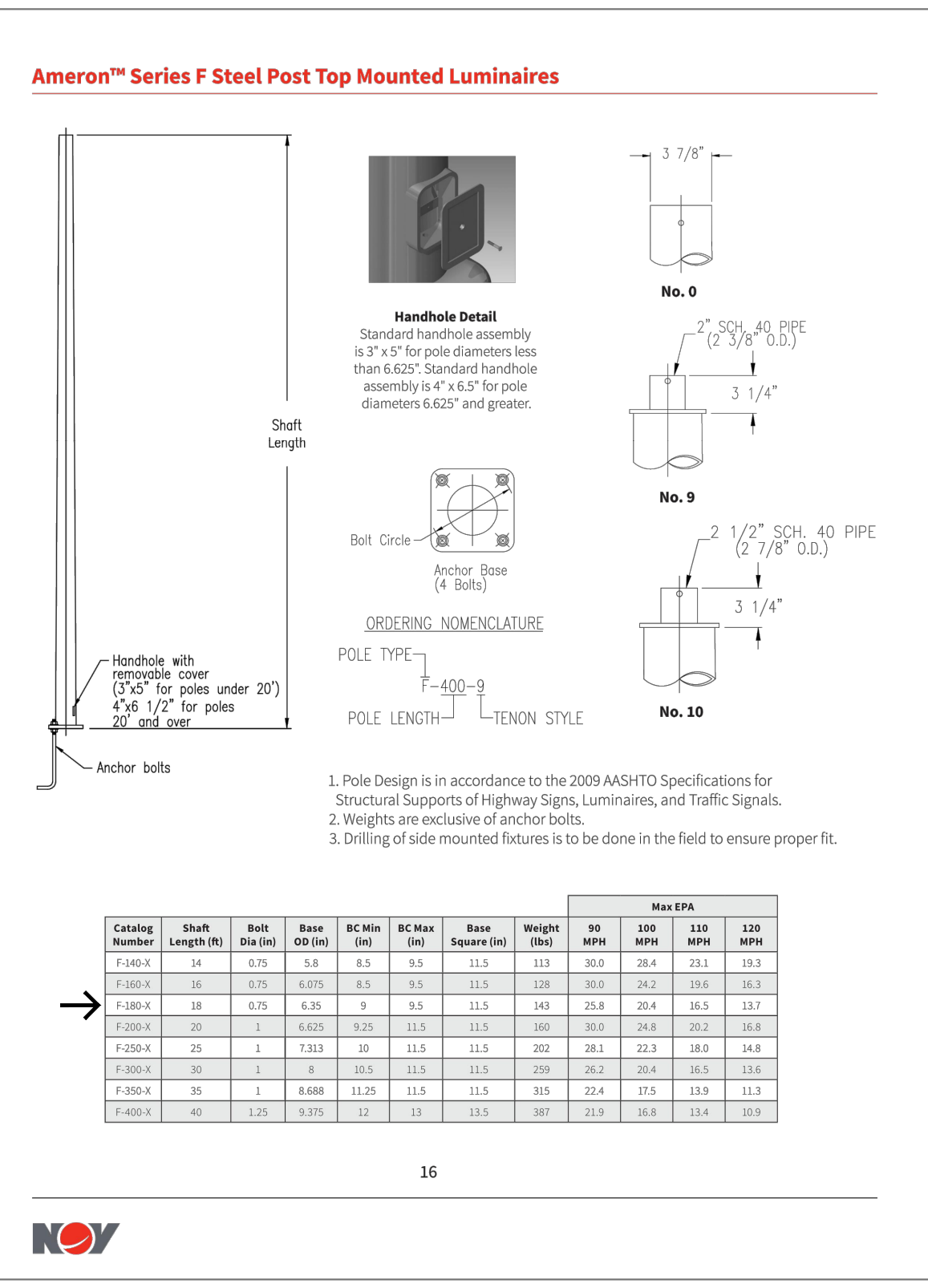
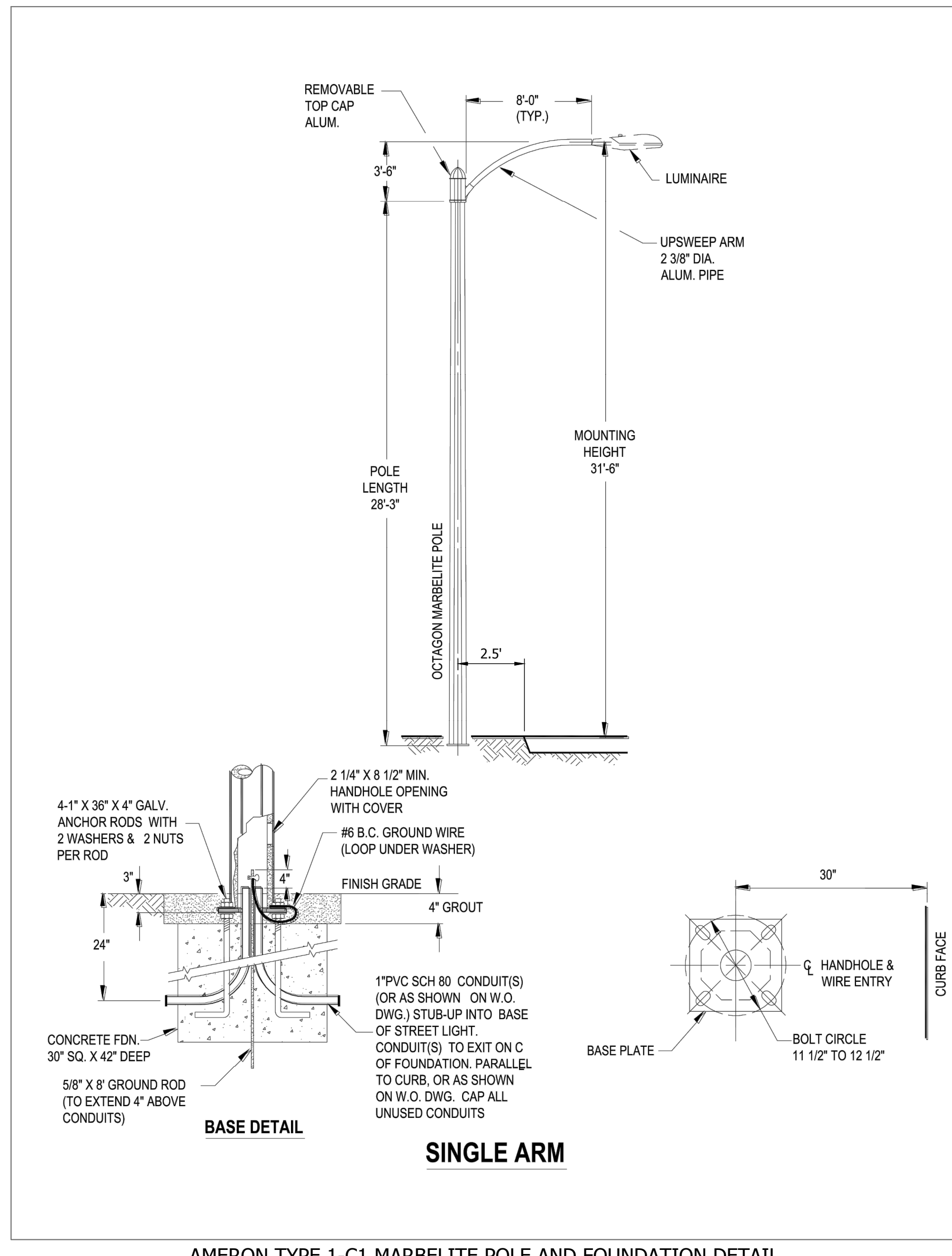
STREET LIGHT POLE SUMMARY TABLE: PHASE 1

SL NO.	STATION	CIRCUIT NO.
C1	25+58.0	CKT 3
C2	26+52.5	CKT 1
C3	27+25.5	CKT 3
C4	28+01.5	CKT 1
C5	28+67.5	CKT 3
C6	29+31.5	CKT 1
C7	30+21.5	CKT 3
D1	30+82.0	CKT 1
D2	31+78.0	CKT 3
D3	32+30.5	CKT 1
D4	33+35.5	CKT 3
D5	33+79.5	CKT 1
D6	34+79.5	CKT 3
D7	34+93.5	CKT 1
D8	35+65.5	CKT 3
D9	35+79.5	CKT 1
D10	36+51.0	CKT 3
D11	36+66.0	CKT 1
D12	37+56.0	CKT 2
D13	38+30.5	CKT 4
D14	39+06.0	CKT 2
E1	39+80.5	CKT 4
E2	40+56.0	CKT 2
E3	41+30.5	CKT 4
E4	42+06.0	CKT 2
E5	42+81.0	CKT 4
E6	43+54.5	CKT 2
E7	44+18.0	CKT 4
E8	45+18.0	CKT 2
E9	45+47.0	CKT 4
E10	46+56.0	CKT 2
E11	47+31.0	CKT 4
F1	49+40.0	CKT 2
F2	50+16.5	CKT 4
F3	51+19.0	CKT 2

* OFFSET FROM CENTERLINE OF FIRESTONE BLVD.

GENERAL NOTES FOR STREET LIGHTING LAYOUT

1. A LIGHT POLE LOCATION MAY BE ADJUSTED A MAXIMUM OF 10' ONLY TO AVOID AN OBSTRUCTION SUCH AS A DRIVEWAY, CATCH BASIN, ETC. ANY DEVIATION EXCEEDING 10' SHALL HAVE PRIOR APPROVAL OF THE CITY OF NORWALK DEPARTMENT OF PUBLIC WORKS.
2. ALL MAST ARMS AND BRACKETS SHALL BE PERPENDICULAR TO THE CURB FACE.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT SOUTHERN CALIFORNIA EDISON (SCE) COMPANY SERVICE PLANNER HONEY JORDAN AT (562) 903-3191 FOR COORDINATION OF SERVICE SHUTOFF AND HOOKUP/TURN-ON. PROVIDE A MINIMUM OF 6 WEEKS NOTICE.
4. THE CENTER LINE OF STREET LIGHT POLES SHALL BE 30" BEHIND THE FACE OF CURB, UNLESS OTHERWISE NOTED.



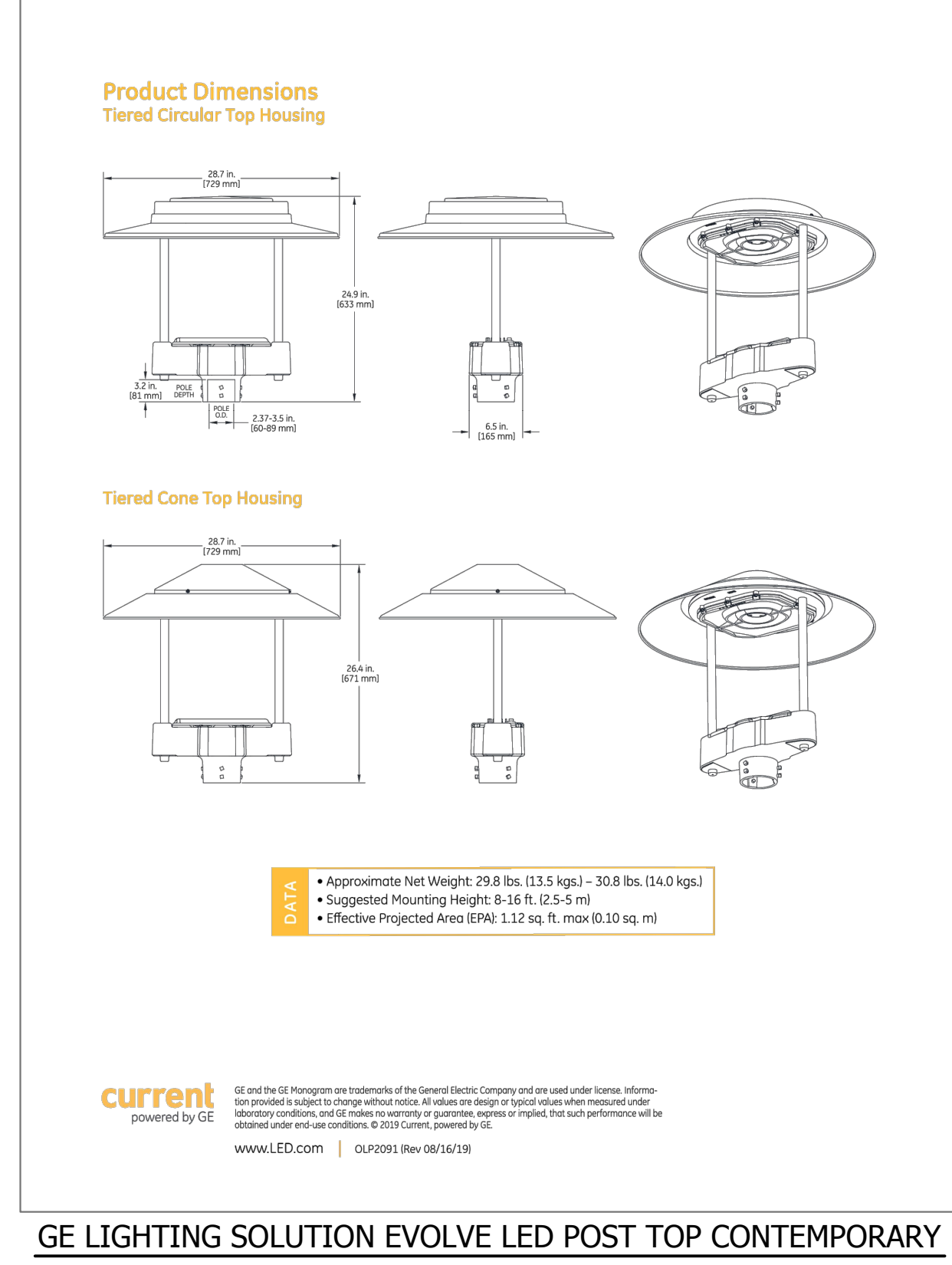
AMERON SERIES F POST TOP STEEL POLE F-180-X

Ordering Number Logic
Contemporary Twin Support Post Top (EPTC)

PRODUCT FAMILY	GENERATION	VOLUme	HEIGHT	TYPE	CONTROL AND DIMMING	FINISH	COLOR	OPTIONS
E = Evolve	02 = Gen 2	1 = 120-270V	30	4 = 4' Round	1 = Standard	01 = Round	00 = Black	0 = Secondary
A = Post Top		2 = 120-270V	40	5 = 5' Round	2 = E-Response	02 = Square	01 = White	1 = Secondary
T = Tall Support		3 = 120-270V	54	6 = 6' Round	3 = E-Response with Dimming	03 = Tapered Cone	02 = Dark Bronze	2 = Secondary
C = Contemporary		4 = 120-270V	68	7 = 7' Round	4 = E-Response with Dimming and 0-10V	04 = Tiered Circular	03 = Light Bronze	3 = Secondary
		5 = 120-270V	82	8 = 8' Round	5 = E-Response with Dimming and 0-10V	05 = Tiered Cone	04 = Dark Bronze	4 = Secondary
		6 = 120-270V	96	9 = 9' Round	6 = E-Response with Dimming and 0-10V	06 = Tiered Circular	05 = Light Bronze	5 = Secondary
		7 = 120-270V	110	10 = 10' Round	7 = E-Response with Dimming and 0-10V	07 = Tiered Cone	06 = Dark Bronze	6 = Secondary

CONSTRUCTION CODE	TYPICAL TOTAL WEIGHT (LBS)		TYPICAL SPAN (FT)	FIXTURE WEIGHT (LBS)	MAX WIND (MPH)	MAX EPA					
	120-270V	120-270V				90 MPN	100 MPN	110 MPN	120 MPN		
F-180-X	24	6.05	8.5	8.5	9.5	11.5	13.0	24.4	25.4	27.3	33.3
F-180-X	30	6.75	8.5	8.5	9.5	11.5	12.5	24.2	25.6	26.9	31.3
F-180-X	36	7.45	8.5	8.5	9.5	11.5	12.5	24.0	25.4	26.8	31.3
F-180-X	42	8.15	8.5	8.5	9.5	11.5	12.5	23.8	25.2	26.6	31.3
F-180-X	48	8.85	8.5	8.5	9.5	11.5	12.5	23.6	25.0	26.4	31.3
F-180-X	54	9.55	8.5	8.5	9.5	11.5	12.5	23.4	24.8	26.2	31.3
F-180-X	60	10.25	8.5	8.5	9.5	11.5	12.5	23.2	24.6	26.0	31.3
F-180-X	66	10.95	8.5	8.5	9.5	11.5	12.5	23.0	24.4	25.8	31.3
F-180-X	72	11.65	8.5	8.5	9.5	11.5	12.5	22.8	24.2	25.6	31.3
F-180-X	78	12.35	8.5	8.5	9.5	11.5	12.5	22.6	24.0	25.4	31.3
F-180-X	84	13.05	8.5	8.5	9.5	11.5	12.5	22.4	23.8	25.2	31.3
F-180-X	90	13.75	8.5	8.5	9.5	11.5	12.5	22.2	23.6	25.0	31.3

GE LIGHTING SOLUTION EVOLVE LEP POST TOP CONTEMPORARY



GE LIGHTING SOLUTION EVOLVE LED POST TOP CONTEMPORARY

engineering division	CITY OF NORWALK
REVISIONS	TITLE: STREET LIGHTING GENERAL NOTES AND DETAILS FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1
DATE: BY:	Approved: PROJECT NO. 7196.1
AS BUILT	City Engineer: RCE 20568 DATE: DRAWING NO. SL-1
FIELD BOOK REF:	Recommended: DRAWING NO. SL-1
PLAN REF:	DATE: SHEET 54 OF 75
Drawn By: DJG	Checked By: JMS

KITTELSON & ASSOCIATES
750 THE CITY DRIVE, SUITE 410
ORANGE, CA 92868
P 714.468.1997


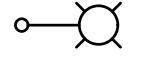



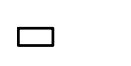
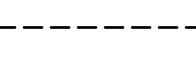

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H:\23\23420 - Firestone Boulevard Widening Preed. design\design_CD\23420-CD-LIGHTING.dwg PH1-GEN01 Last Saved: Tue, 07 Apr 2020 3:20:10 PM Plotted: Tuesday, April 7, 2020 3:20:10 PM

CONSTRUCTION NOTES

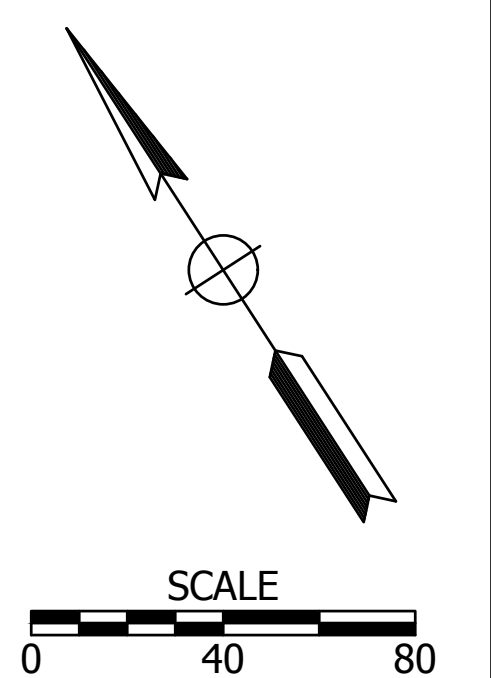
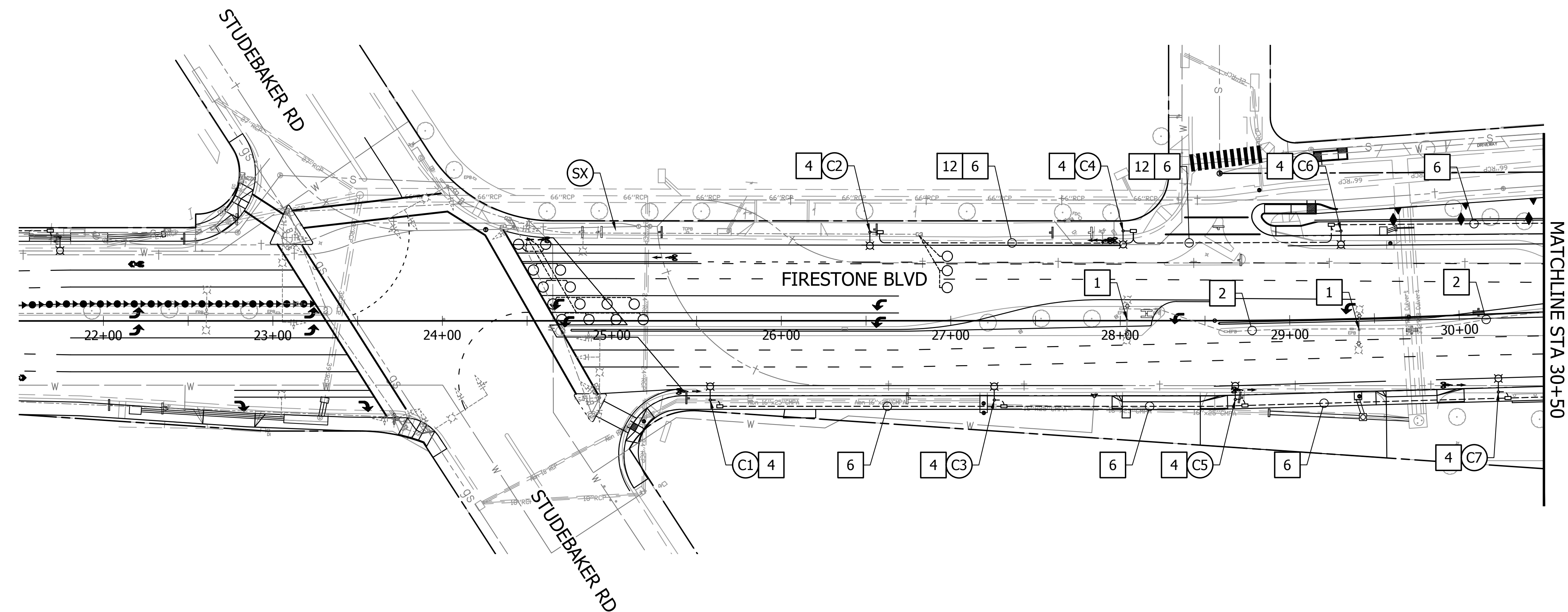
- 1 REMOVE STREET LIGHT POLE AND MAST ARMS. RELOCATE 60W LED LUMINAIRES TO NEW STREET LIGHT POLES. REMOVE FOUNDATION AND PULL BOX. SALVAGE TO THE CITY OF NORWALK ANY EXCESS LED LUMINAIRES.
- 2 ABANDON STREET LIGHT CONDUIT. REMOVE CONDUCTORS.
- 3 INSTALL NO. 6 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. LID ETCHED "STREET LIGHTING".
- 4 INSTALL AMERON TYPE 1-C1 OCTAGONAL MARBELITE POLE OR APPROVED EQUAL, WITH 8' MAST ARM. INSTALL NO. 3 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. RELOCATE ARCHEON 60W LED LUMINAIRE FROM EXISTING STREET LIGHT POLES. WHERE POLE IS TO BE INSTALLED WITHIN EXISTING SIDEWALK, REMOVE AND REPLACE SIDEWALK SECTION AS NECESSARY.
- 5 INSTALL AMERON SERIES F POST TOP STEEL POLE WITH 20' MOUNTING HEIGHT. INSTALL NO. 3-1/2 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. INSTALL GE LIGHTING SOLUTIONS, EVOLVE LED CONTEMPORARY TIERED CONE POST TOP, 120/277V, TYPE III, 4000K CCT LUMINAIRE.
- 6 INSTALL 2" PVC SCHEDULE 80 WITH (3) #6 CONDUCTORS.
- 7 INSTALL 2" PVC SCHEDULE 80 WITH (6) #6 CONDUCTORS.
- 8 INSTALL 2" PVC SCHEDULE 80 WITH (12) #6 CONDUCTORS.
- 9 REMOVE EXISTING STREET LIGHT SERVICE ENCLOSURE.
- 10 INSTALL MYERS ANODIZED ALUMINUM TYPE 3R, 120V UNMETERED LIGHTING SERVICE ENCLOSURE WITH (4) 15A CIRCUIT BREAKERS, PER SSPWC 209-3.10.
- 11 CONNECT 1-1/2" PVC SCHEDULE 80 TO EXISTING CONDUIT RUN TO SCE SERVICE POINT.
- 12 INSTALL CONDUIT WITHIN BIKE LANE OF NEW PAVEMENT.
- (X#) NEW STREET LIGHT POLE AND LUMINAIRE. SEE STREET LIGHT POLE LOCATION TABLE SHEET SL-1.
- (SX) SEE TRAFFIC SIGNAL SHEETS FOR STREET LIGHT INFORMATION.

LEGEND

-  EXISTING STREET LIGHT
-  NEW STREET LIGHT W/ MAST ARM
-  NEW POLE TOP STREET LIGHT
-  NEW SERVICE ENCLOSURE
-  EXISTING SERVICE ENCLOSURE
-  NEW STREET LIGHTING PULL BOX
-  NEW STREET LIGHTING CONDUIT
-  EXISTING STREET LIGHTING/SIGNAL CONDUIT

GENERAL NOTES

- 1. APPROXIMATE CONDUIT LENGTHS:
 LENGTH UNDER NEW SIDEWALK/DRIVEWAY: ±3,950 SF.
 LENGTH UNDER NEW PAVEMENT: ±1,000 SF.
 LENGTH IN BRIDGE SIDEWALK: ±120 SF.



H:\23\23420 - Firestone Boulevard Widening Phase 1\design\design\CD\23420-CD-LIGHTING.dwg PH1-02 Last Saved: Tue, 07 Apr 2020 3:20:18 PM Plotted: Tuesday, April 7, 2020 3:20:18 PM

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: STREET LIGHTING PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
	AS BUILT	DRAWING NO. SL-2
FIELD BOOK REF.	Recommended	CITY ENGINEER RCE 20568 DATE
PLAN REF.		DATE
	Drawn By DJG	Checked By JMS
		SHEET 55 OF 75

KITTELSON & ASSOCIATES

750 THE CITY DRIVE, SUITE 410
ORANGE, CA 92868
P 714.468.1997

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CONSTRUCTION NOTES

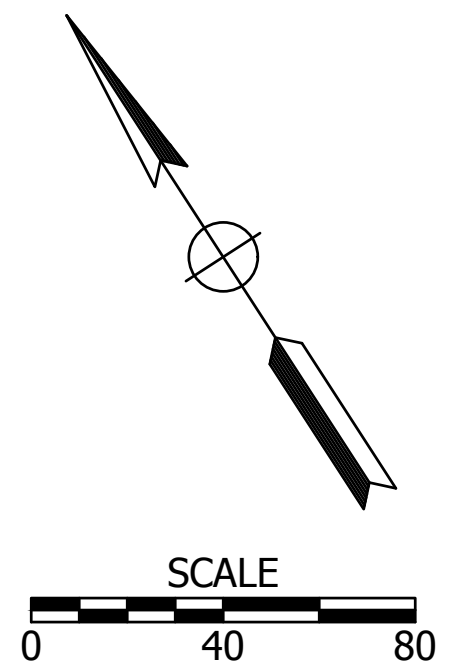
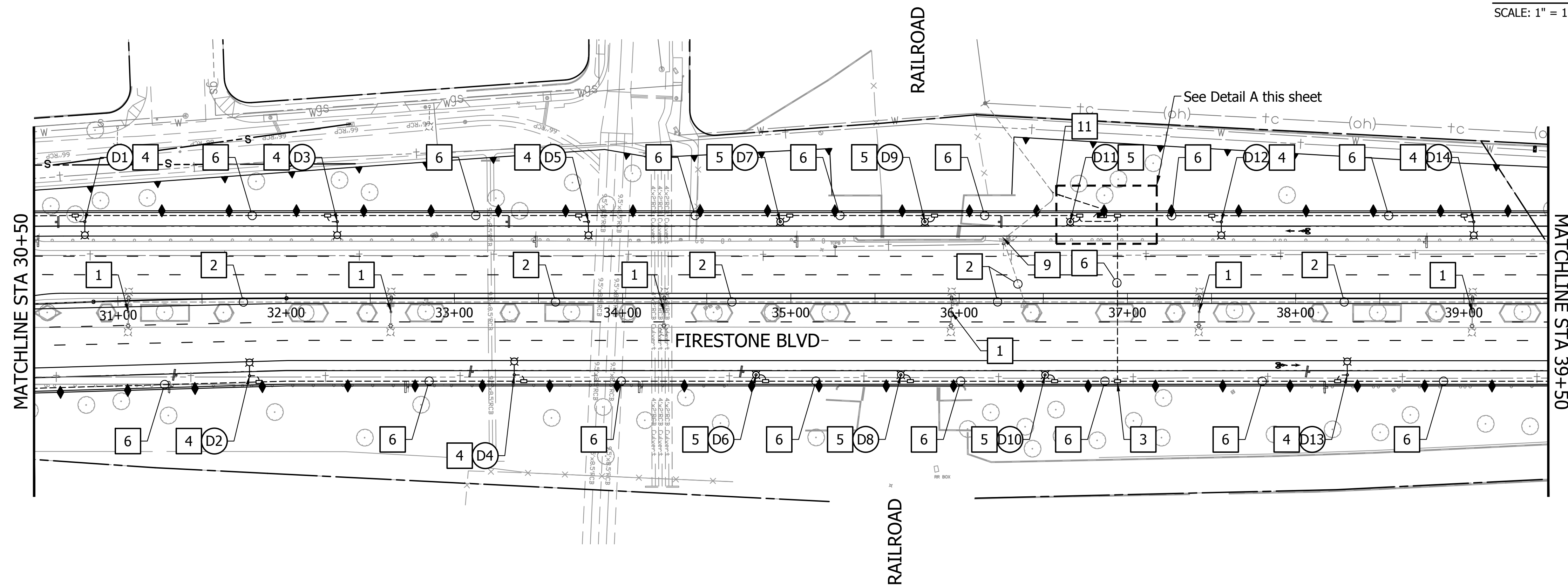
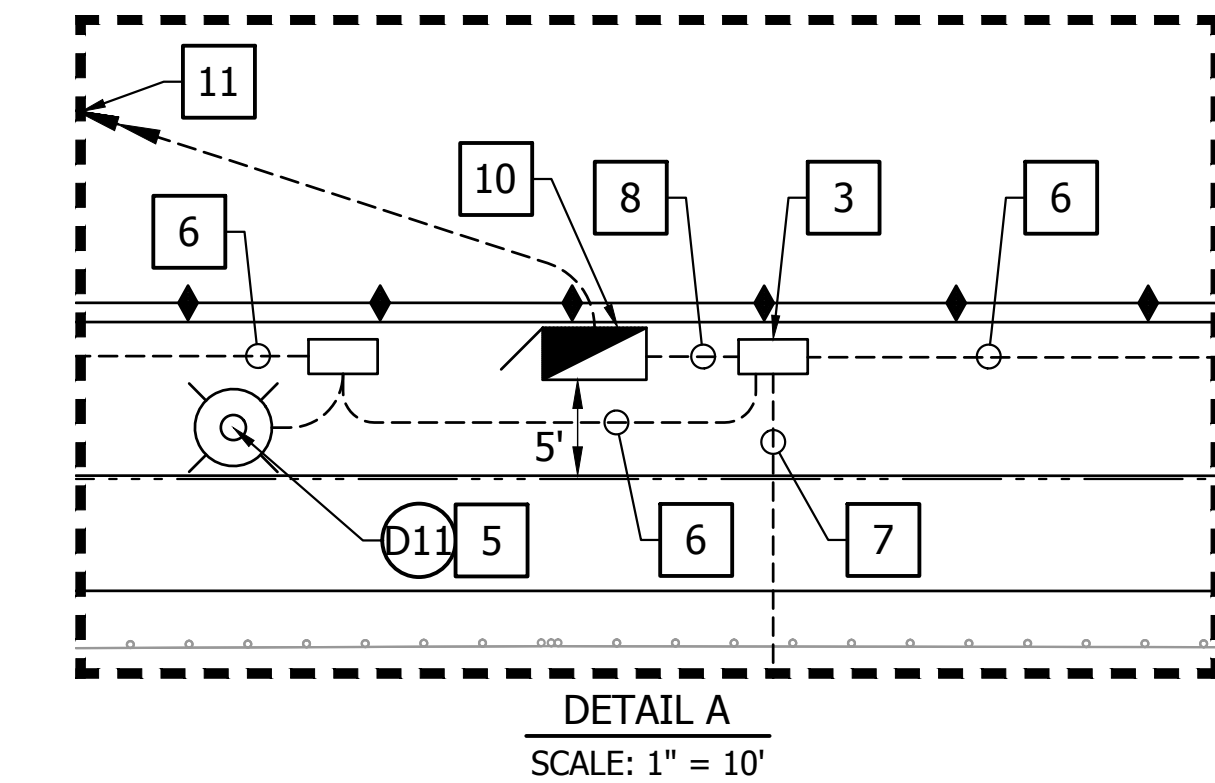
- 1 REMOVE STREET LIGHT POLE AND MAST ARMS. RELOCATE 60W LED LUMINAIRES TO NEW STREET LIGHT POLES. REMOVE FOUNDATION AND PULL BOX. SALVAGE TO THE CITY OF NORWALK ANY EXCESS LED LUMINAIRES.
- 2 ABANDON STREET LIGHT CONDUIT. REMOVE CONDUCTORS.
- 3 INSTALL NO. 6 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. LID ETCHED "STREET LIGHTING".
- 4 INSTALL AMERON TYPE 1-C1 OCTAGONAL MARBELITE POLE OR APPROVED EQUAL, WITH 8' MAST ARM. INSTALL NO. 3 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. RELOCATE ARCHEON 60W LED LUMINAIRE FROM EXISTING STREET LIGHT POLES. WHERE POLE IS TO BE INSTALLED WITHIN EXISTING SIDEWALK, REMOVE AND REPLACE SIDEWALK SECTION AS NECESSARY.
- 5 INSTALL AMERON SERIES F POST TOP STEEL POLE WITH 20' MOUNTING HEIGHT. INSTALL NO. 3-1/2 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. INSTALL GE LIGHTING SOLUTIONS, EVOLVE LED CONTEMPORARY TIERED CONE POST TOP, 120/277V, TYPE III, 4000K CCT LUMINAIRE.
- 6 INSTALL 2" PVC SCHEDULE 80 WITH (3) #6 CONDUCTORS.
- 7 INSTALL 2" PVC SCHEDULE 80 WITH (6) #6 CONDUCTORS.
- 8 INSTALL 2" PVC SCHEDULE 80 WITH (12) #6 CONDUCTORS.
- 9 REMOVE EXISTING STREET LIGHT SERVICE ENCLOSURE.
- 10 INSTALL MYERS ANODIZED ALUMINUM TYPE 3R, 120V UNMETERED LIGHTING SERVICE ENCLOSURE WITH (4) 15A CIRCUIT BREAKERS, PER SSPWC 209-3.10.
- 11 CONNECT 1-1/2" PVC SCHEDULE 80 TO EXISTING CONDUIT RUN TO SCE SERVICE POINT.
- 12 INSTALL CONDUIT WITHIN BIKE LANE OF NEW PAVEMENT.
- (X#) NEW STREET LIGHT POLE AND LUMINAIRE. SEE STREET LIGHT POLE LOCATION TABLE SHEET SL-1.
- (SX) SEE TRAFFIC SIGNAL SHEETS FOR STREET LIGHT INFORMATION.

LEGEND

- EXISTING STREET LIGHT
- NEW STREET LIGHT W/ MAST ARM
- NEW POLE TOP STREET LIGHT
- NEW SERVICE ENCLOSURE
- EXISTING SERVICE ENCLOSURE
- NEW STREET LIGHTING PULL BOX
- NEW STREET LIGHTING CONDUIT
- EXISTING STREET LIGHTING/SIGNAL CONDUIT

GENERAL NOTES

- 1. APPROXIMATE CONDUIT LENGTHS:
 LENGTH UNDER NEW SIDEWALK/DRIVEWAY: ±3,950 SF.
 LENGTH UNDER NEW PAVEMENT: ±1,000 SF.
 LENGTH IN BRIDGE SIDEWALK: ±120 SF.



H:\23\23420 - Firestone Boulevard Widening Phase 1\design\CD\23420-CD-LIGHTING.dwg PH1-03 Last Saved: Tue, 07 Apr 2020 3:20:27 PM Plotted: Tuesday, April 7, 2020 3:20:27 PM

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: STREET LIGHTING PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
	Recommended	DRAWING NO. SL-3
AS BUILT	CITY ENGINEER RCE 20568 DATE	SHEET 56 OF 75
FIELD BOOK REF.	Drawn By DJG	Checked By JMS
PLAN REF.		

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 750 THE CITY DRIVE, SUITE 410
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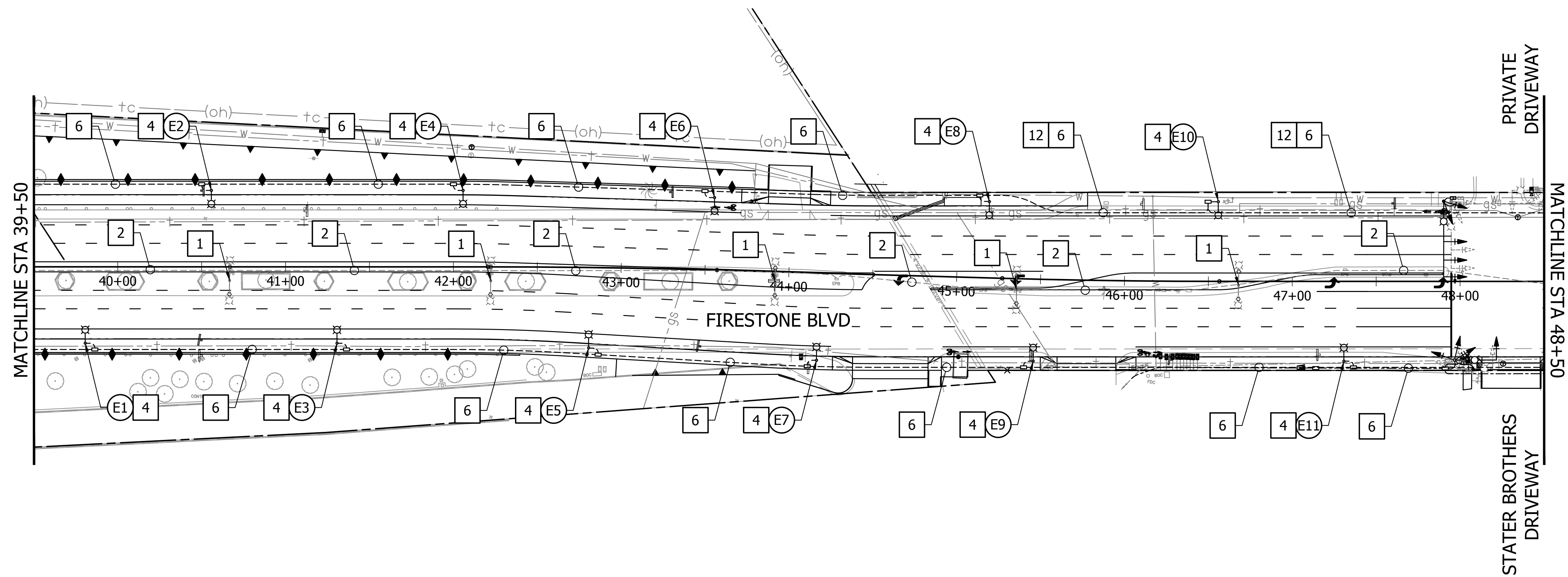
- 1 REMOVE STREET LIGHT POLE AND MAST ARMS. RELOCATE 60W LED LUMINAIRES TO NEW STREET LIGHT POLES. REMOVE FOUNDATION AND PULL BOX. SALVAGE TO THE CITY OF NORWALK ANY EXCESS LED LUMINAIRES.
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- (X#) NEW STREET LIGHT POLE AND LUMINAIRE. SEE STREET LIGHT POLE LOCATION TABLE SHEET SL-1.
- (SX) SEE TRAFFIC SIGNAL SHEETS FOR STREET LIGHT INFORMATION.

LEGEND

- EXISTING STREET LIGHT
- NEW STREET LIGHT W/ MAST ARM
- NEW POLE TOP STREET LIGHT
- NEW SERVICE ENCLOSURE
- EXISTING SERVICE ENCLOSURE
- NEW STREET LIGHTING PULL BOX
- NEW STREET LIGHTING CONDUIT
- EXISTING STREET LIGHTING/SIGNAL CONDUIT

GENERAL NOTES

- 1. APPROXIMATE CONDUIT LENGTHS:
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 LENGTH UNDER NEW PAVEMENT: ±1,000 SF.
 LENGTH IN BRIDGE SIDEWALK: ±120 SF.



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engineering division		CITY OF NORWALK	
REVISIONS		TITLE: STREET LIGHTING PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO. SL-4
FIELD BOOK REF.		Recommended	SHEET 57 OF 75
PLAN REF.		Drawn By DJG	Checked By JMS


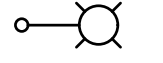



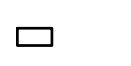
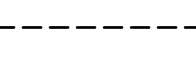
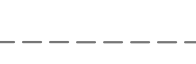
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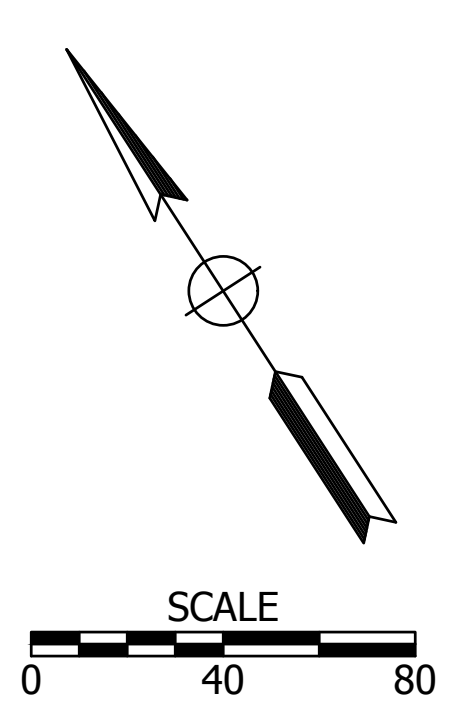
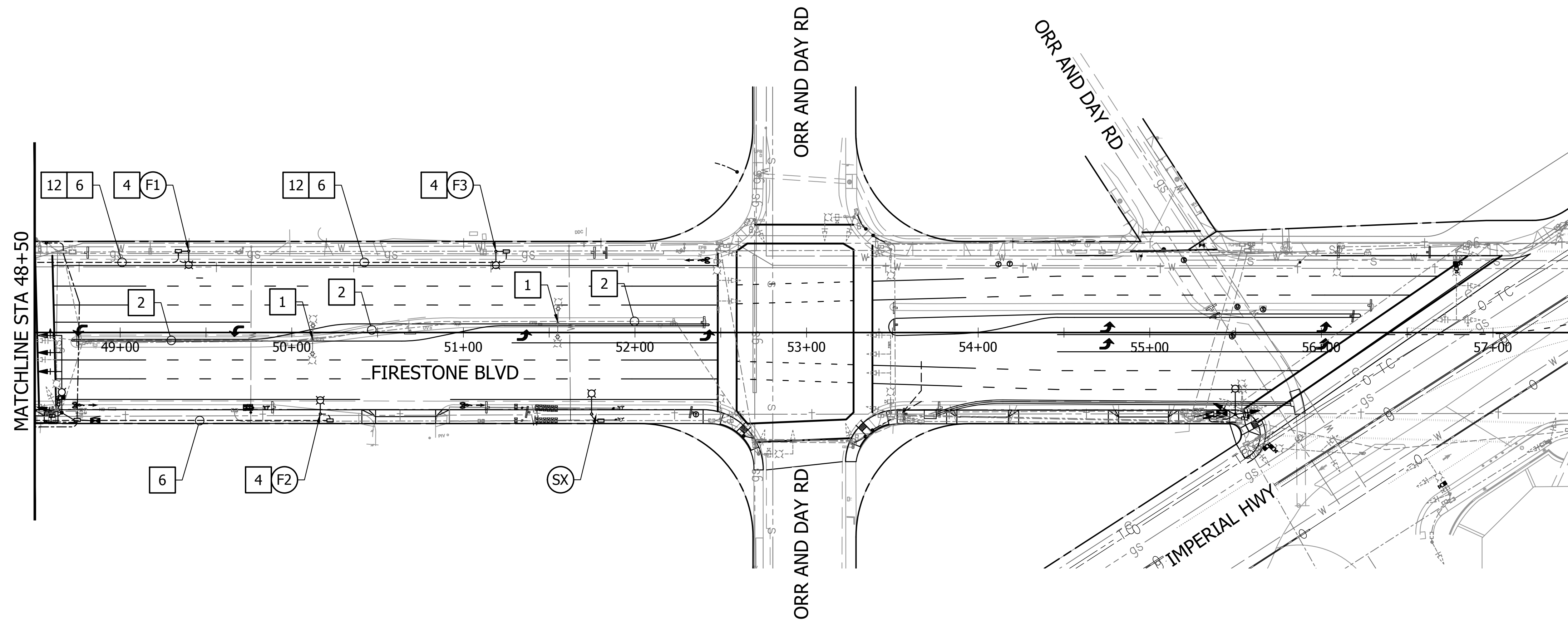
- 1 REMOVE STREET LIGHT POLE AND MAST ARMS. RELOCATE 60W LED LUMINAIRES TO NEW STREET LIGHT POLES. REMOVE FOUNDATION AND PULL BOX. SALVAGE TO THE CITY OF NORWALK ANY EXCESS LED LUMINAIRES.
- 2 ABANDON STREET LIGHT CONDUIT. REMOVE CONDUCTORS.
- 3 INSTALL NO. 6 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. LID ETCHED "STREET LIGHTING".
- 4 INSTALL AMERON TYPE 1-C1 OCTAGONAL MARBELITE POLE OR APPROVED EQUAL, WITH 8' MAST ARM. INSTALL NO. 3 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. RELOCATE ARCHEON 60W LED LUMINAIRE FROM EXISTING STREET LIGHT POLES. WHERE POLE IS TO BE INSTALLED WITHIN EXISTING SIDEWALK, REMOVE AND REPLACE SIDEWALK SECTION AS NECESSARY.
- 5 INSTALL AMERON SERIES F POST TOP STEEL POLE WITH 20' MOUNTING HEIGHT. INSTALL NO. 3-1/2 PULL BOX, CHRISTY OLD CASTLE CONCRETE, OR APPROVED EQUAL. INSTALL GE LIGHTING SOLUTIONS, EVOLVE LED CONTEMPORARY TIERED CONE POST TOP, 120/277V, TYPE III, 4000K CCT LUMINAIRE.
- 6 INSTALL 2" PVC SCHEDULE 80 WITH (3) #6 CONDUCTORS.
- 7 INSTALL 2" PVC SCHEDULE 80 WITH (6) #6 CONDUCTORS.
- 8 INSTALL 2" PVC SCHEDULE 80 WITH (12) #6 CONDUCTORS.
- 9 REMOVE EXISTING STREET LIGHT SERVICE ENCLOSURE.
- 10 INSTALL MYERS ANODIZED ALUMINUM TYPE 3R, 120V UNMETERED LIGHTING SERVICE ENCLOSURE WITH (4) 15A CIRCUIT BREAKERS, PER SSPWC 209-3.10.
- 11 CONNECT 1-1/2" PVC SCHEDULE 80 TO EXISTING CONDUIT RUN TO SCE SERVICE POINT.
- 12 INSTALL CONDUIT WITHIN BIKE LANE OF NEW PAVEMENT.
- (X#) NEW STREET LIGHT POLE AND LUMINAIRE. SEE STREET LIGHT POLE LOCATION TABLE SHEET SL-1.
- (SX) SEE TRAFFIC SIGNAL SHEETS FOR STREET LIGHT INFORMATION.

LEGEND

-  EXISTING STREET LIGHT
-  NEW STREET LIGHT W/ MAST ARM
-  NEW POLE TOP STREET LIGHT
-  NEW SERVICE ENCLOSURE
-  EXISTING SERVICE ENCLOSURE
-  NEW STREET LIGHTING PULL BOX
-  NEW STREET LIGHTING CONDUIT
-  EXISTING STREET LIGHTING/SIGNAL CONDUIT

GENERAL NOTES

- 1. APPROXIMATE CONDUIT LENGTHS:
 LENGTH UNDER NEW SIDEWALK/DRIVEWAY: ±3,950 SF.
 LENGTH UNDER NEW PAVEMENT: ±1,000 SF.
 LENGTH IN BRIDGE SIDEWALK: ±120 SF.



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engineering division	CITY OF NORWALK	
REVISIONS	TITLE: STREET LIGHTING PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
	AS BUILT	DRAWING NO. SL-5
FIELD BOOK REF.	Recommended	SHEET 58 OF 75
PLAN REF.	Drawn By DJG	Checked By JMS

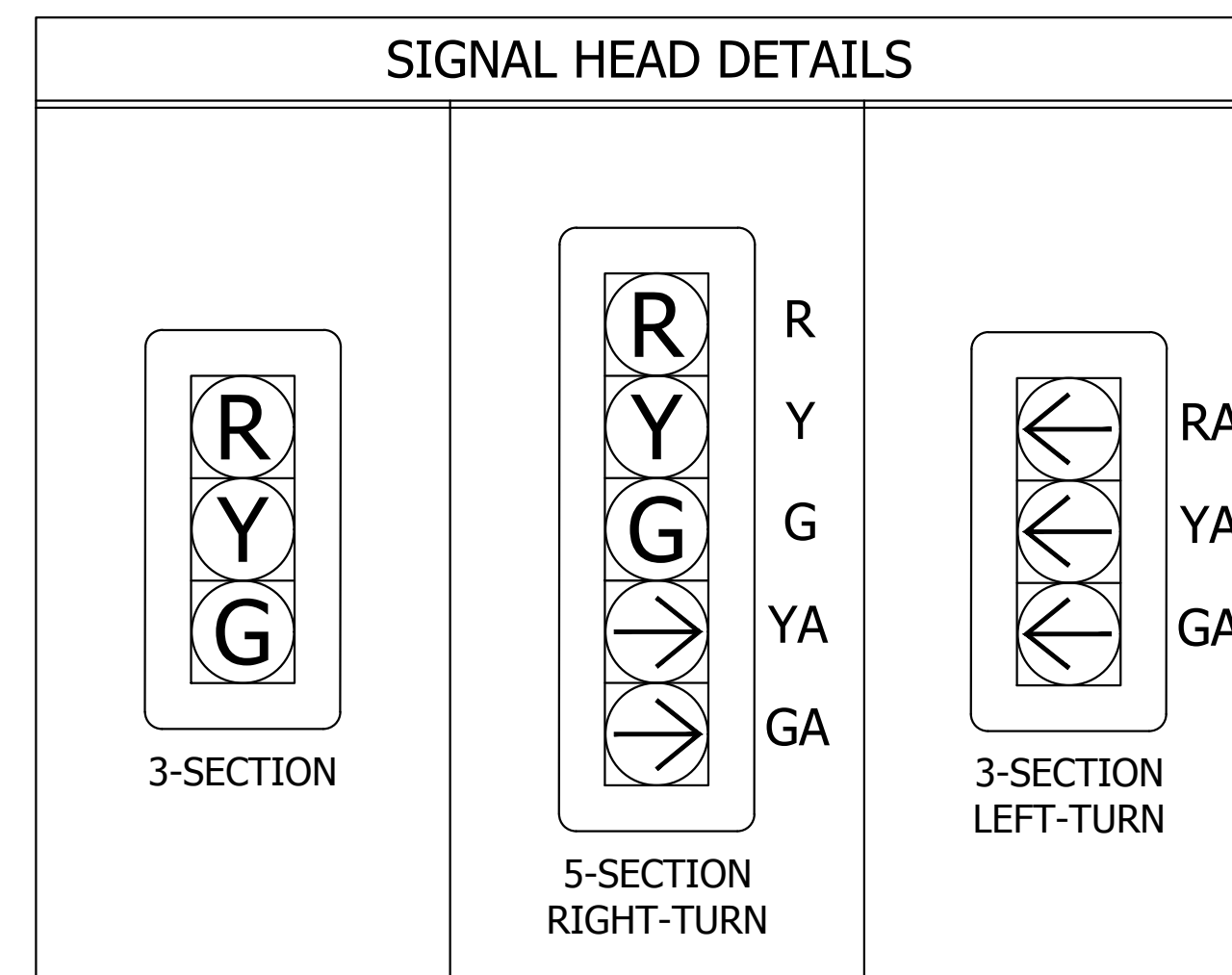
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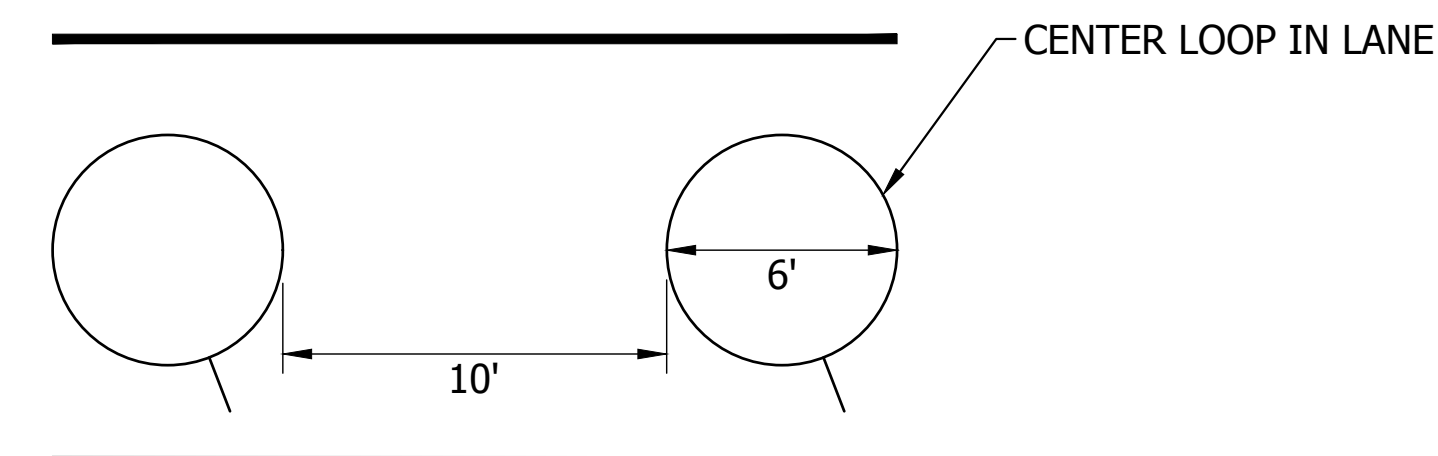
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GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE 2018 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS AND THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, UNLESS OTHERWISE NOTED ON THE PLANS.
2. ALL MATERIALS AND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR, UNLESS OTHERWISE NOTED ON THE PLANS.
3. CONTROLLER CABINET, SERVICE PEDESTAL, PULL BOX AND POLE LOCATIONS SHOWN HEREIN ARE APPROXIMATE. PRECISE LOCATIONS SHALL BE ESTABLISHED IN THE FIELD AND VERIFIED BY THE CITY ENGINEER, GLEN KAU.
4. ALL WIRING SHALL BE MARKED (TAGGED) WITHIN THE CONTROLLER CABINET FOR PHASE IDENTIFICATION.
5. ALL SIGNAL EQUIPMENT SHALL BE WIRED IN ACCORDANCE WITH THE PROPOSED SIGNAL PHASE DIAGRAM.
6. (X-X-XX) INDICATES LOOP AND/OR VIDEO DETECTION ZONE ASSIGNMENT IN THE CONTROLLER CABINET. EACH LOOP ASSIGNMENT SHALL HAVE A SEPARATE LEAD-IN-CABLE TO THE CONTROLLER.
7. ALL LOOPS SHALL BE ROUND (6' DIAMETER), UNLESS OTHERWISE NOTED ON THE PLANS.
8. VIDEO DETECTION SYSTEMS AND CAMERAS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. A MANUFACTURER REPRESENTATIVE SHALL BE PRESENT DURING THE INSTALLATION OF THE VIDEO DETECTION SYSTEMS AND CAMERAS. NEW VIDEO DETECTION SYSTEMS SHALL BE INSTALLED AND OPERATIONAL PRIOR TO DISCONNECTING EXISTING DLC.
9. DETECTORS AND/OR VIDEO DETECTION ZONES SHALL BE WIRED OR RE-CONFIGURED PER DETECTOR ASSIGNMENTS ON THE PLANS.
10. ALL NEW UNDERGROUND CONDUIT SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. MINIMUM CONDUIT SIZE FOR RUNS BETWEEN PULL BOXES AND POLES SHALL BE 2".
11. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS OF ALL SHOWN UTILITIES AND VERIFY ALL CONDITIONS ON THE JOB SITE. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT BY DIALING 811 (48) HOURS PRIOR TO ANY EXCAVATION.
12. IF DAMAGED, THE CONTRACTOR SHALL RESTORE ANY UTILITY PER CITY ENGINEER'S REQUIREMENT.
13. THE CONTRACTOR SHALL PROVIDE 2 WEEKS NOTICE TO THE CITY PRIOR TO SCHEDULING ANY SIGNAL MODIFICATIONS. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND NOTIFY ALL AFFECTED AGENCIES AND UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL PHASES OF CONSTRUCTION WITH ALL AFFECTED AGENCIES AND UTILITY COMPANIES.
14. THE CONTRACTOR SHALL PROVIDE 10 WORKING DAYS NOTICE TO THE CITY ENGINEER PRIOR TO SIGNAL TURN ON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CITY STAFF, VENDORS, AND MANUFACTURERS. COORDINATE ALL SIGNAL WORK WITH CITY TECH, PAT DUGGAN AT (562) 929-5511.
15. THIS PLAN IS ACCURATE FOR SIGNAL WORK ONLY.
16. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION STAGING PLAN PRIOR TO WORK TO IDENTIFY A PLAN FOR MAINTAINING TRAFFIC CONTROL THROUGH EACH INTERSECTION DURING SIGNAL WORK AND HOURS FOR SIGNAL TURN ON/OFF.
17. ALL NEW VEHICLE SIGNAL HEADS SHALL BE 12" LED.
18. ALL NEW PEDESTRIAN HEADS SHALL BE COUNTDOWN LED MODULES. INCLUDE FACEPLATE XX-XX.
19. ALL NEW PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPLIANT.
20. THE CONTRACTOR SHALL MAINTAIN PROPER ADA CLEARANCES AROUND ALL NEW POLES, CABINETS, OR OTHER ABOVE GROUND EQUIPMENT TO BE INSTALLED.
21. ALL SALVAGED EQUIPMENT SHALL BE DELIVERED TO THE CITY OF NORWALK PUBLIC WORKS MAINTENANCE YARD, UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER.
22. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT SOUTHERN CALIFORNIA EDISON (SCE) COMPANY SERVICE PLANNER HONEY JORDAN AT (562) 903-3191 FOR COORDINATION OF SERVICE SHUTOFF AND HOOKUP/TURN-ON. PROVIDE A MINIMUM OF 6 WEEKS NOTICE.
23. LUMINAIRES SHALL BE EATON ARCHEON SMALL LED, AF24 60 WATT OR AF24 90 WATT, AS SPECIFIED. REFER TO SPECIAL PROVISIONS.



**TYPE E LOOP DETECTOR LAYOUT
DETAIL A**



LEGEND

NEW	EXISTING	
		CABINET
		SERVICE ENCLOSURE
		PULL BOX (SIZE AS NOTED)
		SIGNAL MAST ARM AND LUMINAIRE
		LUMINAIRE
		PUSH BUTTON POST
		PEDESTRIAN SIGNAL HEAD
		3-SECTION VEHICLE SIGNAL HEAD
		3-SECTION LEFT TURN VEHICLE SIGNAL HEAD
		5-SECTION RIGHT TURN VEHICLE SIGNAL HEAD
		PROGRAMMABLE VISIBILITY SIGNAL HEAD
		VIDEO DETECTION CAMERA
		TRAFFIC SIGNAL CONDUIT
		TYPE E LOOP DETECTOR
		QUEUE DETECTION

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: TRAFFIC SIGNAL GENERAL NOTES FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
AS BUILT	CITY ENGINEER RCE 20568 DATE	DRAWING NO. TS-1
FIELD BOOK REF.	Recommended	
PLAN REF.	Drawn By LMW Checked By JMS	SHEET 59 OF 75

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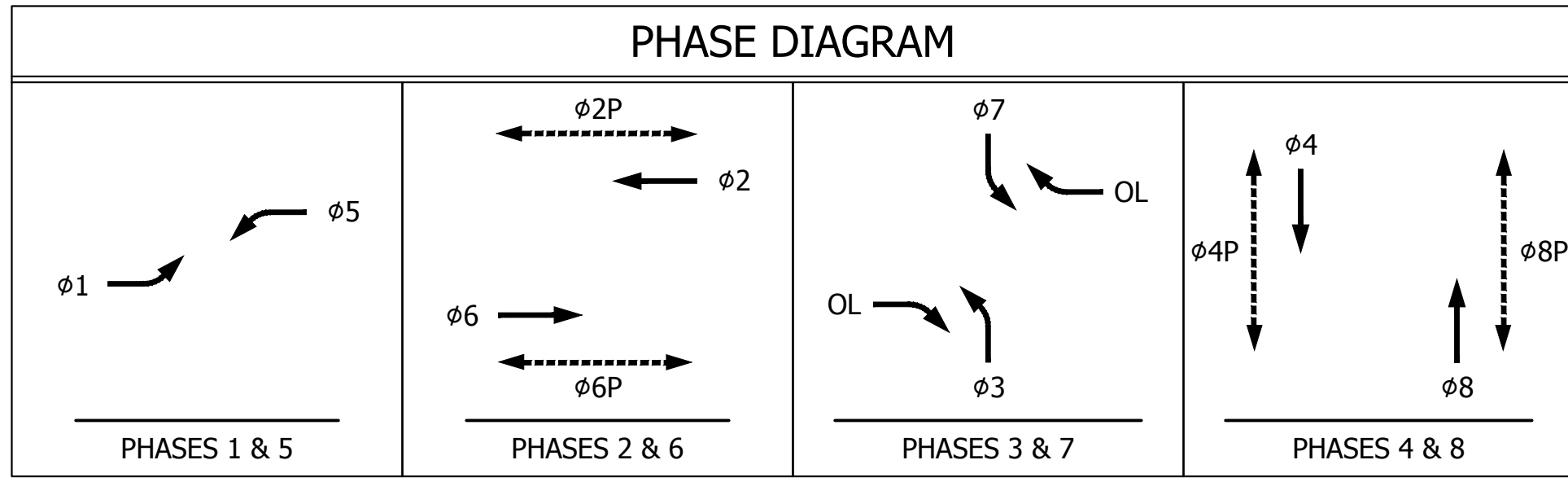
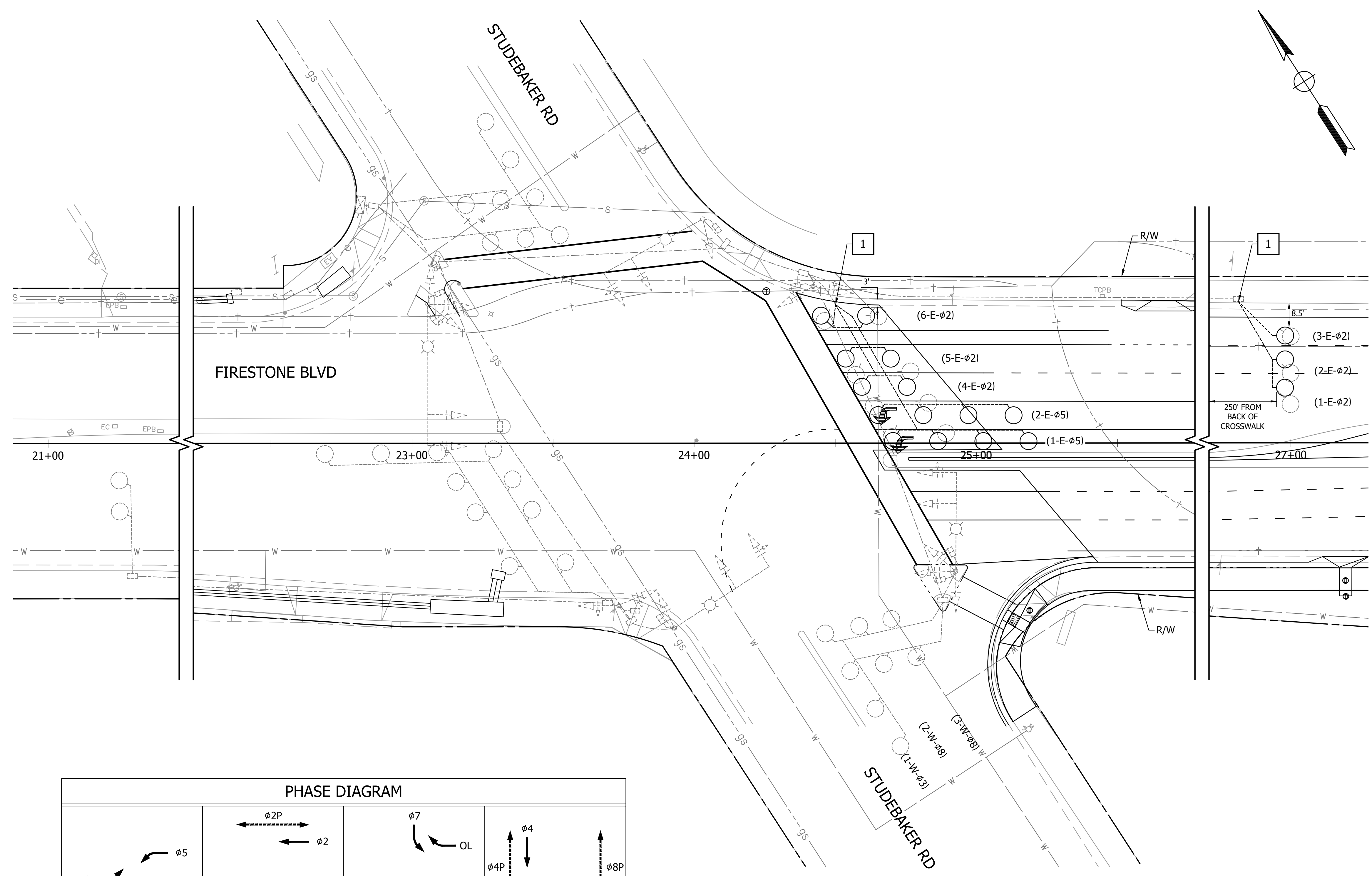
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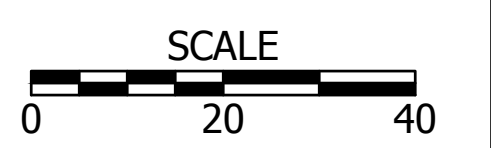
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CONSTRUCTION NOTES

1 ABANDON EXISTING DETECTOR LOOPS, INSTALL NEW DETECTORS. CONNECT TO EXISTING DLC'S.



OL = OVERLAP



FIRESTONE BLVD AT STUDEBAKER RD

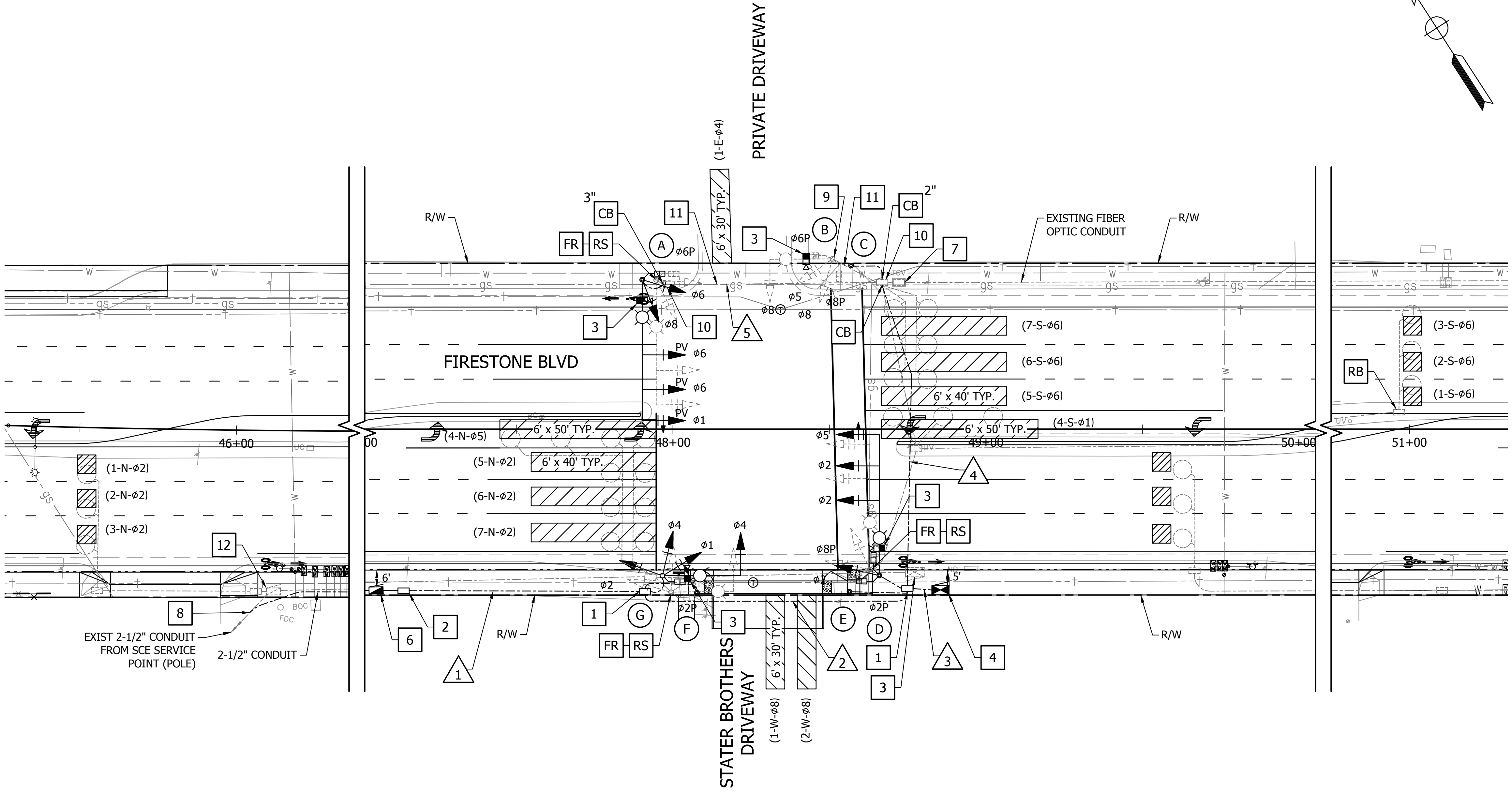
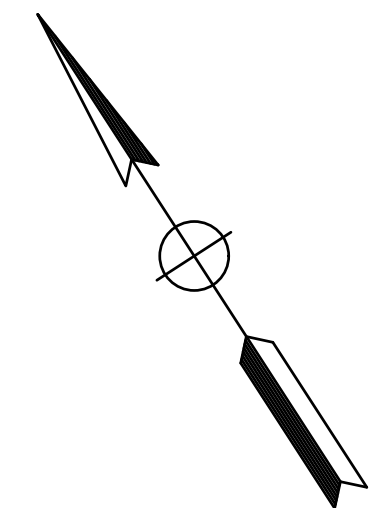
engineering division	CITY OF NORWALK	
REVISIONS	TITLE: TRAFFIC SIGNAL PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
	AS BUILT	DRAWING NO. TS-2
FIELD BOOK REF.	Recommended	
PLAN REF.	Drawn By LMW	Checked By JMS
		SHEET 60 OF 75

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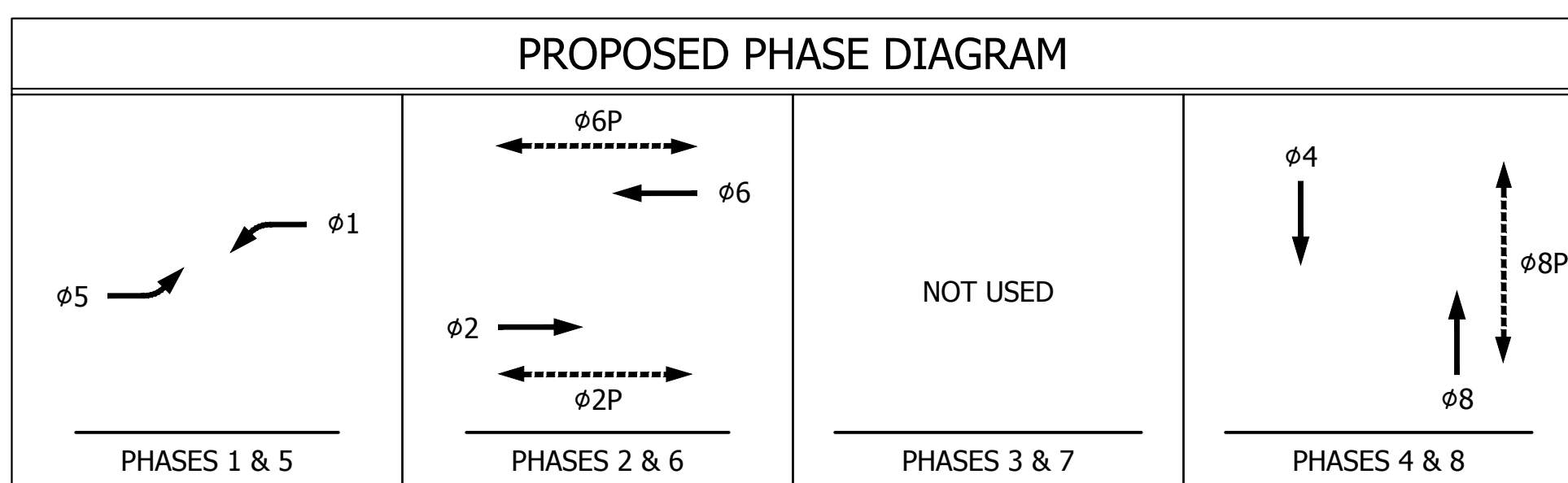
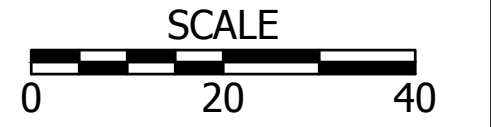
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- ### CONSTRUCTION NOTES
- FR** REMOVE FOUNDATION, A MINIMUM OF THE TOP 5 FEET.
 - RS** REMOVE AND SALVAGE EQUIPMENT COMPLETE.
 - CB** INSTALL CONDUIT INTO EXISTING PULL BOX.
 - 1** INSTALL NEW NO. 6 PULL BOX.
 - 2** INSTALL NEW NO. 5 PULL BOX
 - 3** INSTALL NEW VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER MANUFACTURER'S SPECIFICATIONS. SEE SPECIAL PROVISIONS.
 - 4** REMOVE AND SALVAGE EXISTING TYPE P CABINET COMPLETE. REMOVE FOUNDATION.
 - 5** INSTALL NEW TYPE P CABINET AND FOUNDATION COMPLETE WITH ASC/3 CONTROLLER OR APPROVED EQUAL, VIDEO DETECTION SYSTEM, (14) SWITCH PACKS, GPS UNIVERSAL TIME BASE UNIT AND ANTENNA, AND ETHERNET OVER COPPER DSL SWITCH. TOP OF FOUNDATION SHALL BE 18" ABOVE GRADE.
 - 6** INSTALL NEW TYPE III-BF ANODIZED ALUMINUM SERVICE ENCLOSURE ON NEW FOUNDATION. CONNECT SCE SERVICE.
 - 7** EXISTING FIBER OPTIC COMMUNICATIONS PULL BOX TO REMAIN. REMOVE FO CABLE SIC AND REINSTALL IN NEW CONDUIT TO TRAFFIC SIGNAL CABINET.
 - 8** CONNECT TO EXISTING 2-1/2" CONDUIT. COORDINATE WITH SCE FOR SHUTOFF AND HOOKUP/TURN-ON OF SERVICE TO NEW SERVICE ENCLOSURE.
 - 9** EXISTING SIGNAL STANDARD TO REMAIN. REMOVE AND REPLACE SIGNAL AND PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, AND LUMINAIRE. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM. INSTALL NEW CONDUCTORS.
 - 10** EXISTING TRAFFIC SIGNAL PULL BOX TO REMAIN. INSTALL NEW CONDUIT INTO PULL BOX.
 - 11** REUSE EXISTING CONDUIT. REPLACE CONDUCTORS.
 - 12** REMOVE EXISTING SERVICE ENCLOSURE AND FOUNDATION

- ### GENERAL NOTES
1. ABANDON EXISTING CONDUIT, UNLESS OTHERWISE NOTED. REMOVE CONDUCTORS.
 2. REMOVE ALL EXISTING TRAFFIC SIGNAL PULL BOXES, UNLESS OTHERWISE NOTED.
 3. ABANDON EXISTING DETECTOR LOOPS, UNLESS OTHERWISE NOTED.
 4. REMOVE EXISTING ILLUMINATED STREET NAME SIGNS AND REINSTALL ON NEW POLE MAST ARMS.
 5. COORDINATE TRAFFIC SIGNAL INSTALLATION WITH LIGHTING LAYOUT AND CONSTRUCTION.



FIRESTONE BLVD AT STATER BROTHERS

engineering division	CITY OF NORWALK
REVISIONS	TITLE: TRAFFIC SIGNAL PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1
DATE BY	Approved
AS BUILT	PROJECT NO. 7196.1
FIELD BOOK REF.	Recommended
PLAN REF.	DRAWING NO. TS-3
Drawn By LMW	Checked By JMS
SHEET 61 OF 75	

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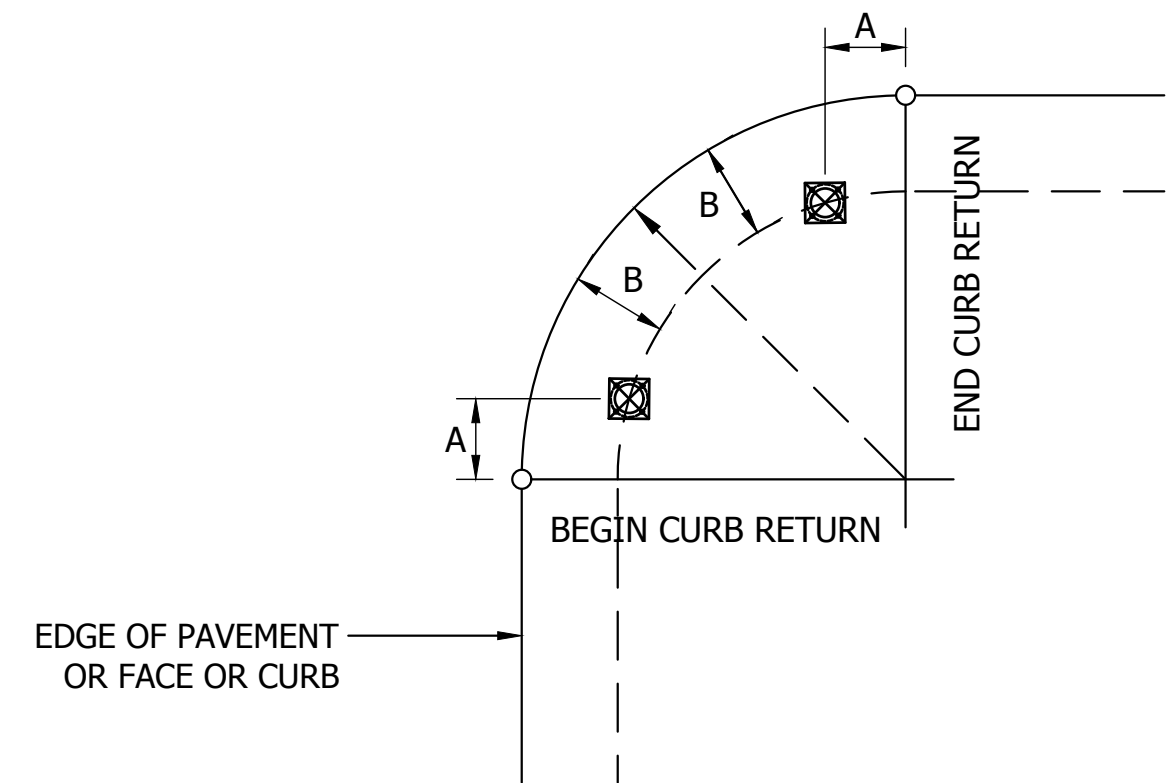
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POLE SCHEDULE													
X	POLE DATA			POLE LOCATION		SIGNAL MOUNTING			PPB		LUMINAIRE	STREET NAME SIGN	SPECIAL REQUIREMENTS
	TYPE	SMA	LMA	A	B	MAST ARM	POLE	PED	Ø	ARROW			
A	29-5-100 (N)	45' (N)	15' (N)	-	2.5'	3-MAS (N)	SV-2-TA (N)	SP-1-T (N)	6	L	60W LED (N)	-	INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PROGRAMMABLE VISIBILITY SIGNAL HEADS ON MAST ARM
B	19-4-129 (E)	20' (E)	15' (E)	-	-	1-MAS (E)	SV-2-TA (E)	SP-2-T (E)	6	L	60W LED (N)	FIRESTONE (E)	INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM
C	PPB POST (N)	-	-	-	6.5'	-	-	-	8	R	-	-	
D	29-5-100 (N)	45' (N)	15' (N)	-	2.5'	3-MAS (N)	SV-1-T (N)	SP-2-T (N)	8	L	60W LED (N)	-	INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM
E	PPB POST (N)	-	-	-	6'	-	-	-	2	R	-	-	
F	PPB POST (N)	-	-	-	7'	-	-	-	2	L	-	-	
G	19-2-100 (N)	25' (N)	12' (N)	-	2.5'	1-MAS (N)	SV-3-TA (N)	SP-1-T (N)	-	-	60W LED (N)	FIRESTONE (R)	INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM

(N) - NEW EQUIPMENT (E) - EXISTING EQUIPMENT (R) - RELOCATED EQUIPMENT
 ALL NEW SIGNAL POLES AND MAST ARMS SHALL BE PER CALTRANS STANDARD PLANS, 2018 EDITION.



CABLE OR AWG	POLE	SIGNAL PHASES		CONDUIT RUN				
				1	2	3	4	5
12-CC 3-CC	A	1,6,8,6P	/6PPB			1/1	1/1	1/1
	B	5,8,6P,8P	/6PPB			1/1	1/1	
	C		/8PPB			-/1	-/1	
	D	2,5,2P,8P	/8PPB			1/1		
	E		/2PPB			-/1		
	F		/2PPB			-/1	-/1	
	G	1,2,4,2P				1/ -	1/ -	
	TOTAL					1/1	4/6	2/3
#10	SIGNAL COMMON				1	1	1	1
	LUMINAIRES			2	2		2	2
	TOTAL			2	3		3	3
#6	SIGNAL SERVICE			3	3	3		
#12	IISNS			2	2		2	
DLC								
	TOTAL							
VIDEO	AUTOSCOPE VIDEO/POWER				1	4	2	1
FO	FO CABLE (NOTE 1)					1	1	
CONDUIT SIZE, INCHES				2	3	(2) 3	3	3 (E)

ALL CONDUIT IS NEW UNLESS NOTED AS EXISTING (E).

NOTES:

- REMOVE AND REINSTALL EXISTING FO CABLE BETWEEN THIS CONTROL CABINET AND THE CABINET AT FIRESTONE BLVD/ORR & DAY RD.

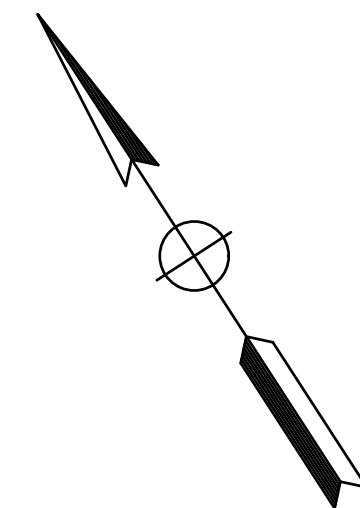
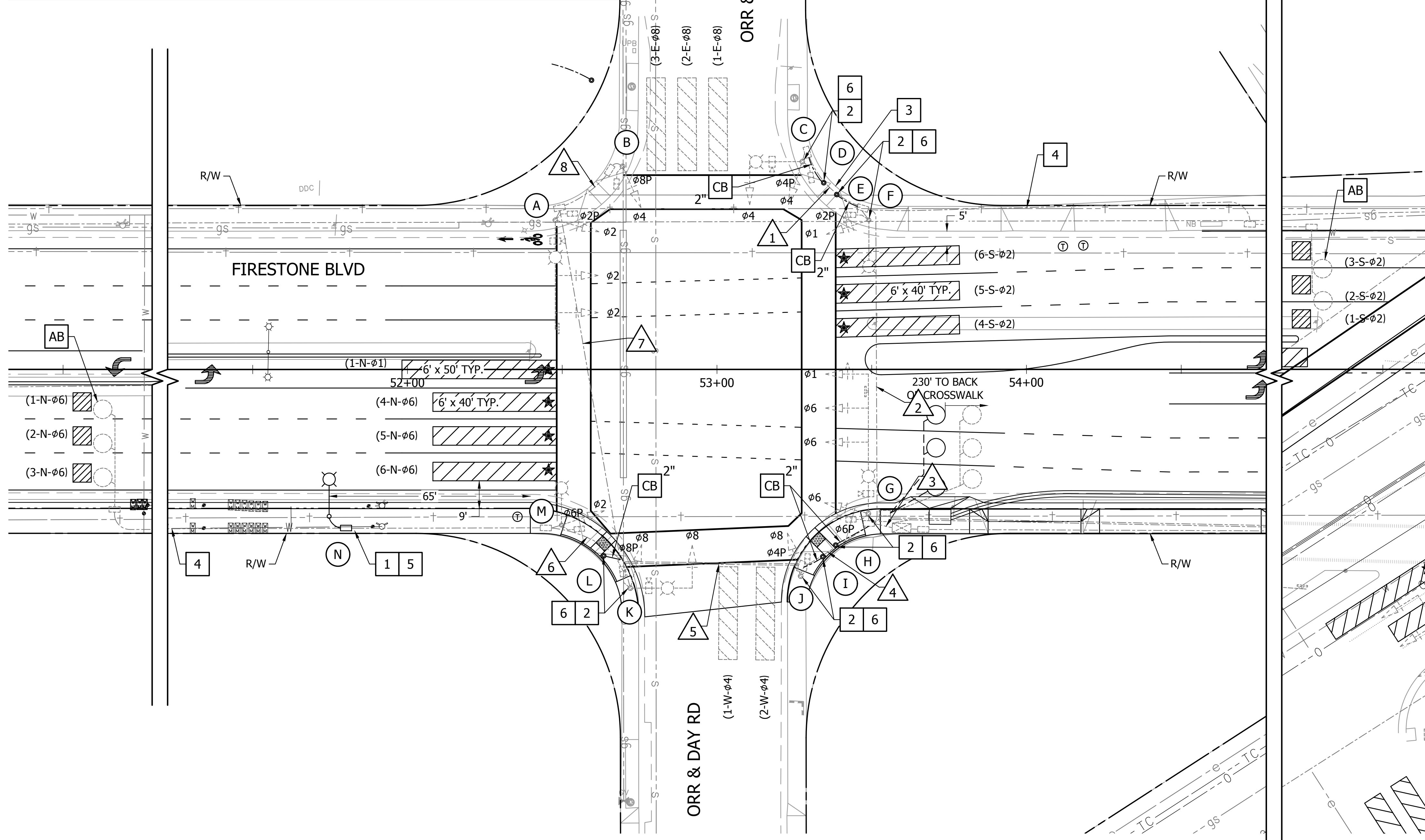
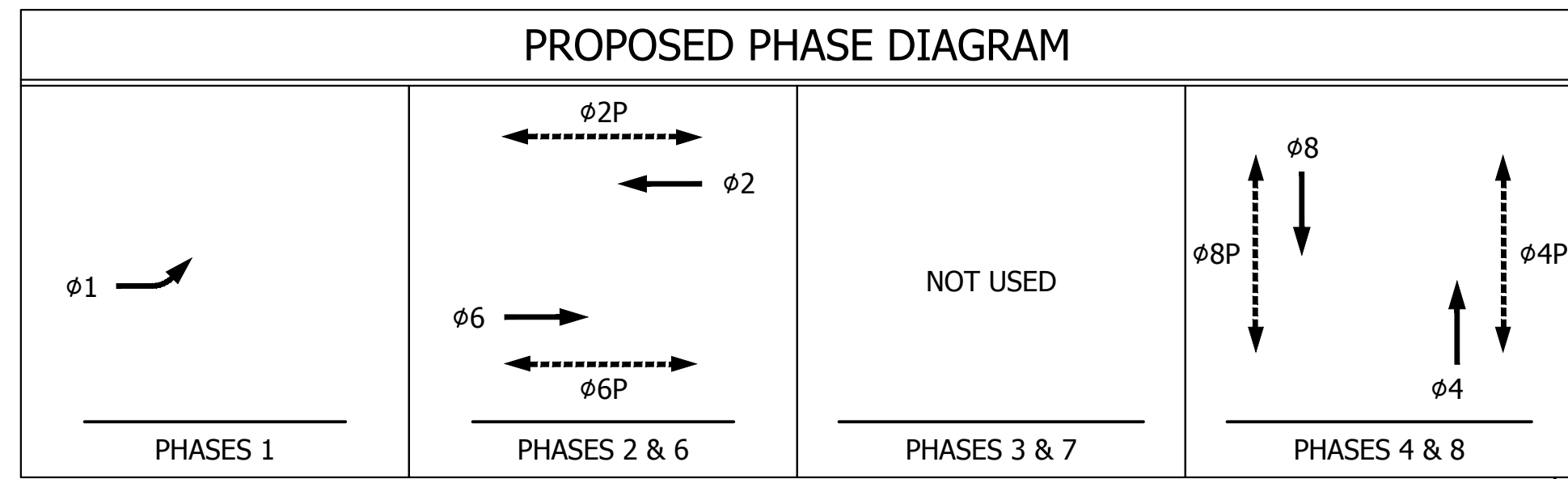
FIRESTONE BLVD AT STATER BROTHERS

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: TRAFFIC SIGNAL PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
AS BUILT	Recommended	DRAWING NO. TS-4
FIELD BOOK REF.	CITY ENGINEER RCE 20568 DATE	
PLAN REF.	Drawn By LMW	Checked By JMS
		SHEET 62 OF 75

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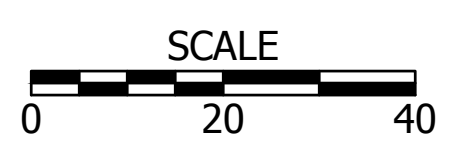


CONSTRUCTION NOTES

- AB** ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS.
- RC** EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR.
- CB** INSTALL CONDUIT INTO EXISTING PULL BOX.
- 1** INSTALL NEW NO. 5 PULL BOX INTO EXISTING CONDUIT RUN.
- 2** REMOVE AND RELOCATE PEDESTRIAN PUSH BUTTON TO NEW POST.
- 3** REMOVE/REPLACE SIDEWALK AND RAMP AS NECESSARY FOR INSTALLATION OF PED POSTS.
- 4** REMOVE DLC'S.
- 5** RUN 2#10 CONDUCTORS TO THE PULL BOX ON THE NORTHWEST CORNER AT THE ORR & DAY INTERSECTION, AND CONNECT TO THE LIGHTING CIRCUIT.
- 6** REMOVE EXISTING 3-WIRE CABLE AND INSTALL NEW CABLE TO RELOCATED PED PUSH BUTTONS.

GENERAL NOTES

- 1. ALL EXISTING SIGNAL EQUIPMENT AND CONDUCTORS TO REMAIN UNLESS OTHERWISE NOTED.



FIRESTONE BLVD AT ORR & DAY RD

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: TRAFFIC SIGNAL PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
AS BUILT	Recommended	DRAWING NO. TS-5
FIELD BOOK REF.	CITY ENGINEER RCE 20568 DATE	SHEET 63 OF 75
PLAN REF.	Drawn By LMW Checked By JMS	



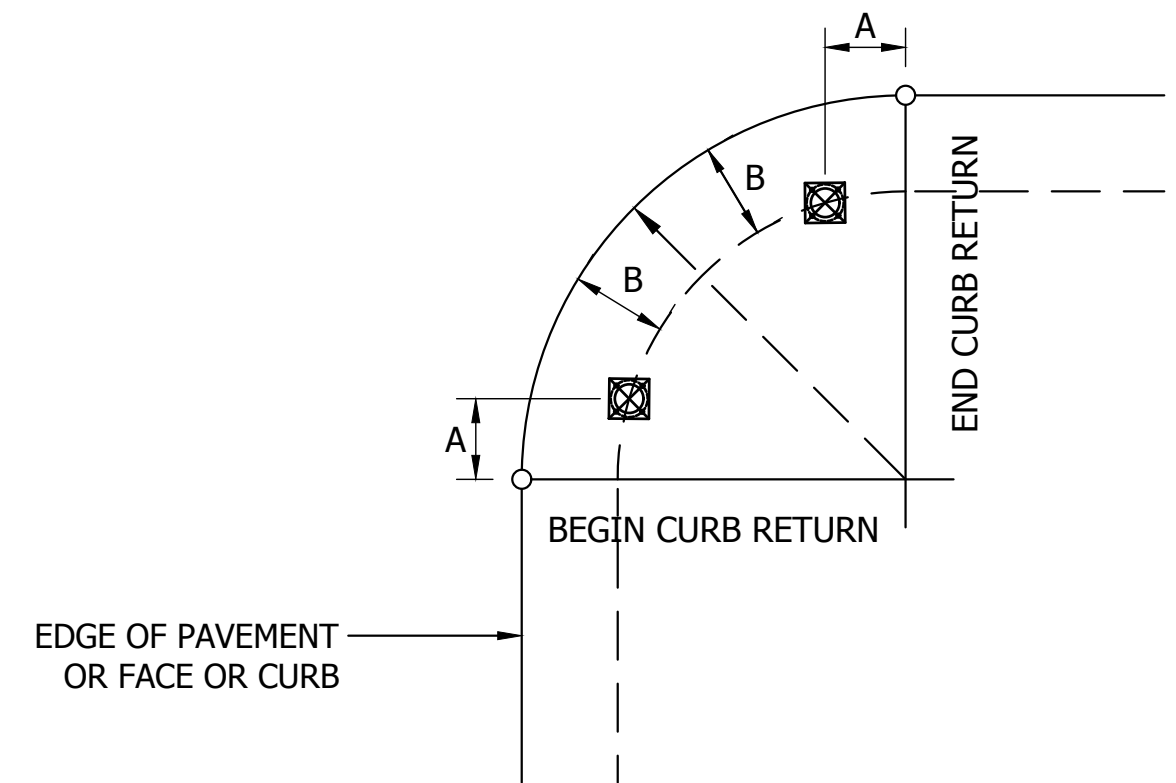
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POLE SCHEDULE													
X	POLE DATA			POLE LOCATION		SIGNAL MOUNTING			PPB		LUMINAIRE	STREET NAME SIGN	SPECIAL REQUIREMENTS
	TYPE	SMA	LMA	A	B	MAST ARM	POLE	PED	Ø	ARROW			
A	24-4-80	35'	12'	EXISTING		2-MAS	SV-1-T	SP-1-T	8	L	LED	ORR & DAY	
B	1-A	-	-	EXISTING		-	TV-1-T	SP-1-T	2	R	-	-	
C	17-3-100	15'	12'	EXISTING		1-MAS	SV-1-T	SP-1-T	-	L	LED	FIRESTONE	REMOVE AND RELOCATE PPB TO POLE D
D	PPB POST (N)	-	-	19.5'	4.5'	-	-	-	2	L (R)	-	-	
E	PPB POST (N)	-	-	19'	5'	-	-	-	4	R (R)	-	-	
F	15TS	-	12'	EXISTING		-	SV-1-T	SP-1-T	-	-	-	-	REMOVE AND RELOCATE PPB TO POLE E
G	29-5-100	45'	12'	EXISTING		3-MAS	SV-1-T	SP-1-T	-	-	LED	ORR & DAY	REMOVE AND RELOCATE PPB TO POLE H
H	PPB POST (N)	-	-	14.5'	6.5'	-	-	-	4	L (R)	-	-	
I	PPB POST (N)	-	-	15'	6.5'	-	-	-	6	R (R)	-	-	
J	1-A	-	-	EXISTING		-	TV-1-T	SP-1-T	-	-	-	-	REMOVE AND RELOCATE PPB TO POLE I
K	17-3-100	20'	12'	EXISTING		1-MAS	SV-1-T	SP-1-T	-	-	LED	FIRESTONE	REMOVE AND RELOCATE PPB TO POLE L
L	PPB POST	-	-	20'	4.5'	-	-	-	6	L (R)	-	-	
M	15TS	-	12'	EXISTING		-	SV-1-T	SP-1-T	8	L	LED	-	
N	*	-	8'	-	2.5'	-	-	-	-	-	60W LED (N)	-	

(N) - NEW EQUIPMENT (E) - EXISTING EQUIPMENT (R) - RELOCATED EQUIPMENT
 ALL NEW SIGNAL POLES AND MAST ARMS SHALL BE PER CALTRANS STANDARD PLANS, 2018 EDITION.
 * = ADVANCED LIGHTING POLE - AMERON TYPE 1-C1 MARBELITE OCTAGONAL



CABLE OR AWG	POLE	SIGNAL PHASES	CONDUIT RUN										
			1	2	3	4	5	6	7	8			
12-CC 3-CC	A	2,2P	/8PPB				1/1	1/-	1/1			1/-	
	B	4,8P	/2PPB				1/1	1/-	1/1			1/-	1/-
	C	4,4P			1/-	1/-	1/-						
	D		/2PPB				-/1						
	E		/4PPB				-/1						
	F	1,2P				1/-	1/-						
	G	1,6,6P					1/-						
	H		/4PPB				-/1						
	I		/6PPB				-/1						
	J	8,4P					1/-	1/-	1/-				
	K	8,8P					1/-	1/-	1/-				
	L		/6PPB				-/1		-/1				
	M	2,6					1/1	1/-	1/1	1/-			
TOTAL					1/-	2/-	8/8	5/5	4/4	1/-	2/-	1/-	
#10	SIGNAL COMMON		1	1	2	1	1	1	1	1	1	1	
	LUMINAIRES		2	2		2	2	2	2	2	2		
	TOTAL		3	3	2	3	3	3	3	3	3	1	
#6	SIGNAL SERVICE												
#12	IISNS		2	2		2	2				2		
DLC	TOTAL												
VIDEO	AUTOSCOPE VIDEO/POWER		1	1	4	2	2				1		
SIC	12PR#19 (NOTE 1)				1								
CONDUIT SIZE, INCHES			2(E)	3(E)	2-3(E)	3(E)	2-3(E)	3(E)	3(E)	3(E)	2(E)		

ALL CONDUIT IS EXISTING (E).

- NOTES:
 1. ALL EXISTING CONDUCTORS ARE TO REMAIN, EXCEPT AS NOTED ON THE SIGNAL PLAN. INSTALL NEW 3CC AS NOTED ON THE SIGNAL PLAN.

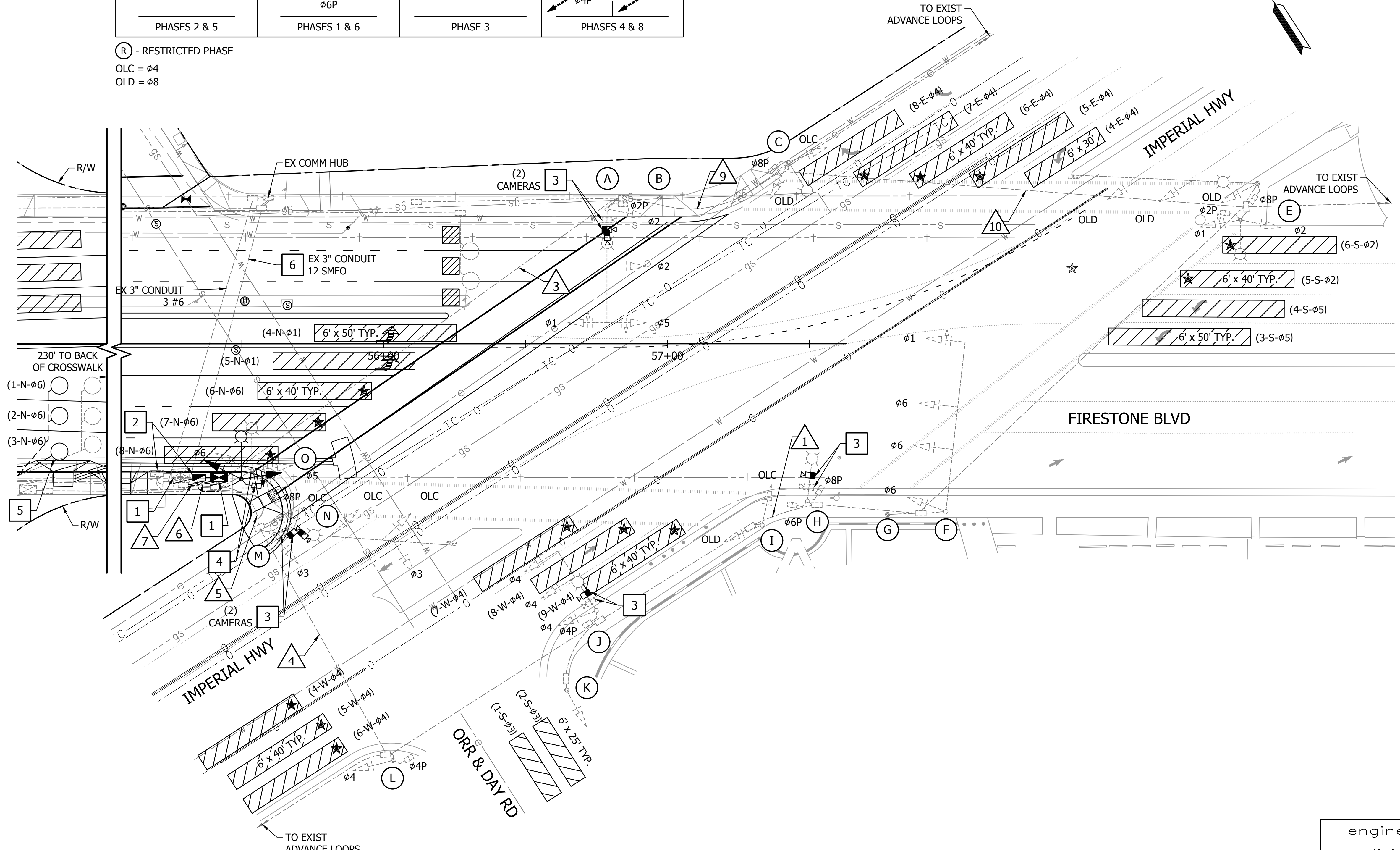
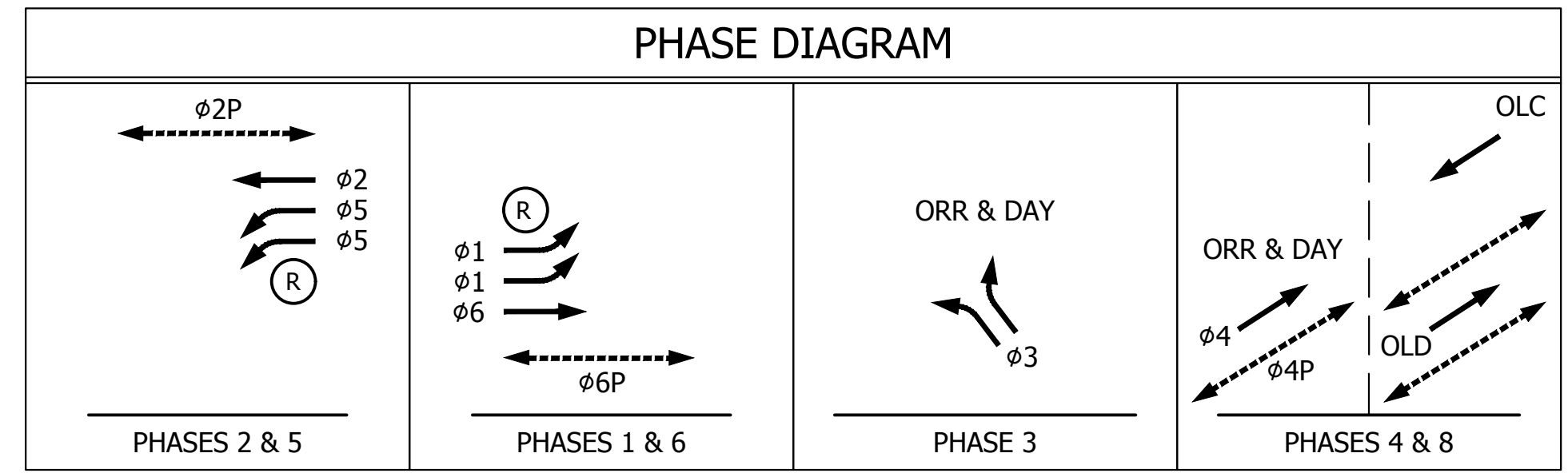
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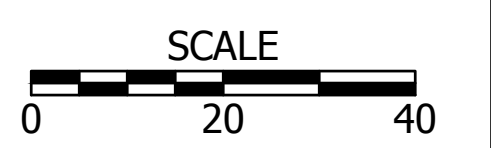
FIRESTONE BLVD AT ORR & DAY RD

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: TRAFFIC SIGNAL PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE BY	Approved	PROJECT NO. 7196.1
AS BUILT	Recommended	DRAWING NO. TS-6
FIELD BOOK REF.	CITY ENGINEER RCE 20568 DATE	
PLAN REF.	Drawn By LMW Checked By JMS	SHEET 64 OF 75

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- CONSTRUCTION NOTES**
- ABANDON. IF APPLIED TO CONDUIT, REMOVE CONDUCTORS
 - RELOCATE EXISTING TYPE P CABINET COMPLETE TO NEW FOUNDATION. REMOVE EXISTING FOUNDATION. REMOVE EXISTING VIDEO DETECTION SYSTEM. INSTALL NEW VIDEO DETECTION SYSTEM PER MANUFACTURER'S SPECIFICATIONS. REFER TO SPECIAL PROVISIONS. TOP OF FOUNDATION SHALL BE 18" ABOVE GRADE. CONNECT TO EXISTING PULL BOXES. (2) 3" CONDUIT TO SIGNAL PULL BOX, (1) 3" CONDUIT TO PULL BOX FROM EXISTING SERVICE ENCLOSURE. REROUTE AND CONNECT EXISTING SIGNAL CABLES AND CONDUCTORS TO RELOCATED CONTROL CABINET.
 - RELOCATE EXISTING SERVICE ENCLOSURE COMPLETE TO NEW FOUNDATION. REMOVE EXISTING FOUNDATION. CONNECT TO EXISTING PULL BOX WITH 2" CONDUIT. SPLICE EXISTING LUMINAIRE AND IISNS CONDUCTORS AND EXTEND TO RELOCATED ENCLOSURE
 - REMOVE AND SALVAGE EXISTING VIDEO DETECTION CAMERAS (6) AND CABLE. INSTALL NEW VIDEO DETECTION CAMERA(S) ON LUMINAIRE MAST ARM PER MANUFACTURER'S SPECIFICATIONS. REFER TO SPECIAL PROVISIONS.
 - RELOCATE TYPE 15TS POLE COMPLETE. REMOVE A MINIMUM OF THE TOP 5 FEET OF FOUNDATION. INSTALL NEW CABLES AND CONDUCTORS TO CONTROL CABINET AND SERVICE ENCLOSURE.
 INSTALL NEW LOOP DETECTORS. REMOVE EXISTING AND INSTALL NEW (2) 2-PAIR DLC'S TO CONTROL CABINET.
 - REMOVE AND INSTALL NEW 12 SMFO CABLE FROM COMMUNICATION HUB TO RELOCATED CONTROL CABINET.



FIRESTONE BLVD AT IMPERIAL HWY

engineering division		CITY OF NORWALK	
REVISIONS		TITLE: TRAFFIC SIGNAL PLAN FIRESTONE BOULEVARD WIDENING STUDEBAKER RD TO IMPERIAL HWY - PHASE 1	
DATE	BY	Approved	PROJECT NO. 7196.1
		AS BUILT	DRAWING NO. TS-7
FIELD BOOK REF.		Recommended	
PLAN REF.		CITY ENGINEER RCE 20568 DATE	
		Drawn By LMW	Checked By JMS
			SHEET 65 OF 75

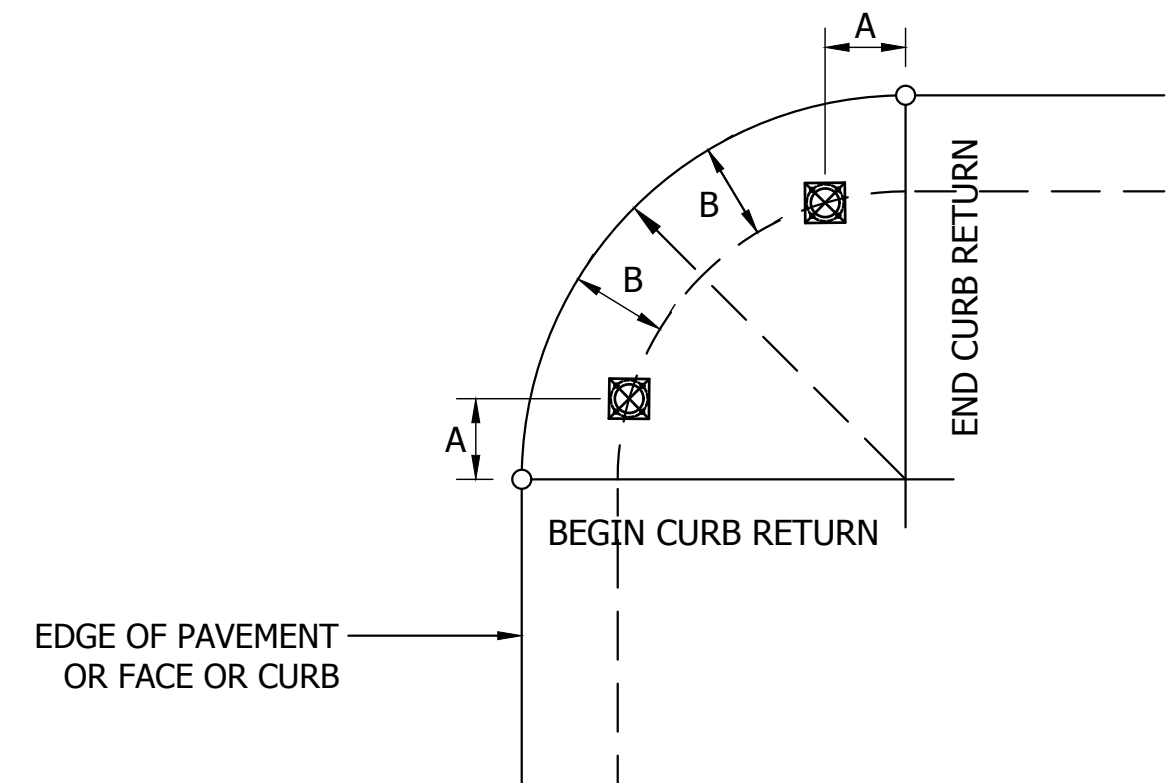
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POLE SCHEDULE													
X	POLE DATA			POLE LOCATION		SIGNAL MOUNTING			PPB		LUMINAIRE	STREET NAME SIGN	SPECIAL REQUIREMENTS
	TYPE	SMA	LMA	A	B	MAST ARM	POLE	PED	Ø	ARROW			
A	29-5-100	40'	12'	EXISTING		3-MAS	SV-1-T	SP-1-T	-	-	LED	IMPERIAL	REPLACE VIDEO DETECTION CAMERAS (2)
B	PPB POST	-	-	EXISTING		-	-	-	8	L	-	-	
C	15TS	-	12'	EXISTING		-	SV-2-TA	SP-1-T	2	R	LED	-	
D	61-5-100	65'	12'	EXISTING		2-MAS	SV-1-T	SP-1-T	2	L	LED	FIRESTONE	
E	15TS	-	12'	EXISTING		-	SV-2-TA	SP-1-T	8	R	LED	-	
F	61-5-100	60'	-	EXISTING		4-MAS	-	-	-	-	-	-	
G	PPB POST	-	-	EXISTING		-	-	-	8	L	-	-	
H	15TS	-	12'	EXISTING		-	-	SP-2-T	-	-	-	IMPERIAL	REPLACE VIDEO DETECTION CAMERA
I	1-A	-	-	EXISTING		-	TV-2-T	SP-1-T	6	R	-	-	
J	19-4-100	25'	-	EXISTING		2-MAS	SV-1-T	SP-1-T	-	-	-	ORR & DAY	REPLACE VIDEO DETECTION CAMERA
K	1-A	-	-	EXISTING		-	TV-1-T	-	4	R	-	-	
L	1-A	-	-	EXISTING		-	TV-1-T	SP-1-T	4	R	-	-	
M	61-5-100	65'	12'	EXISTING		4-MAS	SV-2-T	SP-1-T	-	-	-	FIRESTONE	REPLACE VIDEO DETECTION CAMERAS (2)
N	PPB POST	-	-	EXISTING		-	-	-	6	L	-	-	
O	15TS	-	12'	5'	2.5'	-	SV-2-TA	SP-1-T	8	R	LED	-	RELOCATE POLE AND EQUIPMENT COMPLETE



CABLE OR AWG	POLE	SIGNAL PHASES	CONDUIT RUN											
			1	2	3	4	5	6	7	8	9	10		
12-CC 3-CC	A	1,2,5,2P								1/-	1/-	1/-		
	B	/8PPB								- /1	- /1	- /1		
	C	/2PPB								- /1	- /1	- /1	- /1	
	D	OLC, OLD, 8P								1/-	1/-	1/-	1/-	
	E	OLD,8P	/2PPB							1/1	1/1	1/1	1/1	1/1
	F	1,2,2P	/8PPB							1/1	1/1	1/1	1/1	1/1
	G	1,5,6		1/-	1/-	1/-	1/-	1/-	1/-	1/-	1/-	1/-		
	H	/8PPB		- /1	- /1	- /1	- /1	- /1	- /1	- /1	- /1	- /1		
	I	6P,8P		1/-	1/-	1/-	1/-	1/-	1/-	1/-	1/-	1/-		
	J	OLC,OLD	/6PPB		1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1		
	K	4,4P				1/-	1/-	1/-	1/-	1/-	1/-	1/-		
	L	3	/4PPB			1/1	1/1	1/1	1/1	1/1	1/1	1/1		
	M		/4PPB				- /1	- /1	- /1	- /1	- /1	- /1		
	N	4,4P				1/-	1/-	1/-	1/-	1/-	1/-	1/-		
	O	3,OLC,8P	/6PPB						1/1	1/1	1/1	1/1		
P	5,6,6P	/8PPB							1/1	1/1	1/1			
TOTAL			2/1	3/2	5/3	6/4	7/5	12/10	12/10	4/4	3/3	2/2		
#10	SIGNAL COMMON		1	1	1	1	1	1	1	1	1	1	1	
	LUMINAIRES		2	2	2	2	2	2	2	2	2	2	2	
	TOTAL		3	3	3	3	3	3	3	1	3	3	3	
#6	SIGNAL SERVICE													
#12	IISNS		2	2	2	2	2	2	2	2	2	2	2	
Type B	Phase 2								2	2	2	2	2	
DLC	Phase 4					3	3	3	3	3	3	3	3	
	Phase 6								3	3	3	3	3	
	TOTAL					3	3	5	8	5	5	2	2	
VIDEO	AUTOSCOPE VIDEO/POWER		1	1	2	2	4	6	6	2	2	2	2	
SIC														
CCTV	CCTV Cable							1	1	1	1	1	1	
CONDUIT SIZE, INCHES			3 (E)	3 (E)	3 (E)	3 (E)	2-3(E)	2-3(E)	2-3(E)	3 (E)	3 (E)	3 (E)	3 (E)	

ALL CONDUIT IS AS EXISTING (E).
 NOTES:
 1. ALL EXISTING CONDUCTORS ARE TO REMAIN. ROUTE TO RELOCATED CONTROL CABINET OR SERVICE ENCLOSURE.

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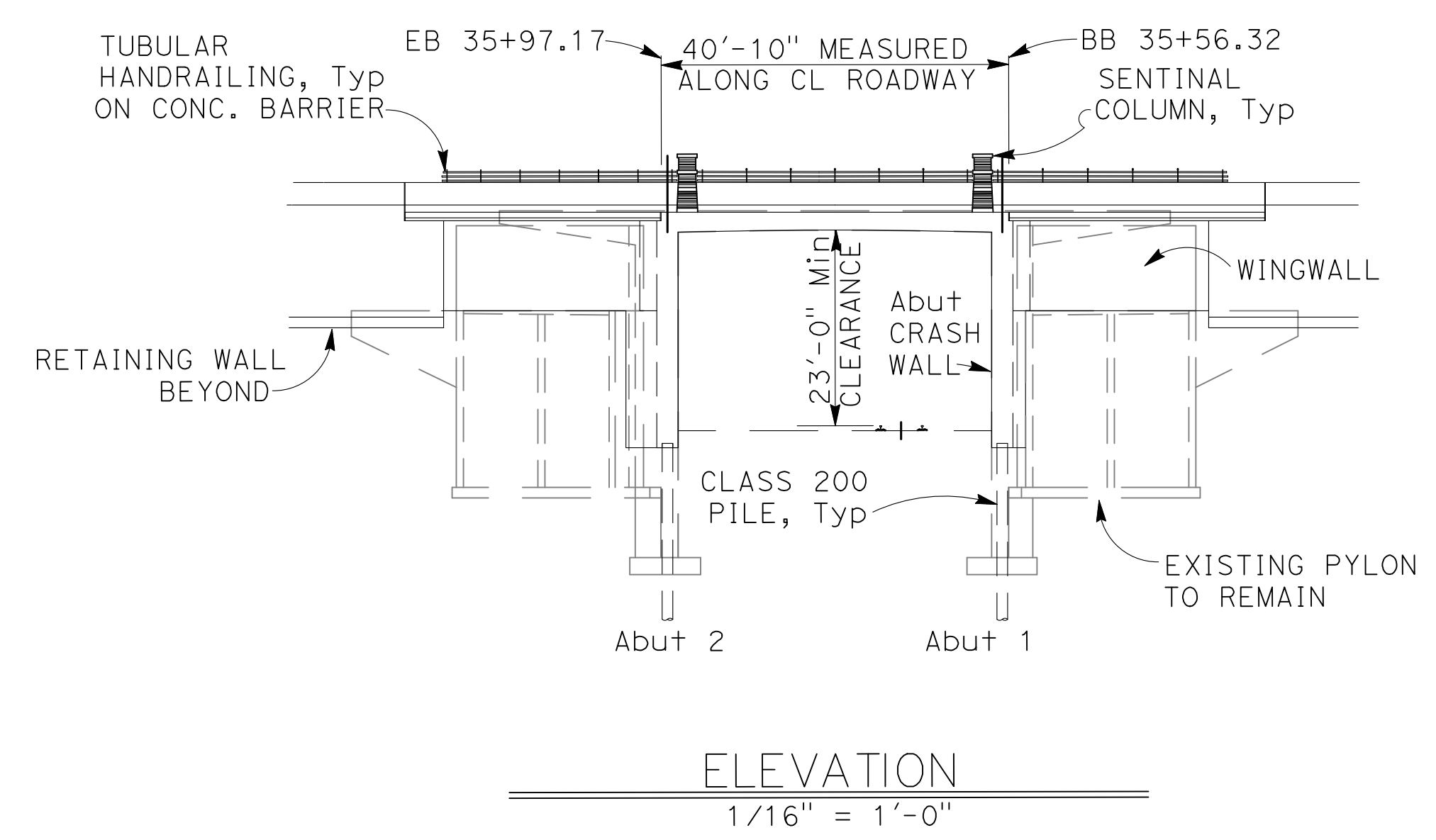
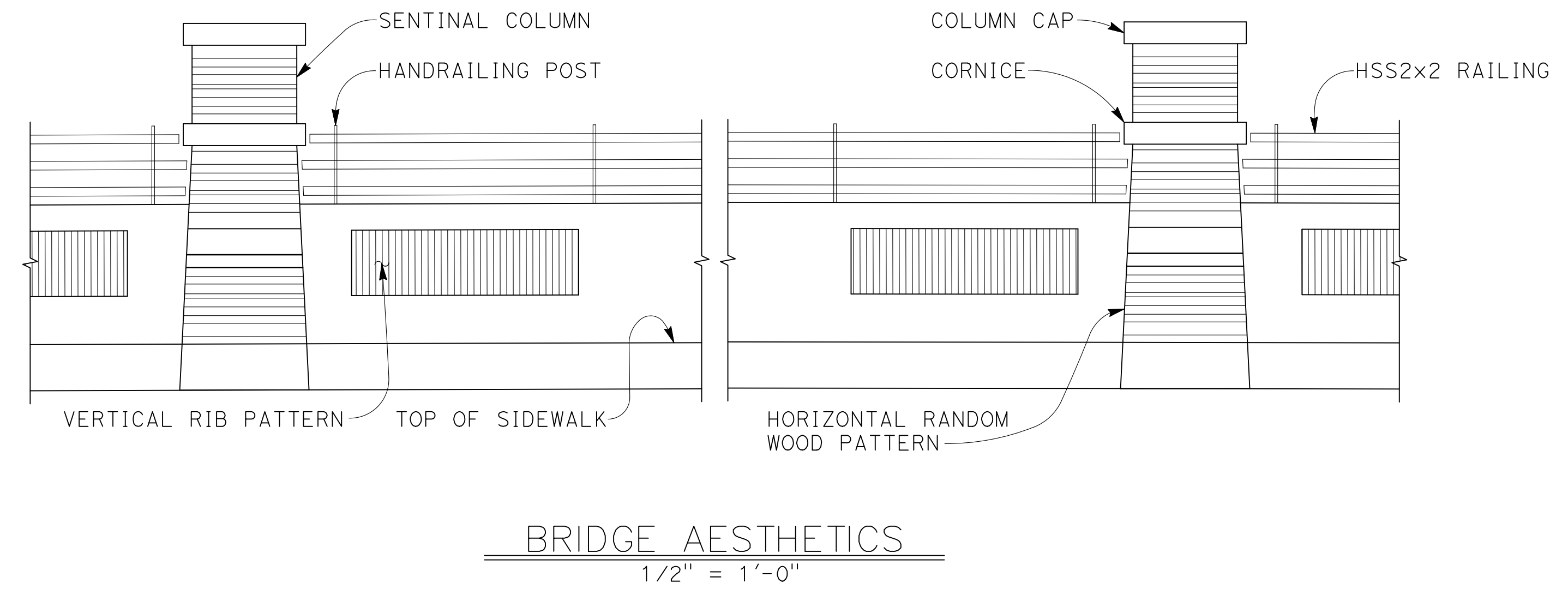
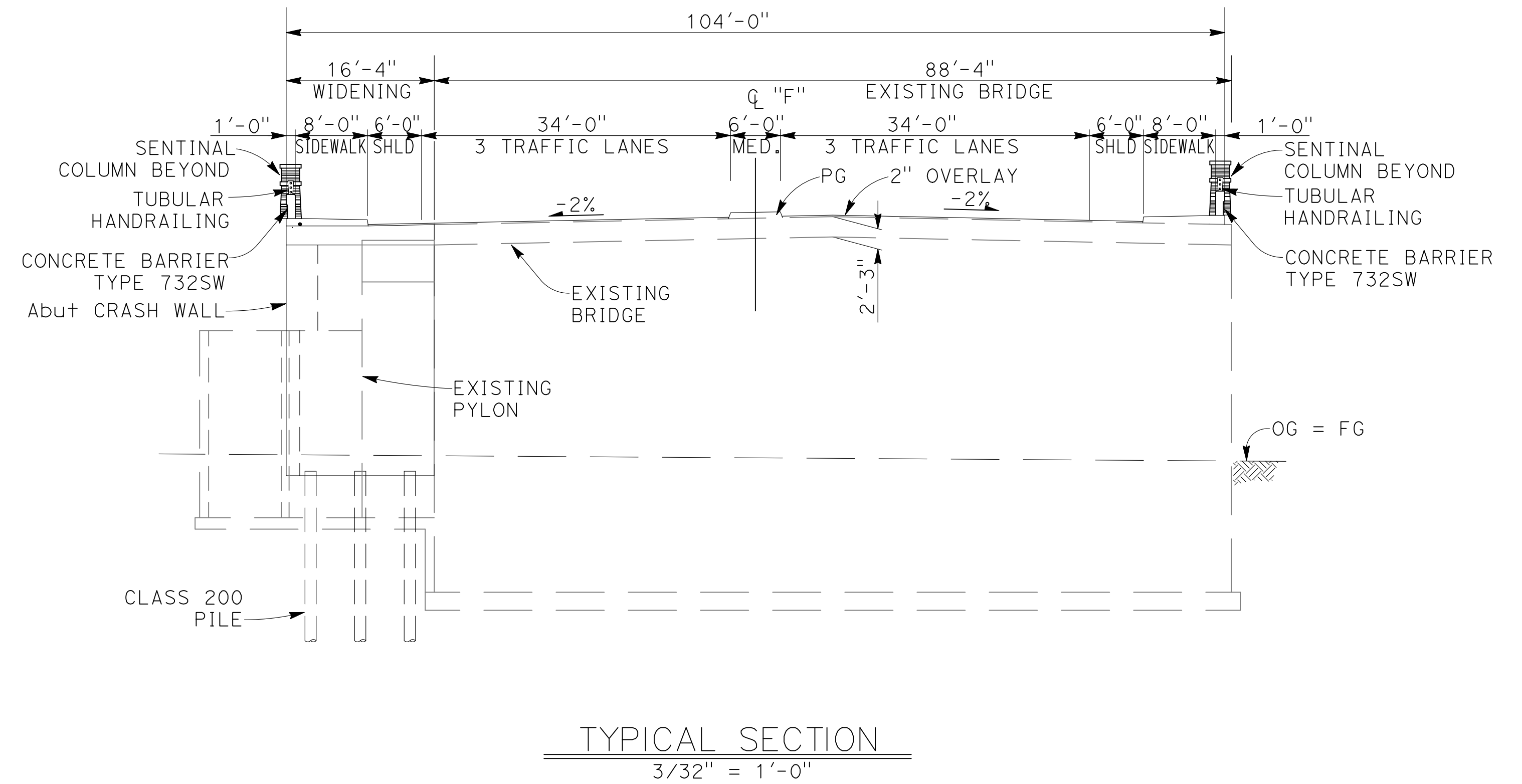
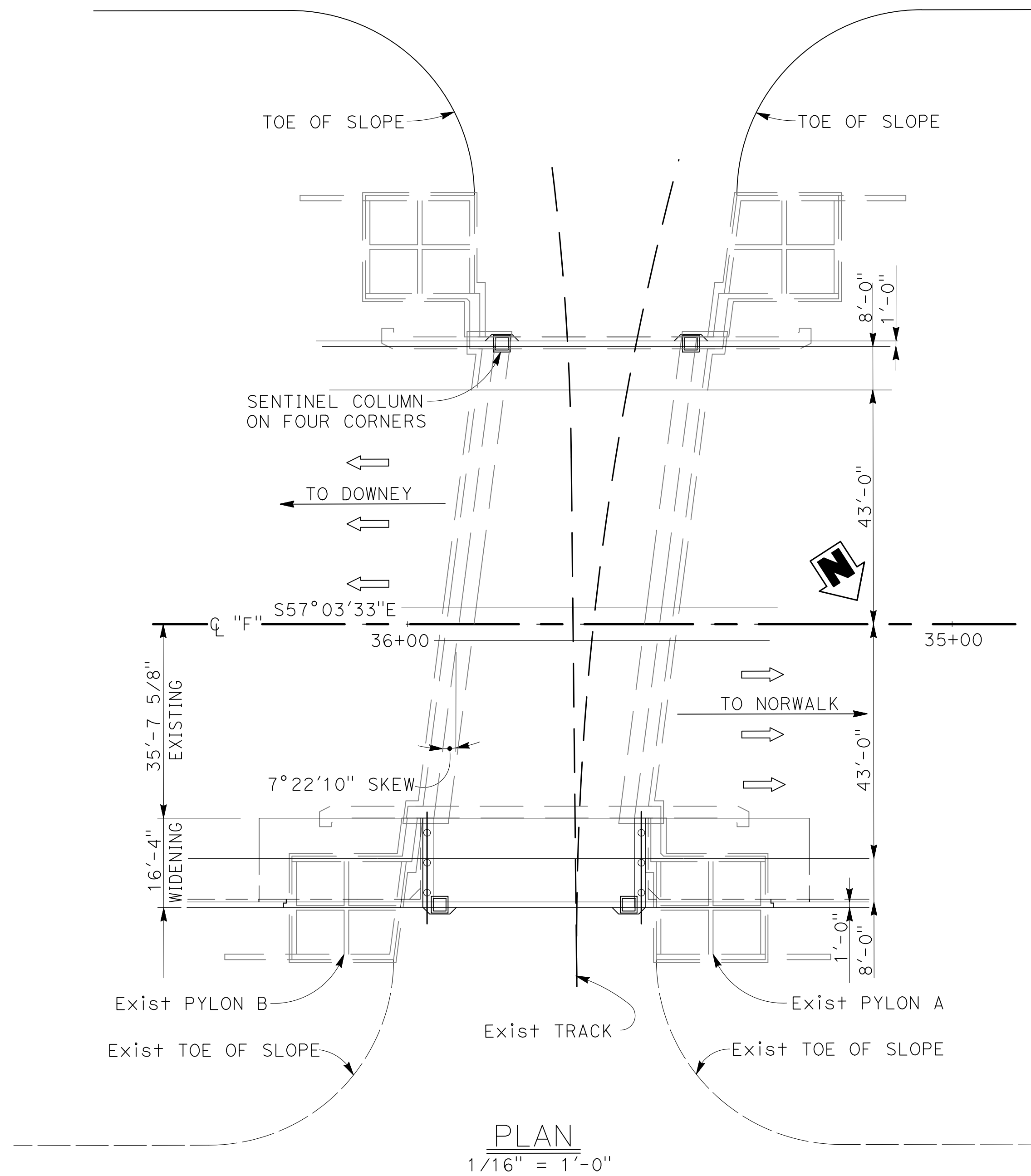
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FIRESTONE BLVD AT IMPERIAL HWY

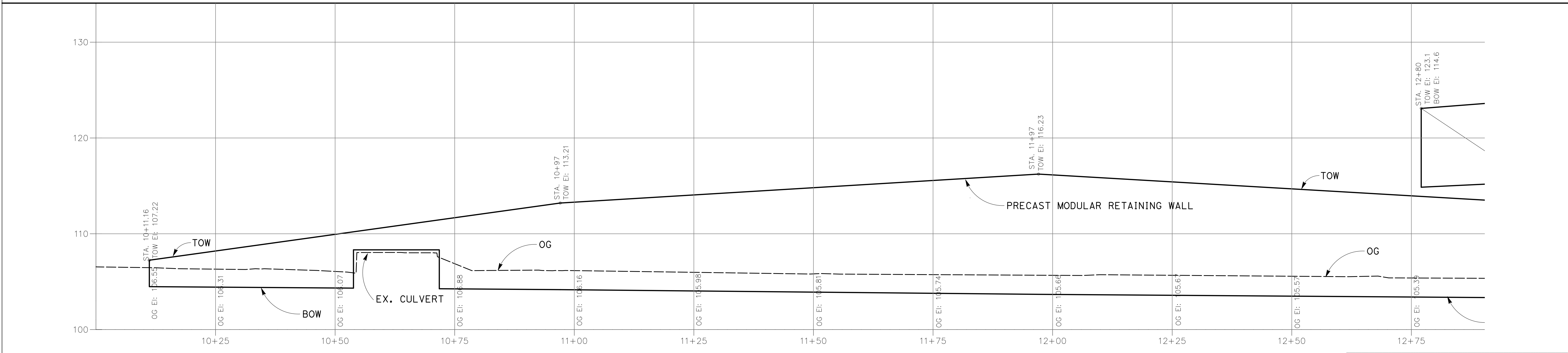
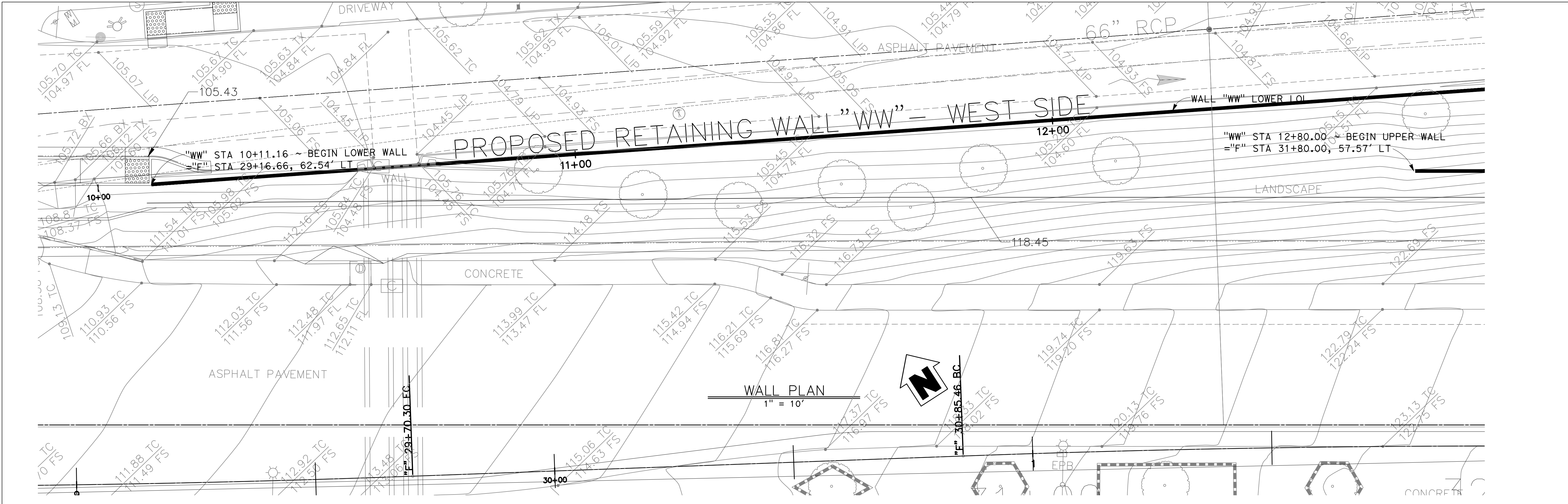
engineering division
CITY OF NORWALK

TITLE: TRAFFIC SIGNAL PLAN
FIRESTONE BOULEVARD WIDENING
STUDEBAKER RD TO IMPERIAL HWY - PHASE 1

Approved: _____ PROJECT NO. 7196.1
 Recommended: _____ DRAWING NO. TS-8
 Drawn By: LMW Checked By: JMS SHEET 66 OF 75



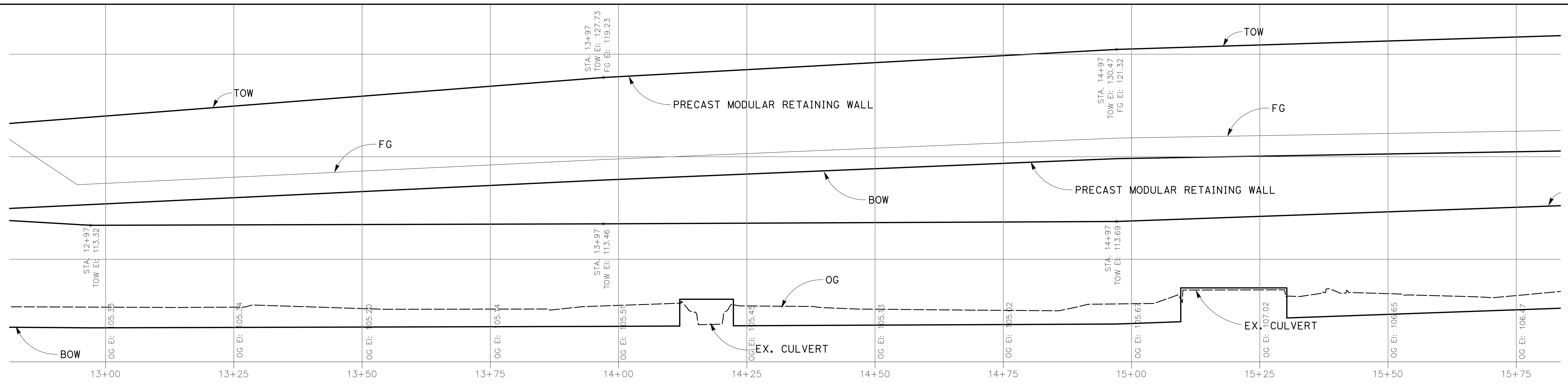
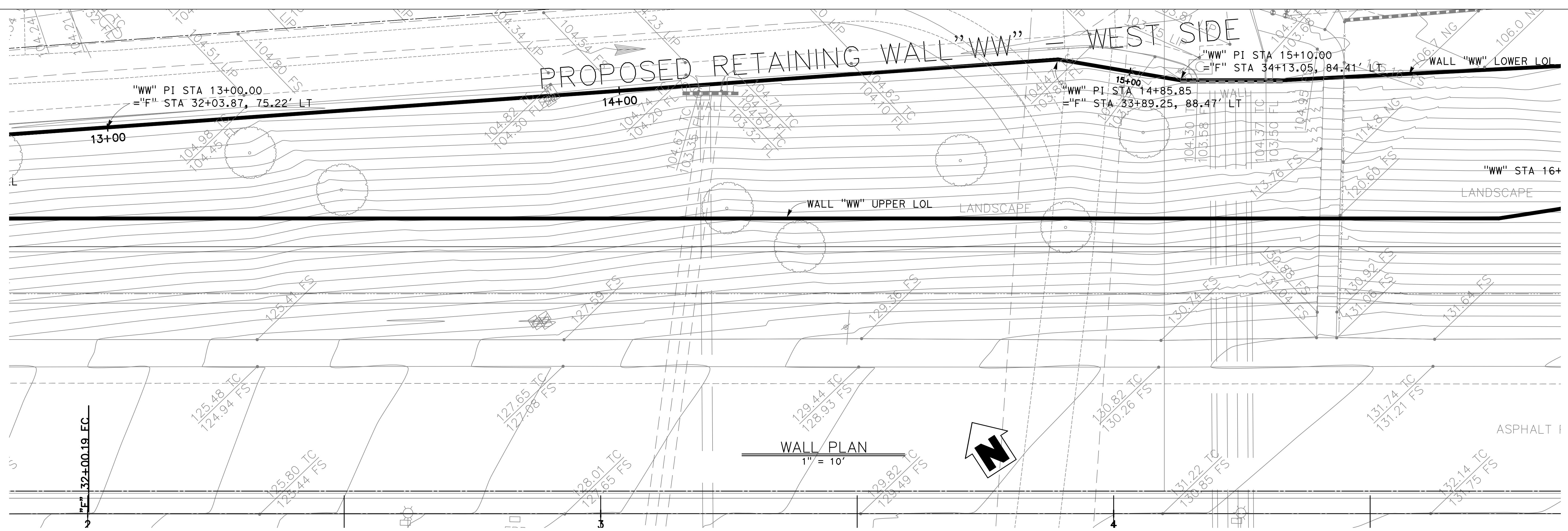
<p>BIGGS CARDOSA ASSOCIATES INC STRUCTURAL ENGINEERS 500 S. Main Street, Suite 400 Orange, California 92668 714-550-4665</p>		<p>engineering division</p>	<p>CITY OF NORWALK</p>						
		<p>REVISIONS</p> <table border="1"> <tr><th>DATE</th><th>BY</th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>		DATE	BY				
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<p>AS BUILT</p>		<p>Approved</p> <p>CITY ENGINEER RCE 20088 DATE</p>	<p>PROJECT NO. 7196.1</p>						
<p>PLAN REF.</p>		<p>Recommended</p> <p>DATE</p>	<p>DRAWING NO.</p>						
<p>Drawn By T.D.</p>		<p>Checked By E.J.P.</p>	<p>SHEET 67 OF 75</p>						



WALL PROFILE
 1" = 10' HORZ
 1" = 5' VERT

 BIGGS CARDOSA ASSOCIATES INC STRUCTURAL ENGINEERS 500 S. Main Street, Suite 400 Orange, California 92668 714-550-4665		engineering division CITY OF NORWALK		TITLE: WEST RETAINING WALL & PROFILE 1 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY	PROJECT NO. 7196.1
		REVISIONS DATE BY		Approved CITY ENGINEER RCE 2008 DATE	DRAWING NO. SHEET 68 OF 75
		AS BUILT		Recommended	
		PLAN REF.		Drawn By T.D. Checked By E.J.P.	

PROPOSED RETAINING WALL "WW" = WEST SIDE

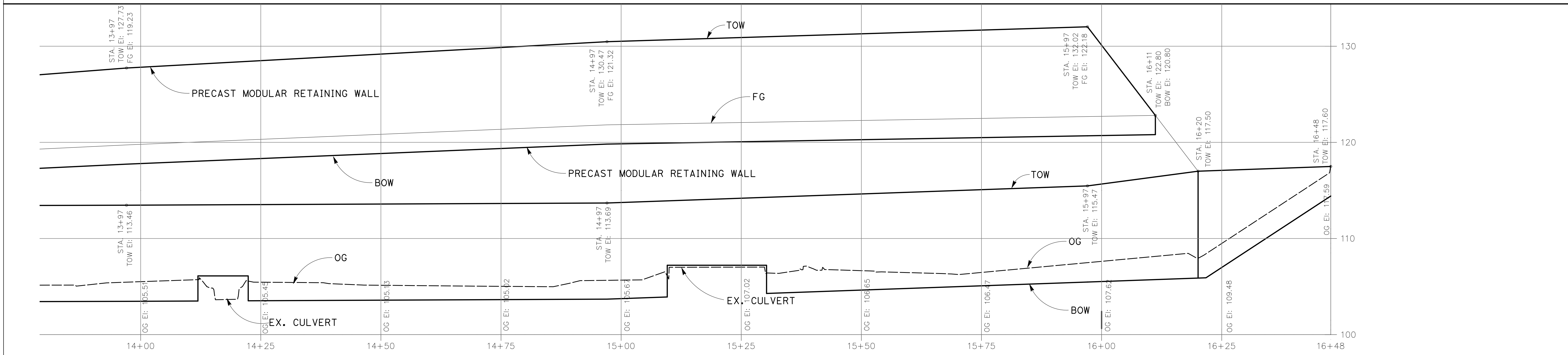
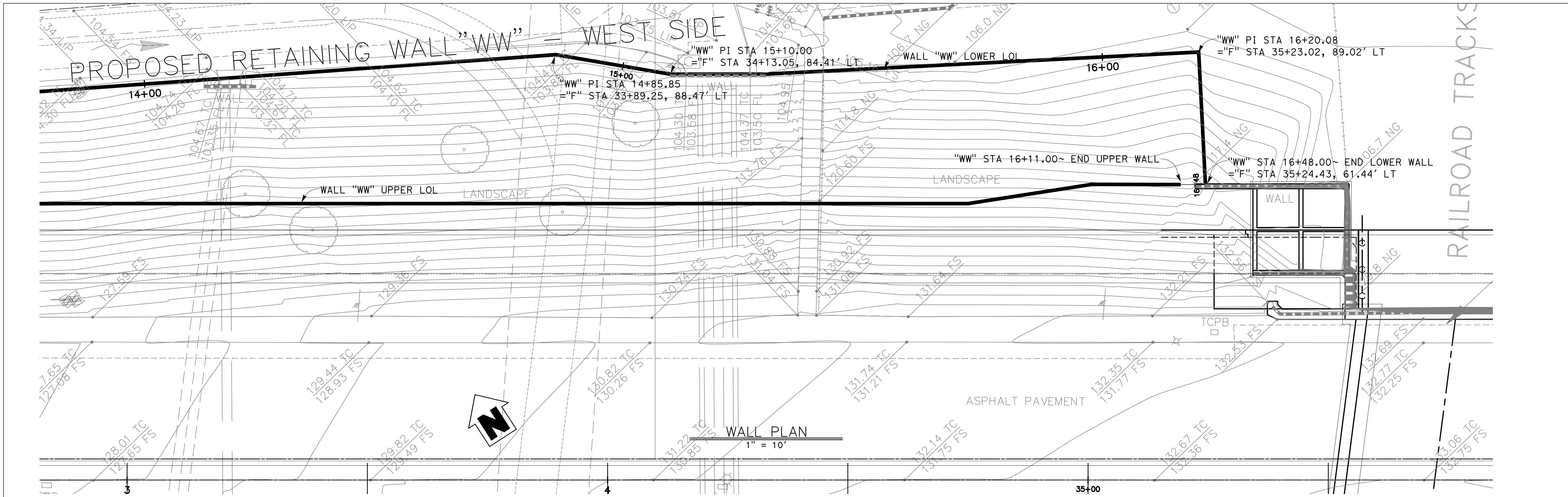


WALL PROFILE
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714-550-4665

REGISTERED PROFESSIONAL ENGINEER
MICHAEL A THOMAS
No. S4676
Exp. 9/30/20
STRUCTURAL
STATE OF CALIFORNIA

engineering division		CITY OF NORWALK															
TITLE: WEST RETAINING WALL PLAN & PROFILE 2 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY		PROJECT NO. 7196.1															
Revisions: <table border="1"> <thead> <tr> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		DATE	BY					Approved: <table border="1"> <tr> <td>CITY ENGINEER</td> <td>RCE</td> <td>2008</td> <td>DATE</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>		CITY ENGINEER	RCE	2008	DATE				
DATE	BY																
CITY ENGINEER	RCE	2008	DATE														
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PLAN REF.		DATE															
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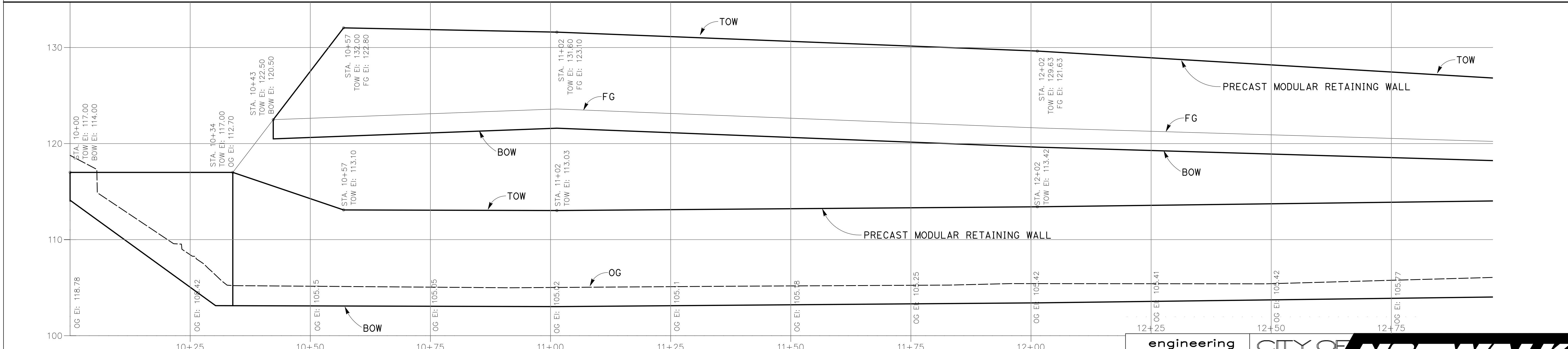
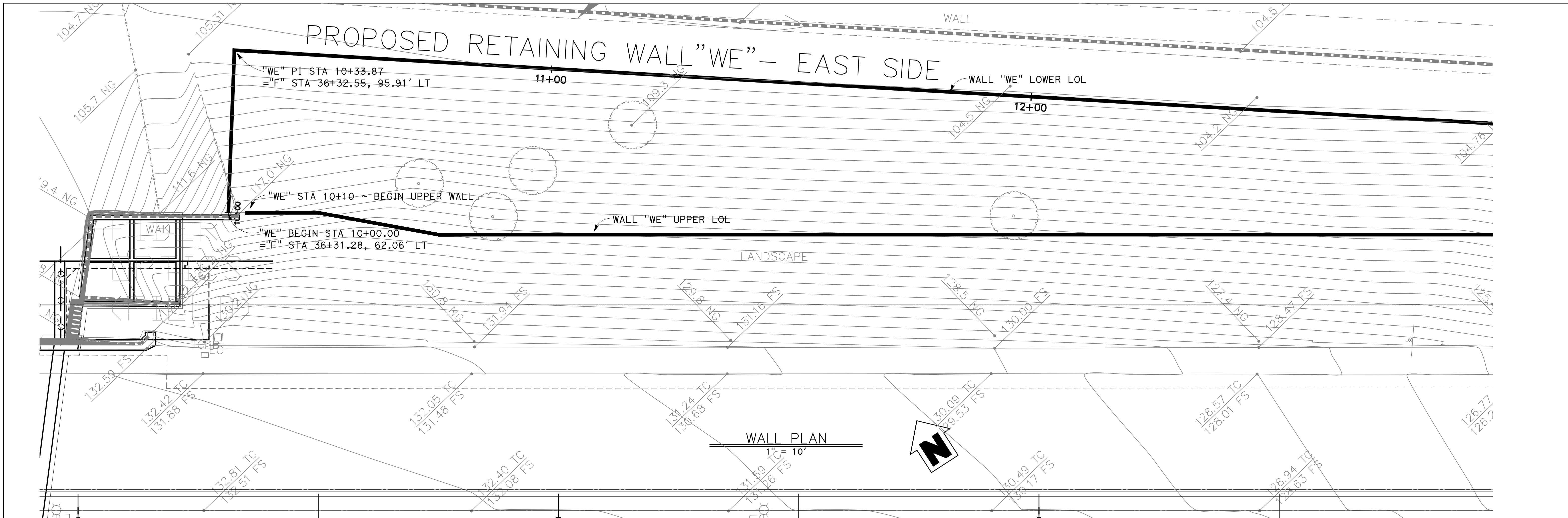


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REGISTERED PROFESSIONAL ENGINEER
 MICHAEL A. THOMAS
 No. S4676
 Exp. 9/30/20
 STRUCTURAL
 STATE OF CALIFORNIA

engineering division		CITY OF NORWALK	
TITLE: WEST RETAINING WALL PLAN & PROFILE 3 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY		PROJECT NO. 7196.1	
Approved CITY ENGINEER: RCE 20088 DATE:		DRAWING NO. SHEET 70 OF 75	
Recommended DATE:		Drawn By T.D. Checked By E.J.P.	
REVISIONS DATE BY		AS BUILT	
FIELD BOOK REF.		PLAN REF.	

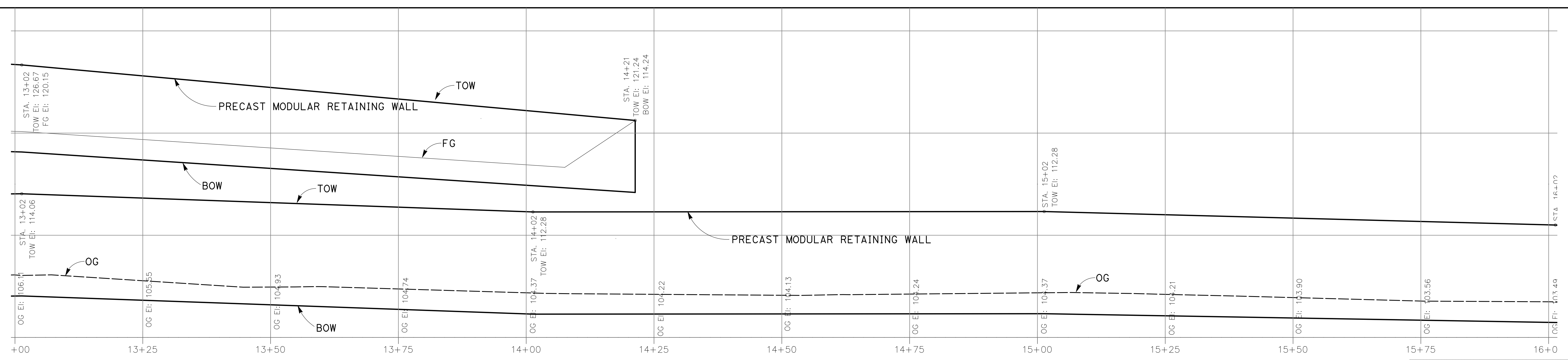
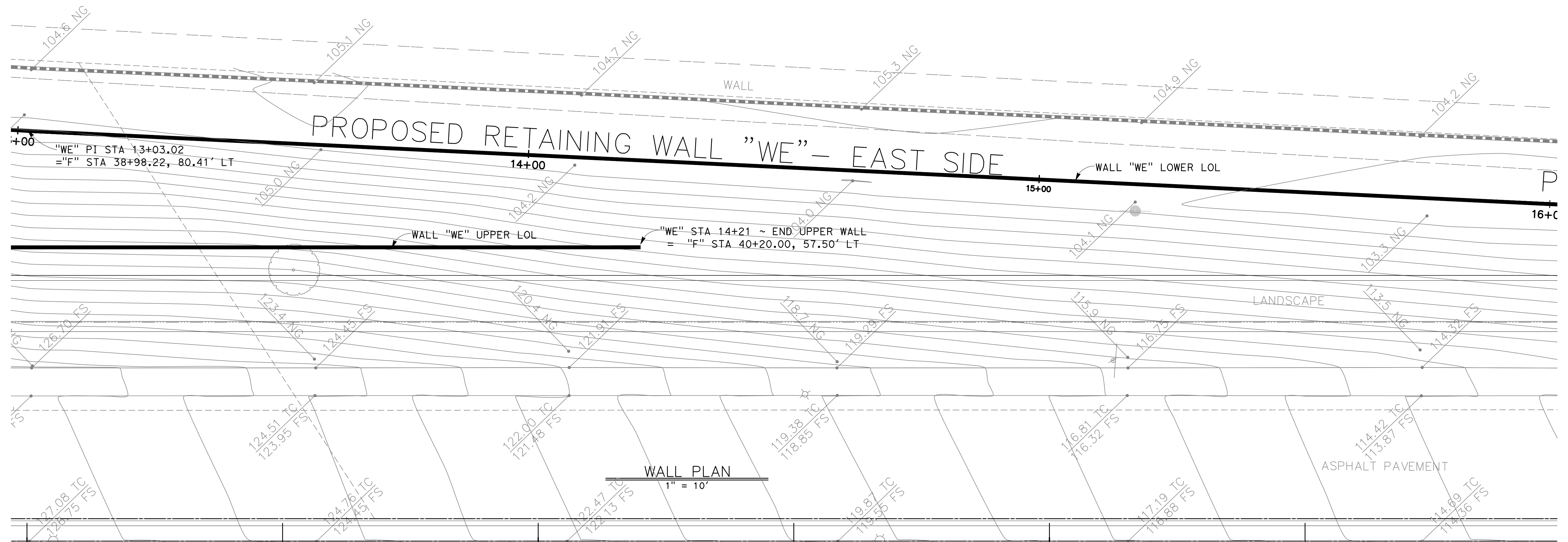


WALL PROFILE
 1" = 10' HORIZ
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 MICHAEL A. THOMAS
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 Exp. 9/30/20
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 STATE OF CALIFORNIA

engineering division		CITY OF NORWALK	
TITLE: EAST RETAINING WALL PLAN & PROFILE 1 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY		PROJECT NO. 7196.1	
Approved CITY ENGINEER RCE 20068 DATE		DRAWING NO. SHEET 71 OF 75	
Recommended Drawn By T.D. Checked By E.J.P.		DATE	
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WALL PROFILE
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REGISTERED PROFESSIONAL ENGINEER
 MICHAEL A. THOMAS
 No. S4676
 Exp. 9/30/20
 STRUCTURAL
 STATE OF CALIFORNIA

engineering division
CITY OF NORWALK

TITLE: EAST RETAINING WALL PLAN & PROFILE 2
 FIRESTONE BOULEVARD WIDENING
 FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY

DATE	BY

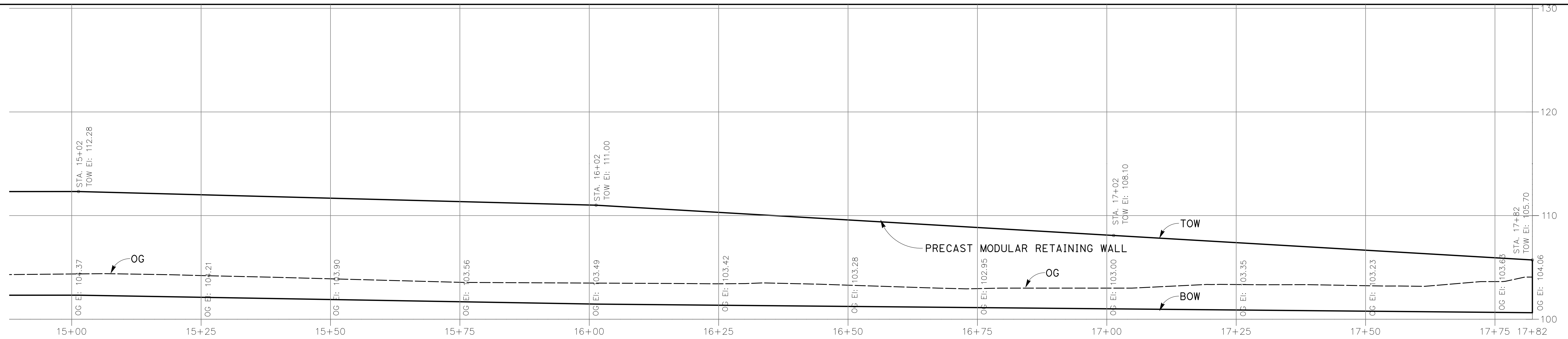
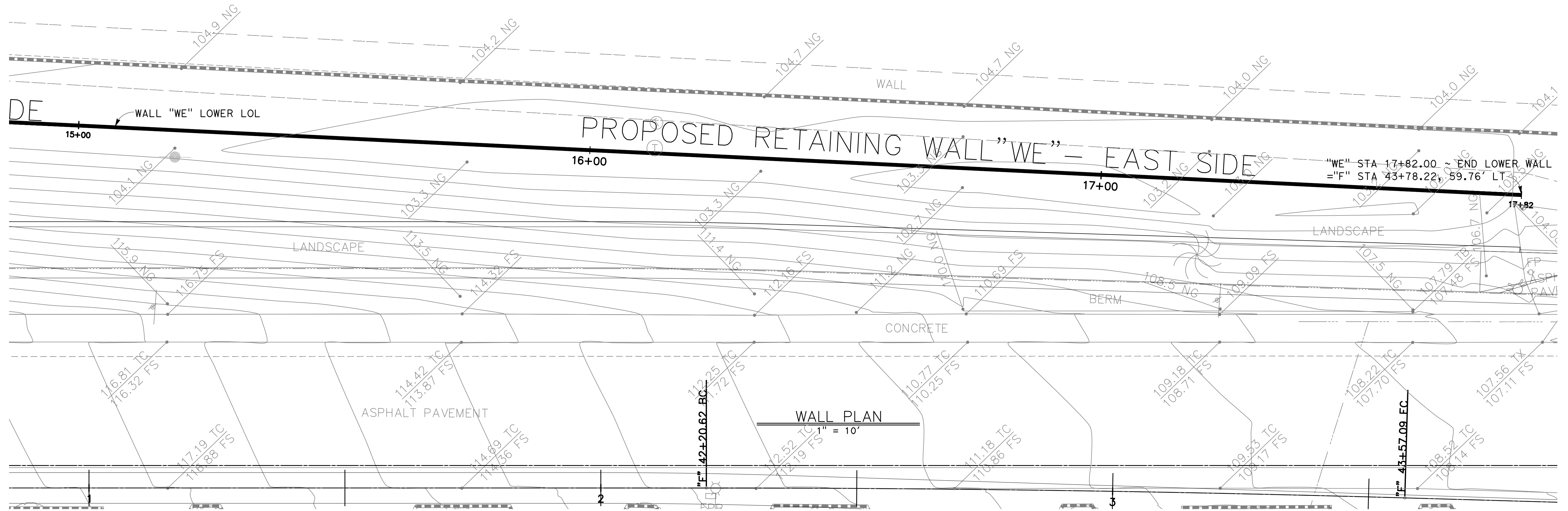
Approved
 CITY ENGINEER: RCE 20088 DATE:

Recommended
 DATE:

Drawn By **T.D.** Checked By **E.J.P.**

PROJECT NO.
7196.1

DRAWING NO.
SHEET 72 OF 75

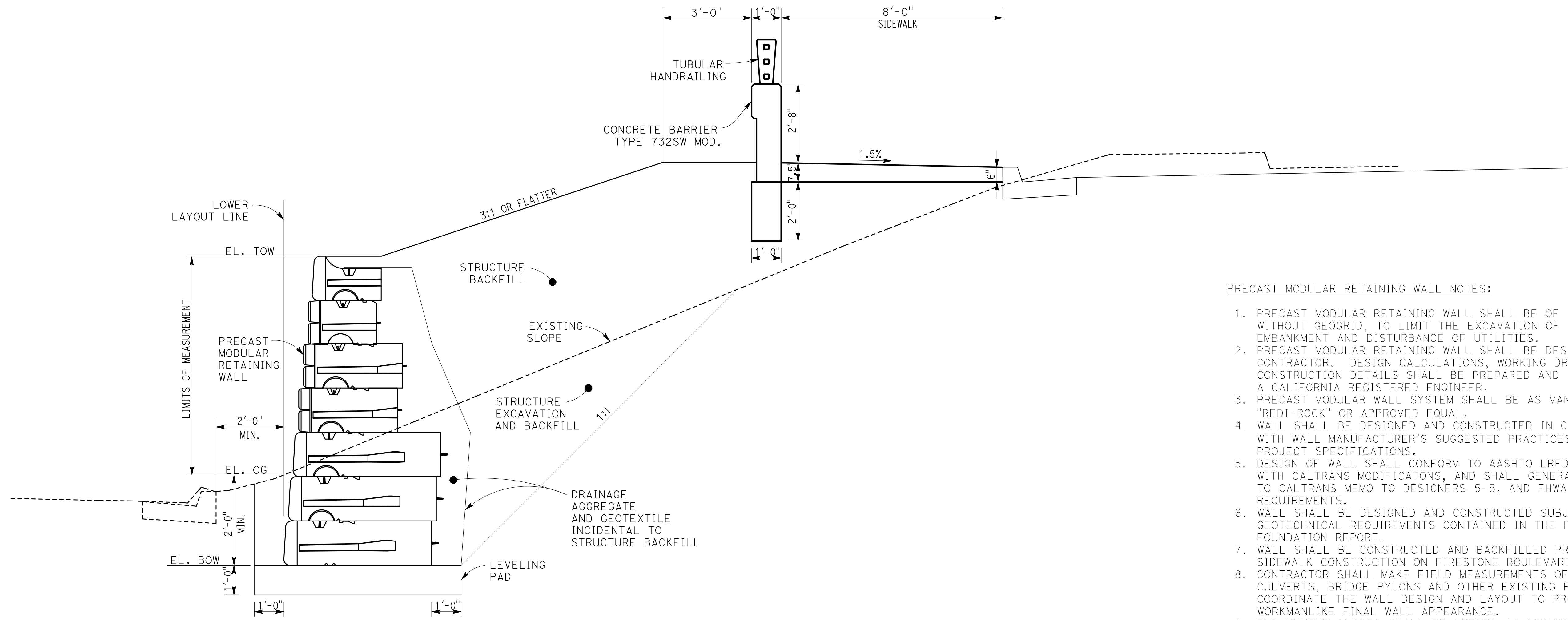


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REGISTERED PROFESSIONAL ENGINEER
 MICHAEL A THOMAS
 No. S4676
 Exp. 9/30/20
 STRUCTURAL ENGINEER
 STATE OF CALIFORNIA

engineering division		CITY OF NORWALK	
REVISIONS DATE BY AS BUILT FIELD BOOK REF. PLAN REF.		TITLE: EAST RETAINING WALL PLAN & PROFILE 3 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY Approved CITY ENGINEER RCE 2008 DATE Recommended DATE Drawn By T.D. Checked By E.J.P.	
		PROJECT NO. 7196.1 DRAWING NO. SHEET 73 OF 75	



ONE-TIER WALL SECTION
1/2" = 1'-0"

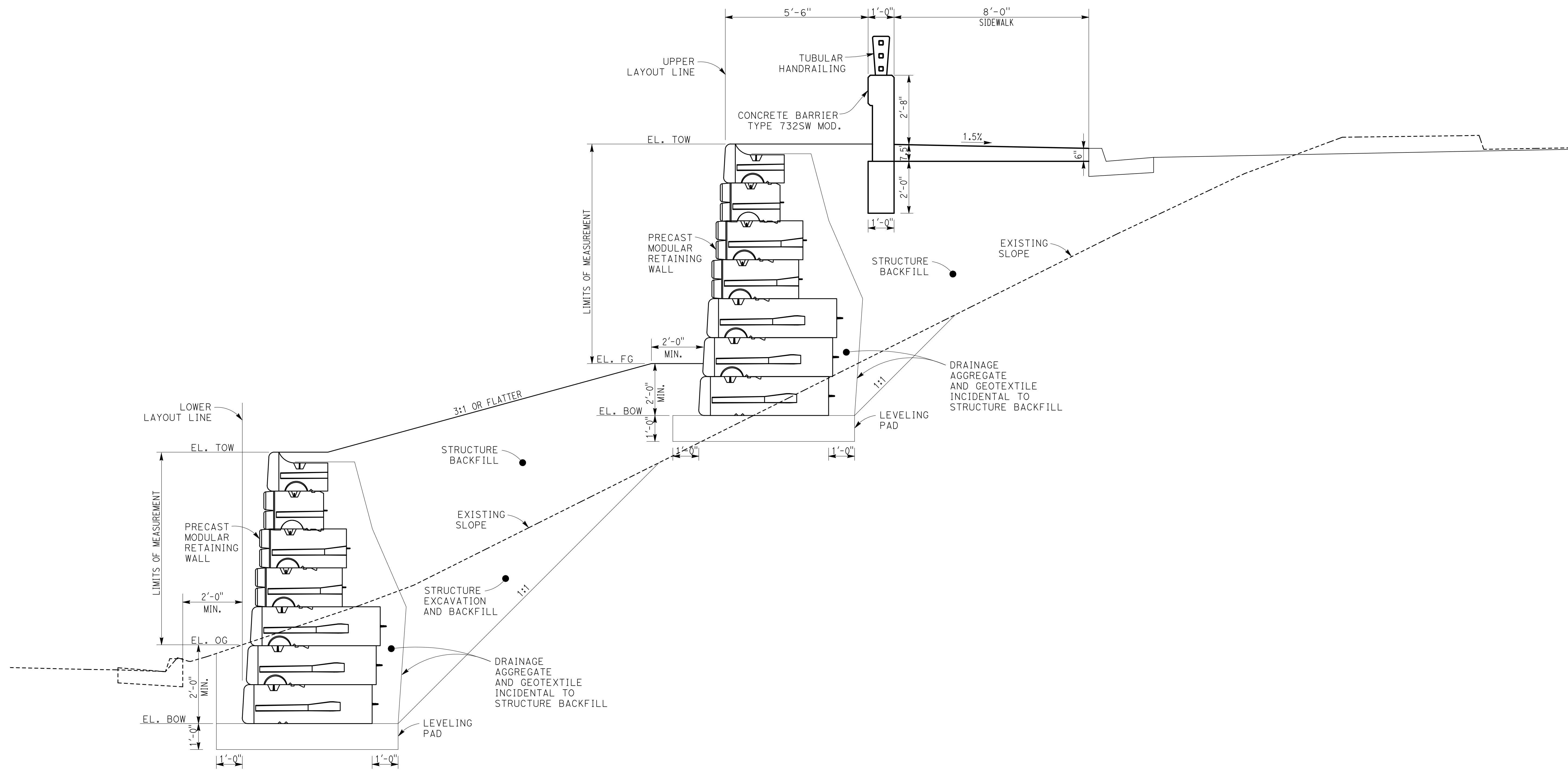
PRECAST MODULAR RETAINING WALL NOTES:

1. PRECAST MODULAR RETAINING WALL SHALL BE OF GRAVITY TYPE, WITHOUT GEOGRID, TO LIMIT THE EXCAVATION OF EXISTING EMBANKMENT AND DISTURBANCE OF UTILITIES.
2. PRECAST MODULAR RETAINING WALL SHALL BE DESIGNED BY THE CONTRACTOR. DESIGN CALCULATIONS, WORKING DRAWINGS, AND CONSTRUCTION DETAILS SHALL BE PREPARED AND SUBMITTED BY A CALIFORNIA REGISTERED ENGINEER.
3. PRECAST MODULAR WALL SYSTEM SHALL BE AS MANUFACTURED BY "REDI-ROCK" OR APPROVED EQUAL.
4. WALL SHALL BE DESIGNED AND CONSTRUCTED IN CONFORMANCE WITH WALL MANUFACTURER'S SUGGESTED PRACTICES AND THE PROJECT SPECIFICATIONS.
5. DESIGN OF WALL SHALL CONFORM TO AASHTO LRFD REQUIREMENTS WITH CALTRANS MODIFICATIONS, AND SHALL GENERALLY CONFORM TO CALTRANS MEMO TO DESIGNERS 5-5, AND FHWA GEC-11 REQUIREMENTS.
6. WALL SHALL BE DESIGNED AND CONSTRUCTED SUBJECT TO GEOTECHNICAL REQUIREMENTS CONTAINED IN THE PROJECT FOUNDATION REPORT.
7. WALL SHALL BE CONSTRUCTED AND BACKFILLED PRIOR TO SIDEWALK CONSTRUCTION ON FIRESTONE BOULEVARD.
8. CONTRACTOR SHALL MAKE FIELD MEASUREMENTS OF EXISTING CULVERTS, BRIDGE PYLONS AND OTHER EXISTING FEATURES AND COORDINATE THE WALL DESIGN AND LAYOUT TO PROVIDE A WORKMANLIKE FINAL WALL APPEARANCE.
9. EMBANKMENT SLOPES SHALL BE SEEDED AS REQUIRED.
10. EXISTING TREES SHALL BE PROTECTED AS REQUIRED.
11. CONTRACTOR SHALL LOCATE AND PROTECT ALL UTILITIES TO REMAIN IN PLACE.
12. DRAINAGE AGGREGATE AND GEOTEXTILE SHALL BE PROVIDED AS RECOMMENDED BY THE CONTRACTOR'S WALL DESIGNER, AND SHALL BE CONSIDERED AS INCIDENTAL TO STRUCTURE BACKFILL.
13. CONTRACTOR SHALL NOTIFY THE ENGINEER IF SOFT SUBSOILS ARE LOCATED AT THE WALL BASE, PRIOR TO PLACING THE LEVELING PAD.

BCA
BIGGS CARDOSA
ASSOCIATES INC
STRUCTURAL ENGINEERS
500 S. Main Street, Suite 400
Orange, California 92668
714-550-4665



engineering division	CITY OF NORWALK	
REVISIONS	TITLE: PRECAST MODULAR RETAINING WALL DETAILS 1 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY	
DATE BY	Approved	PROJECT NO. 7196.1
	CITY ENGINEER RCE 20068 DATE	DRAWING NO.
	Recommended	
AS BUILT	DATE	
FIELD BOOK REF.	Drawn By T.D.	Checked By E.J.P. SHEET 74 OF 75
PLAN REF.		



TWO-TIER WALL SECTION
 1/2" = 1'-0"

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 714-550-4665

REGISTERED PROFESSIONAL ENGINEER
 MICHAEL A. THOMAS
 No. S4676
 Exp. 9/30/20
 STRUCTURAL
 STATE OF CALIFORNIA

engineering division	CITY OF NORWALK	
REVISIONS	TITLE: PRECAST MODULAR RETAINING WALL DETAILS 2 FIRESTONE BOULEVARD WIDENING FROM STUDEBAKER ROAD TO IMPERIAL HIGHWAY	
DATE BY	Approved	
	PROJECT NO. 7196.1	
	Recommended	
AS BUILT	DRAWING NO.	
FIELD BOOK REF.	DATE	
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