

**VICINITY MAP**  
NOT TO SCALE

**INDEX OF SHEETS**

SHEET NO.	SHEET NAME	DESCRIPTION
1	T-1	TITLE SHEET
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3	X-1	TYPICAL CROSS SECTIONS
4	DM-1	DEMOLITION PLAN
5	L-1	LAYOUT PLAN
6-7	C-1 TO C-2	CONSTRUCTION DETAILS
8	D-1	DRAINAGE AND UTILITIES
9	PD-1	PAVEMENT DELINEATION & SIGN PLAN
10	E-1	TRAFFIC SIGNAL GENERAL NOTES, LEGEND, ABBREVIATIONS AND INDEX
11	E-2	TRAFFIC SIGNAL PLAN
12	E-3	CONDUCTOR AND EQUIPMENT SCHEDULES

**NOTES**

1. THE CONTRACTOR SHALL HAVE A CLASS "A" LICENSE FOR THIS PROJECT.
2. STANDARD PLAN LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE SPECIAL PROVISIONS.

**DESIGN DESIGNATION**

F St AADT (2022) = 6,754 VEH/DAY  
 OAK St AADT (2022) = 1,888 VEH/DAY  
 DESIGN SPEED = 30 MPH  
 TRAFFIC INDEX = Unk.

**ABBREVIATIONS**

AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT	MH	MANHOLE	SW	SIDEWALK
AB	AGGREGATE BASE	ES	EDGE OF SHOULDER	MIN	MINIMUM	TC	TOP OF CURB
AP	ANGLE POINT	(E)/Exist	EXISTING	OG	ORIGINAL GRADE	TOF	TOP OF FOOTING
ARV	AIR RELEASE VALVE	EVC	END VERTICAL CURVE	PCC	POINT OF COMPOUND CURVATURE	TOW	TOP OF WALL
BC	BEGIN CURVE	EXC	EXCAVATION	PL	PROPERTY LINE	TS	TRAFFIC SIGNAL
Beg,BEG	BEGIN	FL	FLOWLINE	PRC	POINT OF REVERSE CURVE	TCE	TEMPORARY CONSTRUCTION EASEMENT
BFC	BACK FACE CURB	FOW	FACE OF WALK	PVI	POINT OF VERTICAL INTERSECTION	TYP	TYPICAL
BOW	BACK OF WALK	FG	FINISHED GRADE	P/L	PROPERTY LINE	VAR	VARIES
C&G	CURB & GUTTER	GB	GRADE BREAK	R/W	RIGHT OF WAY	W	WATER
CG&SW	CURB, GUTTER, & SIDEWALK	HMA	HOT MIXED ASPHALT	S/C	SAWCUT	WM	WATER METER
CL	CENTER LINE	JP	JOINT POLE	SD	STORM DRAIN	WV	WATER VALVE
EL	ELEVATION	LIP	LIP OF GUTTER	STA	STATION		



# COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS PROJECT PLANS FOR CONSTRUCTION OF OAK St AND F St TRAFFIC SIGNAL PROJECT CONTRACT NO. 321621

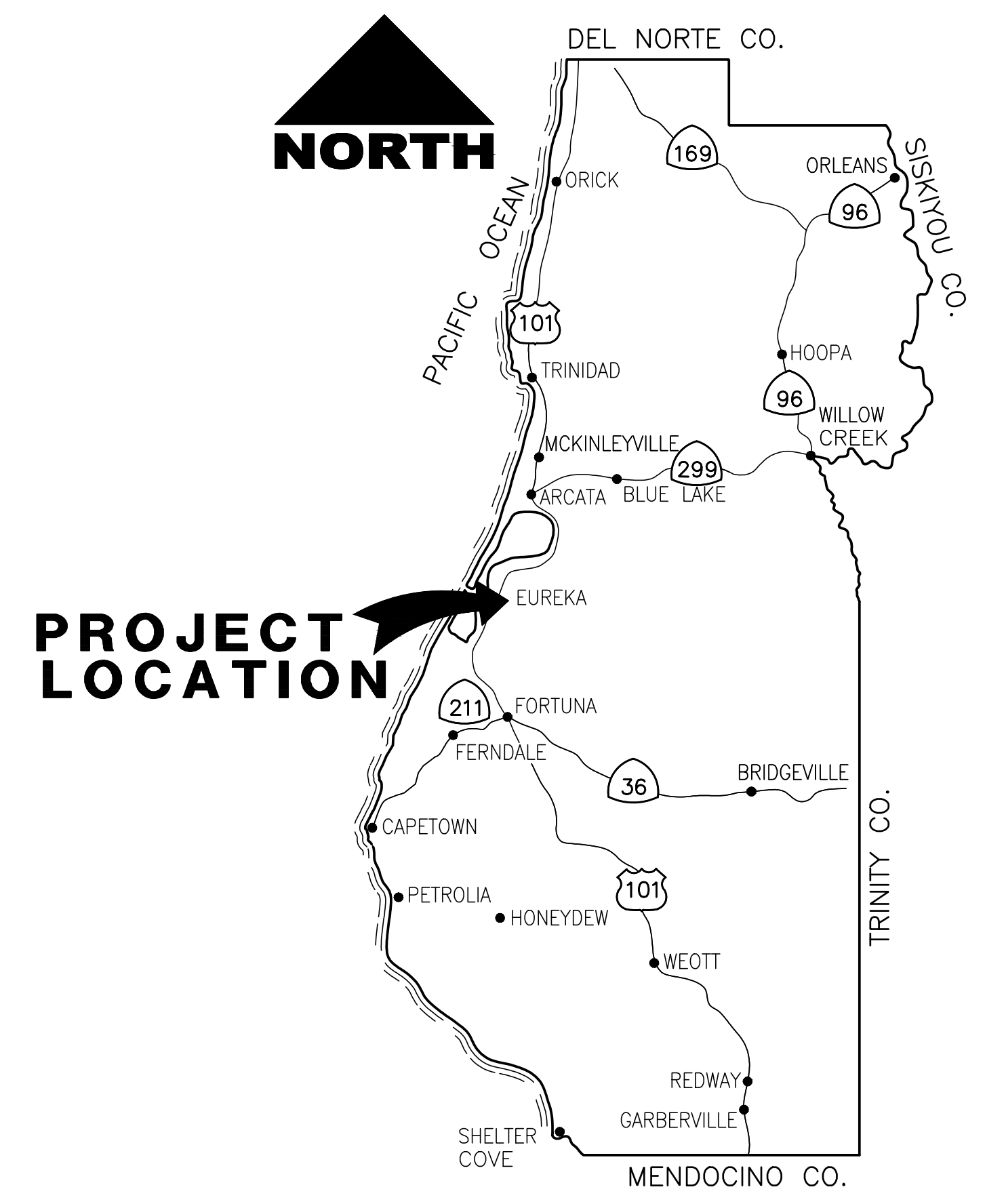
TO BE SUPPLEMENTED BY STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION 2022  
STANDARD PLANS, STANDARD SPECIFICATIONS, REVISED STANDARD PLANS,  
AND REVISED STANDARD SPECIFICATIONS



**PROPOSED LOCATION**  
NOT TO SCALE

ROAD NAME: OAK St & F St	MARK THOMAS
ROAD NO:	DESIGNED BY: KD
CONTRACT NO.: 321621	MILE POST:
	DRAWN BY: JY
DRAWING FILE NAME: HOF_T-1.dwg	REVIEWED BY: DB
PLOT DATE: 02/28/2023	APPROVED BY: DB
REVISION DATE:	

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET <b>1</b> OF <b>12</b>
OAK St & F St TRAFFIC SIGNAL PROJECT	
<b>TITLE SHEET</b>	



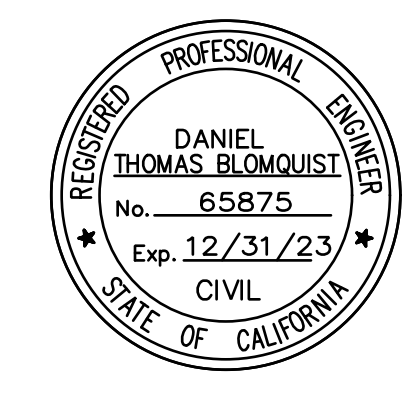
**LOCATION MAP**  
NOT TO SCALE

APPROVED BY:

*Tony Seghetti*  
 TONY SEGHETTI, RCE 63714  
 COUNTY OF HUMBOLDT  
 PUBLIC WORKS DEPUTY DIRECTOR  
 03/09/2023  
 DATE



MEASURE Z





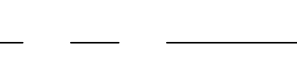
*Daniel Blomquist*  
 DESIGN ENGINEER  
 REGISTERED CIVIL ENGINEER  
 DANIEL BLOMQUIST  
 2/28/23  
 DATE

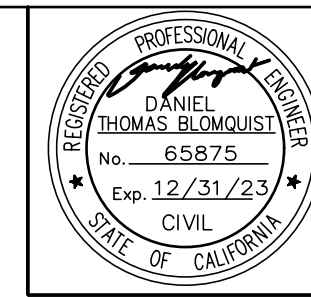
**T-1**

ORIGINAL LOW BID PRICE	CONSTRUCTED BY	RESIDENT ENGINEER
	PROJECT COMPLETED	CONSTRUCTION COST \$



**LEGEND:**

-  CONTROL POINT
-  SURVEY MONUMENT
-  RIGHT OF WAY



BAR IS ONE INCH ON ORIGINAL DRAWING  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: OAK St & F St	MILE POST:
ROAD NO:	
CONTRACT NO.: 321621	
DRAWING FILE NAME: HOF_PC-1.dwg	
PLOT DATE: 02/28/2023	REVISION DATE:

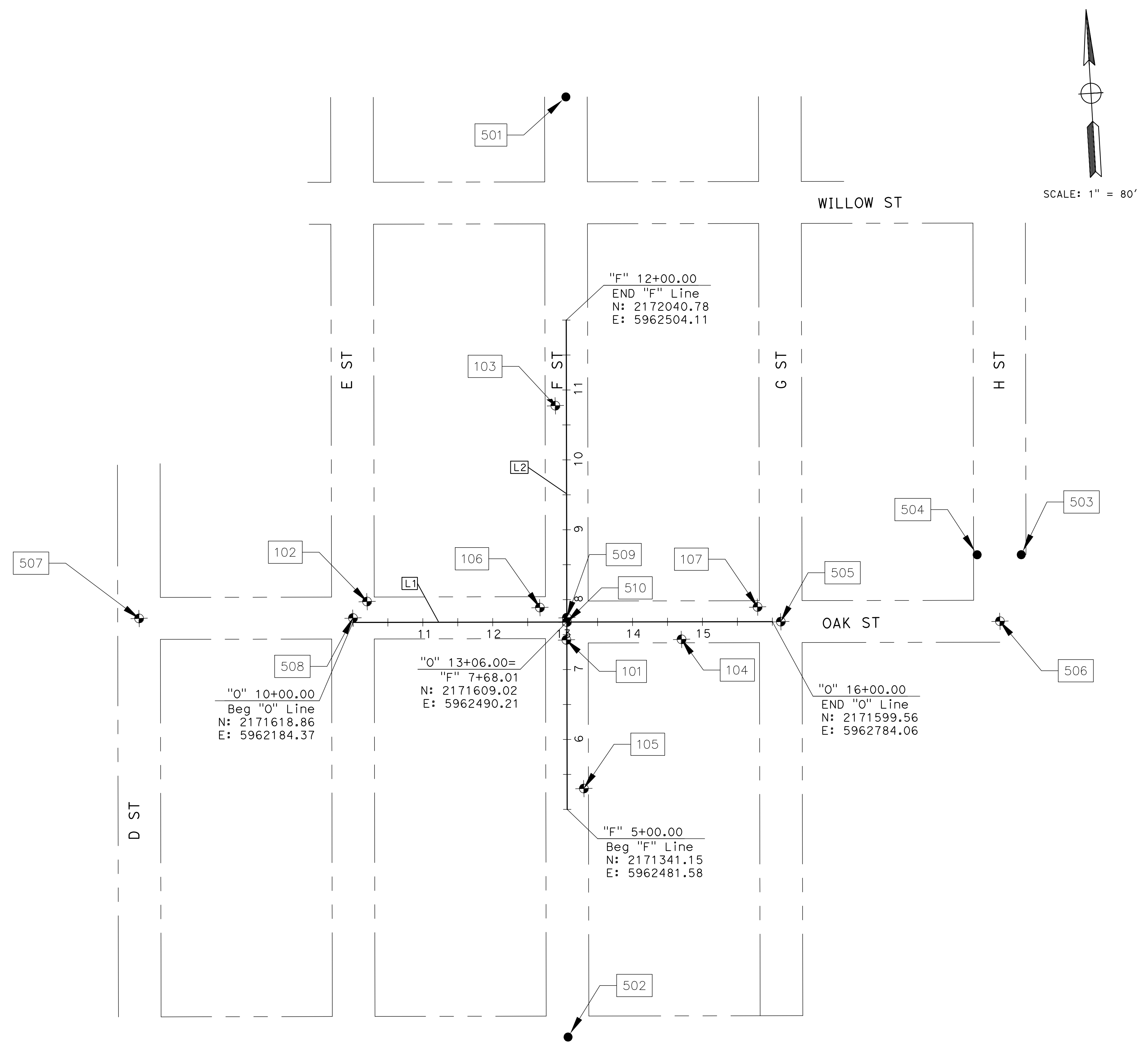
<b>MARK THOMAS</b>
DESIGNED BY: KD
DRAWN BY: JY
REVIEWED BY: DB
APPROVED BY: DB

**NOTE:**

- BEARINGS SHOWN HEREON ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM (CCS83), ZONE 1, EPOCH 2010.00, HAVING A CONVERGENCE ANGLE OF -01°24'53" AT CONTROL POINT NUMBER 103 BEING A SET GIN SPIKE WITH TAG STAMPED 'HUMCO SURVEY'. THE BEARINGS FOR THIS PROJECT ARE IN GRID, HOWEVER THE DISTANCES HAVE BEEN SCALED TO GROUND DISTANCES; ROTATE GRID BEARINGS HEREON COUNTERCLOCKWISE 01° 24'53" TO OBTAIN GEODETIC (TRUE) BEARINGS. MULTIPLY GROUND DISTANCES HEREIN BY THE COMBINED SCALE FACTOR OF 0.99989403 TO OBTAIN "GRID" DISTANCES.
- VERTICAL DATUM: NAVD 88 BASED UPON GPS STATIC OBSERVATION AT CONTROL POINT 103 BEING A SET GIN SPIKE WITH BRASS TAG STAMPED 'HUMCO SURVEY'; ELEVATION= 126.07'
- THE RIGHT OF WAY FOR THIS PROJECT IS BASED UPON MULTIPLE RECORD MAPS IN THIS AREA SEE SURVEYS PROJECT FILE FOR RECORD MAPS OF THIS AREA.
- IF MONUMENT IS DAMAGED BY CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL REPLACE MONUMENT AT CONTRACTOR'S EXPENSE.

LINE #	LENGTH	DIRECTION
L1	600.00'	S88°09'22"E
L2	700.00'	N1°50'38"E

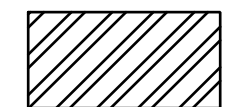
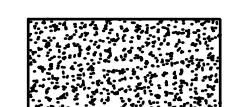
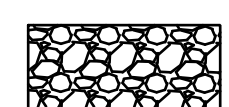
Point #	Description	Northing	Easting	Elevation
101	CP/GIN SPIKE&TAGHUMCOSURVEY	2171583.543	5962488.642	124.31
102	CP/MAG&TAGHUMCOSURVEY	2171648.043	5962205.508	123.64
103	CP/GIN SPIKE&TAGHUMCOSURVEY	2171918.960	5962484.250	126.07
104	CP/MAG&TAGHUMCOSURVEY	2171578.728	5962653.261	120.25
105	CP/MAG&TAGHUMCOSURVEY	2171370.141	5962506.351	121.00
106	CP/MAGS	2171631.054	5962452.282	123.93
107	CP/MAG&TAGHUMCOSURVEY	2171621.280	5962763.589	118.67
501	FD/2.5IN BD IN WELL LS3115 PNCH MRK	2172359.912	5962514.381	128.84
502	FD/COPPER PIN IN CNC IN CL MON WELL BOX	2171015.497	5962471.721	113.98
503	FD/LEAD&TACK	2171683.141	5963143.141	106.25
504	FD/LEAD&TACK	2171685.244	5963080.094	106.99
505	CENTERLINE G ST & OAK ST	2171599.171	5962796.049	0.00
506	CENTERLINE H ST & OAK ST	2171589.084	5963109.395	0.00
507	CENTERLINE D ST & OAK ST	2171634.998	5961878.727	0.00
508	CENTERLINE D ST & OAK ST	2171625.152	5962184.569	0.00
509	CENTERLINE F ST & OAK ST. WEST	2171615.306	5962490.410	0.00
510	CENTERLINE F ST & OAK ST. EAST	2171609.017	5962490.208	0.00



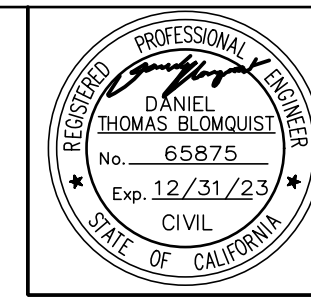
**NOTES:**

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR LIMITS OF RETAINING CURB, PAVEMENT RECONSTRUCTION, GRIND AND OVERLAY, C&G, SIDEWALK, AND DRIVEWAYS, SEE LAYOUT AND CONSTRUCTION DETAILS SHEETS.
3. FOR DETAILS OF C&G, SIDEWALK, DRIVEWAYS, AND CURB RAMPS, SEE CONSTRUCTION DETAILS SHEET.
4. FOR STRIPING DETAILS, SEE PD SHEET.


**LEGEND:**

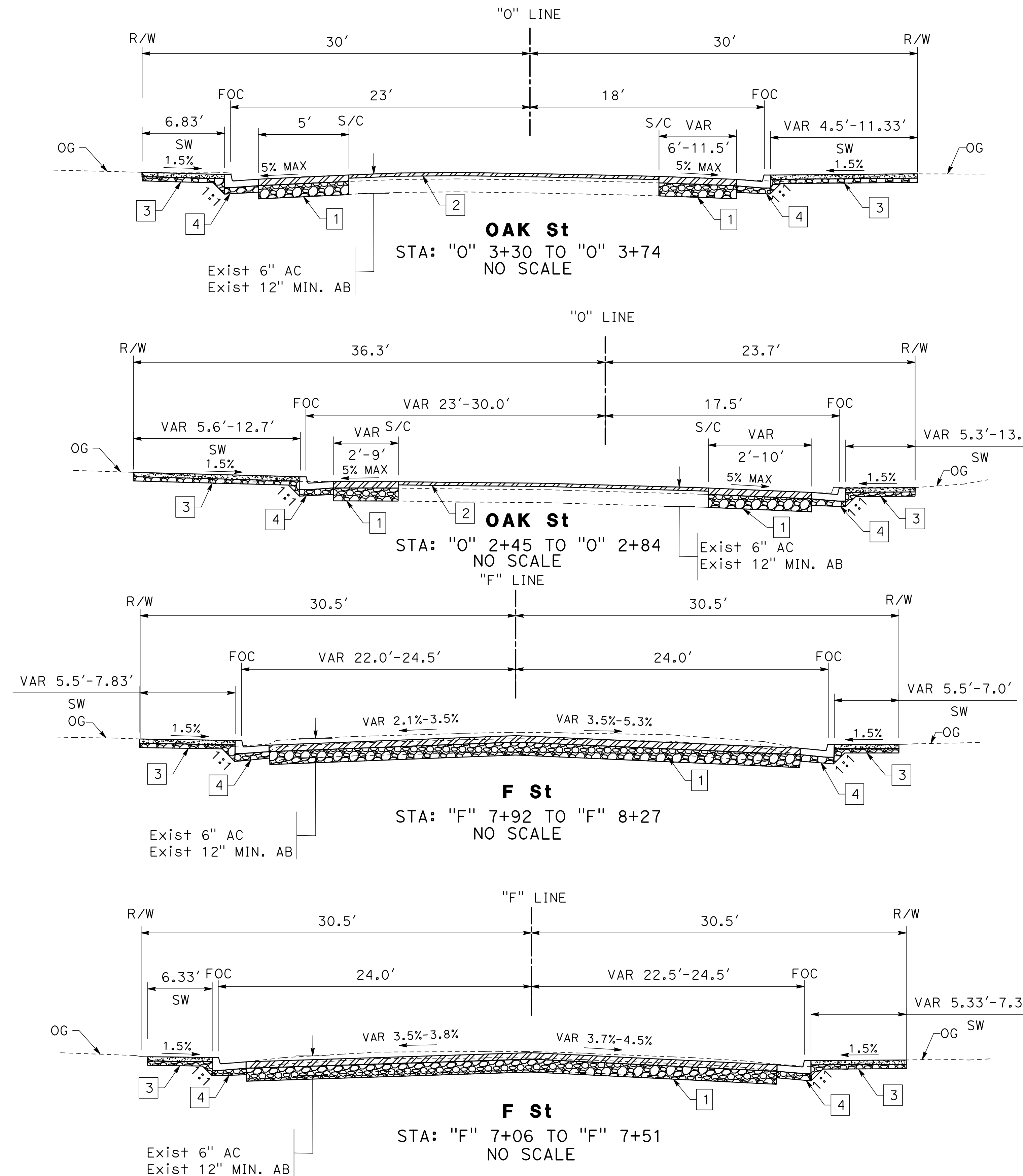
-  HMA (TYPE A)
-  PCC
-  CLASS 2 AB

STRUCTURAL SECTIONS: #	
1	6" HMA ON 12" CLASS 2 AB
2	3" GRIND AND HMA OVERLAY
3	4" PCC ON 4" CLASS 2 AB
4	A2-6 CURB AND GUTTER PER CALTRANS STD PLAN A87A ON 4" CLASS 2 AB



ROAD NAME: OAK St & F St	MILE POST:
ROAD NO:	CONTRACT NO.: 321621
DRAWING FILE NAME: HOF_X-1.dwg	REVISION DATE:
PLOT DATE: 02/28/2023	DESIGNED BY: KD
	DRAWN BY: JY
	REVIEWED BY: DB
	APPROVED BY: DB

 COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	<b>OAK St &amp; F St TRAFFIC SIGNAL PROJECT</b>	SHEET <b>3</b> OF <b>12</b>
	<b>TYPICAL CROSS SECTIONS</b>	





**NOTES:**

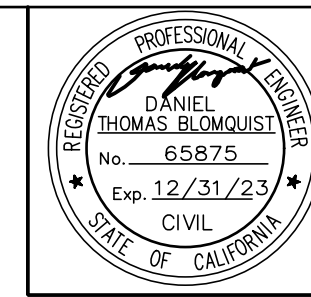
1. SEE DRAINAGE AND UTILITIES SHEETS FOR UTILITY RELOCATIONS, REMOVALS, AND ADJUSTMENTS.
2. SEE PAVEMENT DELINEATION AND SIGN PLANS FOR LIMITS OF STRIPING AND MARKING REMOVALS.

**LEGEND:**

 REMOVE EXISTING ROADWAY SECTION

 REMOVE CONCRETE CURB, GUTTER, CURB RAMP, SIDEWALK, AND VALLEY GUTTER

 LIMIT OF 3" GRIND



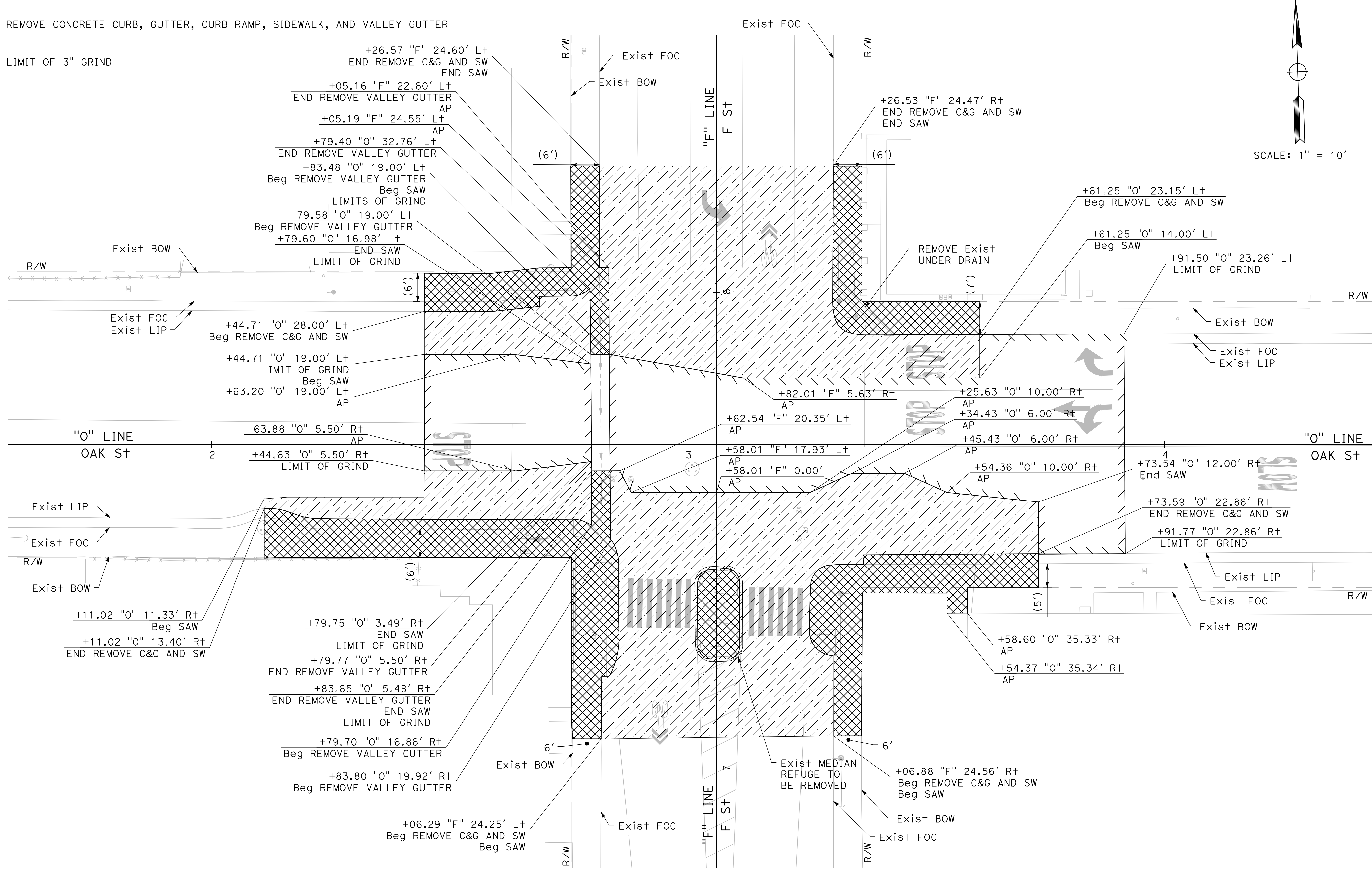
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IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: OAK St & F St	MILE POST:
ROAD NO:	
CONTRACT NO.: 321621	
DRAWING FILE NAME: HOF_DM-1.dwg	
PLOT DATE: 02/28/2023	REVISION DATE:

<b>MARK THOMAS</b>
DESIGNED BY: KD
DRAWN BY: JY
REVIEWED BY: DB
APPROVED BY: DB

<b>COUNTY OF HUMBOLDT</b> <b>DEPARTMENT OF PUBLIC WORKS</b>
<b>OAK St &amp; F St TRAFFIC SIGNAL PROJECT</b>
<b>DEMOLITION PLAN</b>

SHEET **4**  
OF  
**12**





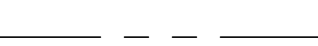
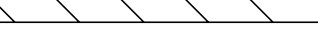



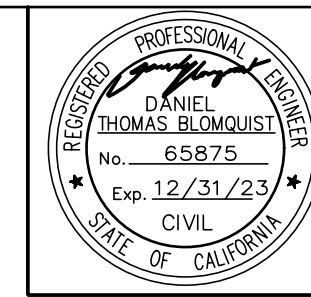


**NOTES:**

1. SEE CONSTRUCTION DETAILS FOR BULBOUT AND CURB RAMP DETAILS.
2. ALL REMOVAL AND RECONSTRUCTION WORK ARE TO BE PERFORMED WITHIN THE PUBLIC RIGHT OF WAY.
3. SEE DRAINAGE AND UTILITIES SHEETS FOR UTILITY RELOCATIONS, REMOVALS, AND ADJUSTMENTS.

**LEGEND**

-  FULL PAVEMENT SECTION (6" HMA ON 12" CLASS 2 AB)
-  STAMPED CONCRETE (BASKET WEAVE PATTERN STAMPED CONCRETE WITH BRICK RED #1117 OR APPROVED EQUAL)
-  NEW TRAFFIC SIGNAL FOUNDATION (SEE TS SHEETS)
-  SAWCUT
-  RIGHT OF WAY
-  LIMIT OF 3" HMA OVERLAY
-  Exist VALLEY GUTTER FLOWLINE

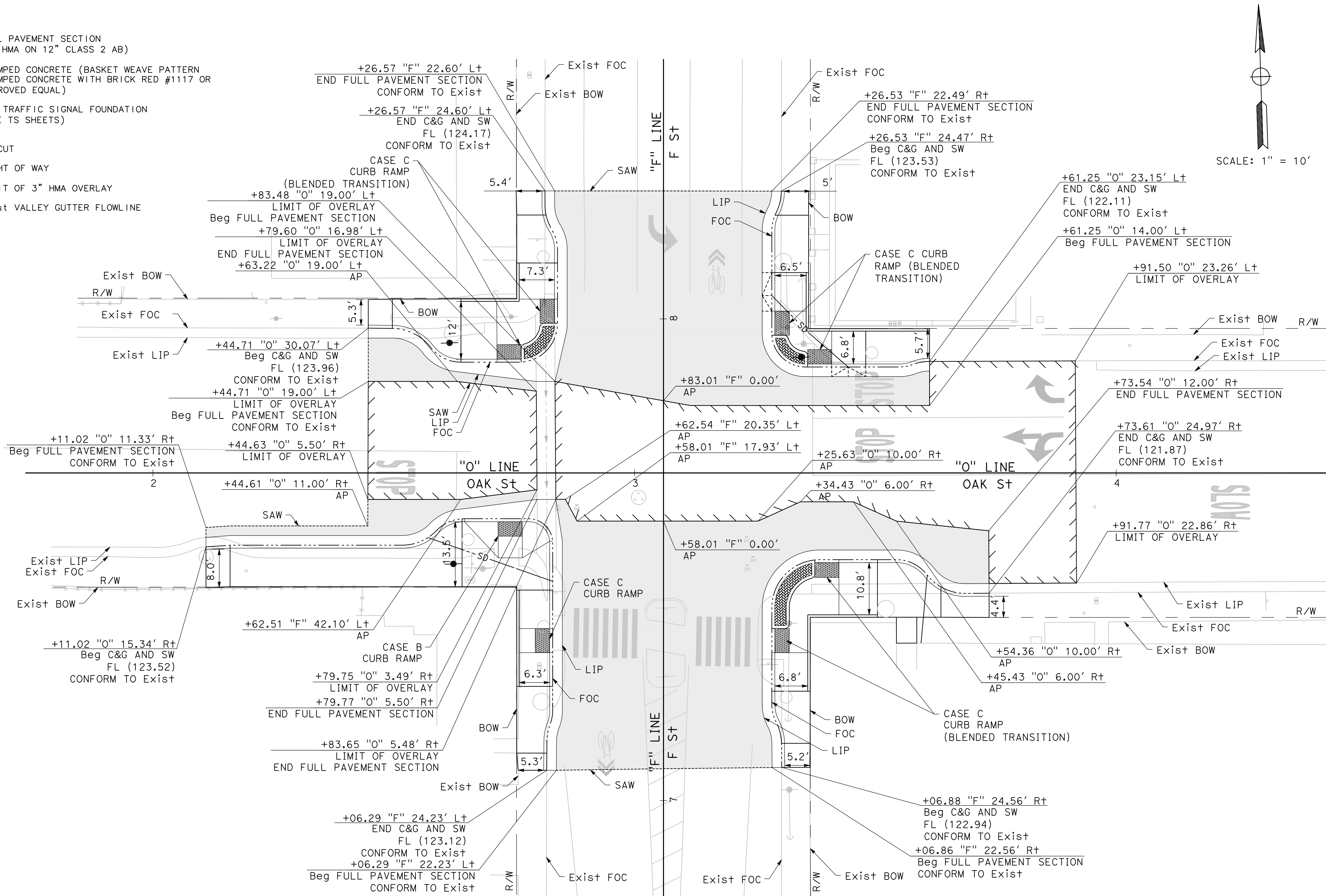


ROAD NAME: OAK St & F St	MILE POST:
CONTRACT NO.: 321621	DRAWN BY: JY
DRAWING FILE NAME: HOF_L-1.dwg	REVIEWED BY: DB
PLOT DATE: 02/28/2023	APPROVED BY: DB

**MARK THOMAS**  
DESIGNED BY: KD  
DRAWN BY: JY  
REVIEWED BY: DB  
APPROVED BY: DB

COUNTY OF HUMBOLDT  
DEPARTMENT OF PUBLIC WORKS  
**OAK St & F St TRAFFIC SIGNAL PROJECT**  
**LAYOUT PLAN**

SHEET **5**  
OF  
**12**










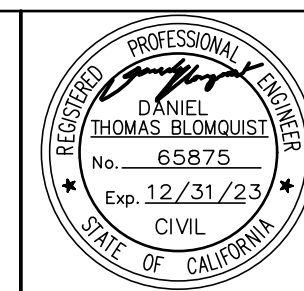


**NOTES:**

1. CONTRACTOR MUST COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771 (b) REGARDING REFERENCING, PRESERVING AND RECONSTRUCTING MONUMENTS, WHETHER OR NOT MONUMENTS ARE SHOWN IN THESE PLANS. IF MONUMENT IS DAMAGED BY CONTRACTORS OPERATIONS, CONTRACTOR SHALL REPLACE MONUMENT AT CONTRACTOR'S EXPENSE.
2. ALL CURB, GUTTER, AND SIDEWALK SHALL BE PER CALTRANS STANDARD PLAN A87A.
3. ALL CURB RAMPS SHALL CONFORM TO CALTRANS REVISED STANDARD PLAN RSP A88A.
4. ALL SIDEWALK AND CURB RAMPS SHALL HAVE A PCC THICKNESS OF 4" AND AB THICKNESS OF 4".

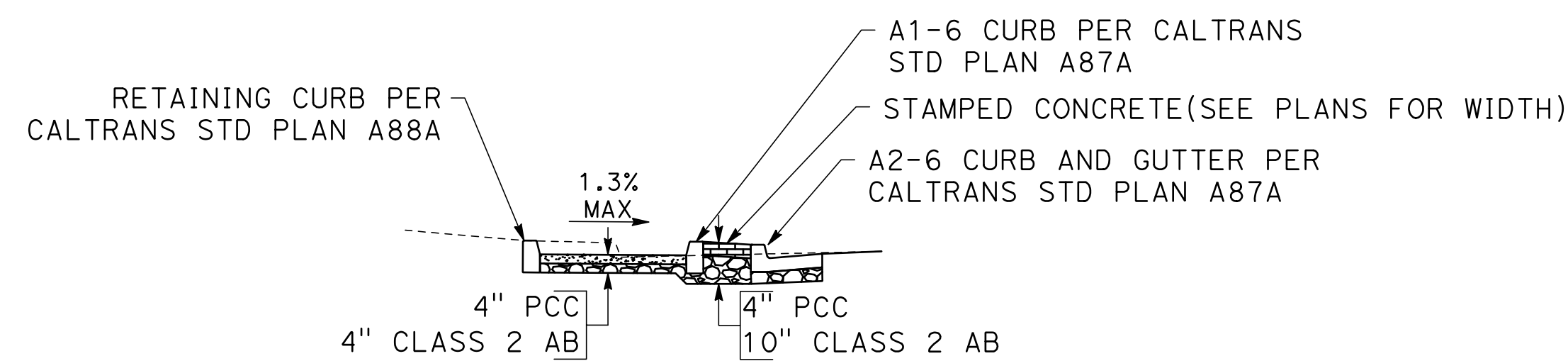
**LEGEND**

-  FULL PAVEMENT SECTION (6" HMA ON 12" CLASS 2 AB)
-  STAMPED CONCRETE (BASKET WEAVE PATTERN STAMPED CONCRETE WITH BRICK RED #1117 OR APPROVED EQUAL)
-  NEW TRAFFIC SIGNAL FOUNDATION (SEE TS SHEETS)
-  SAWCUT
-  RIGHT OF WAY
-  LIMIT OF 3" HMA OVERLAY
-  Exist VALLEY GUTTER FLOWLINE



ROAD NAME: OAK St & F St	MILE POST:
CONTRACT NO.: 321621	
DRAWING FILE NAME: HOF_C-1.dwg	REVISION DATE:
DESIGNED BY: KD	APPROVED BY: DB
DRAWN BY: JY	
REVIEWED BY: DB	
BAR IS ONE INCH ON ORIGINAL DRAWING	
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PLOT DATE: 02/28/2023	

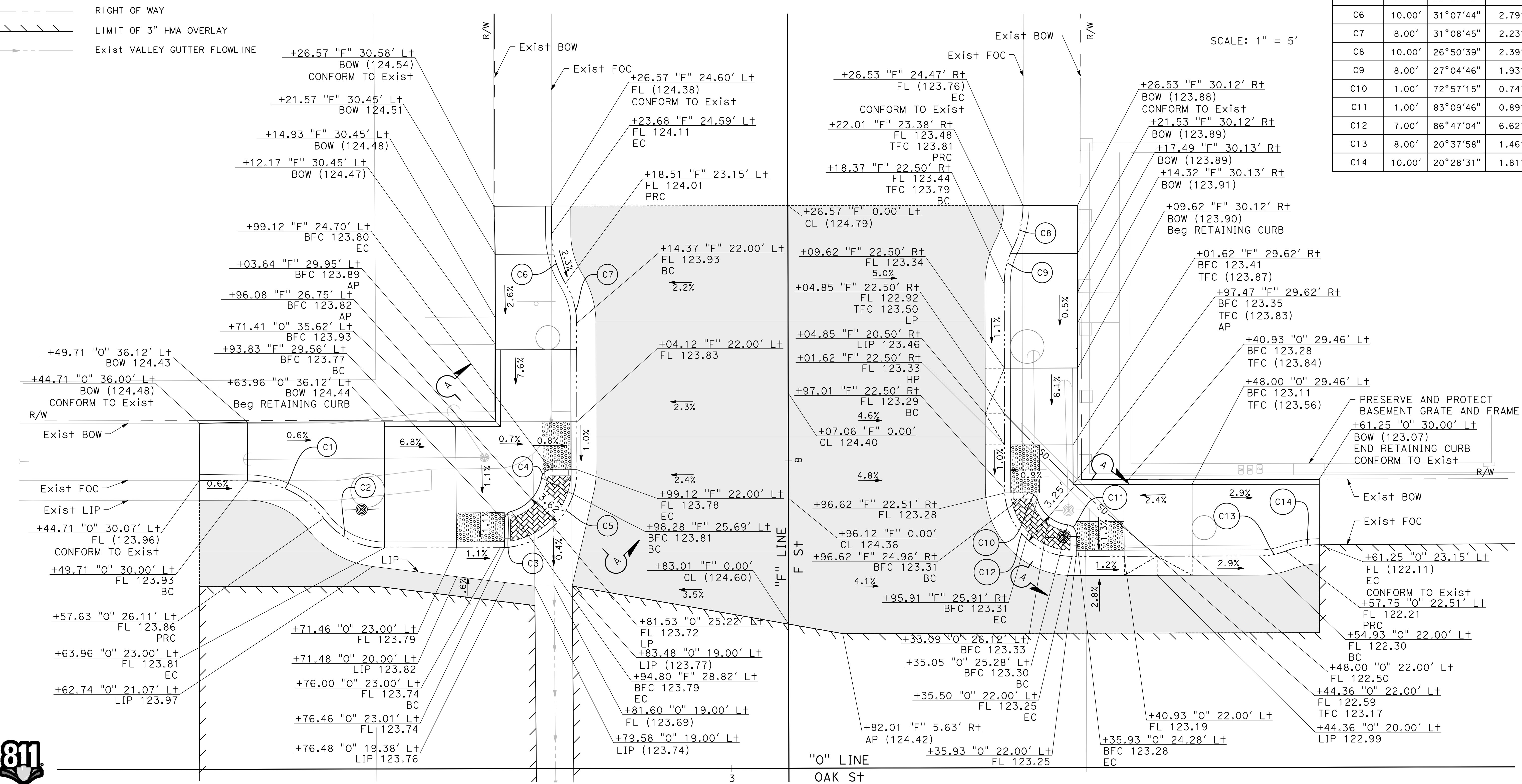
**MARK THOMAS**



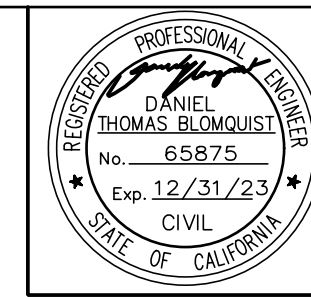
**SECTION A-A**

SCALE: 1" = 5'

CURVE TABLE				
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C1	10.00'	52°19'48"	4.91'	9.13'
C2	8.00'	52°19'48"	3.93'	7.31'
C3	1.00'	74°45'52"	0.76'	1.30'
C4	1.00'	80°26'25"	0.85'	1.40'
C5	8.00'	90°00'00"	8.00'	12.57'
C6	10.00'	31°07'44"	2.79'	5.43'
C7	8.00'	31°08'45"	2.23'	4.35'
C8	10.00'	26°50'39"	2.39'	4.69'
C9	8.00'	27°04'46"	1.93'	3.78'
C10	1.00'	72°57'15"	0.74'	1.27'
C11	1.00'	83°09'46"	0.89'	1.45'
C12	7.00'	86°47'04"	6.62'	10.60'
C13	8.00'	20°37'58"	1.46'	2.88'
C14	10.00'	20°28'31"	1.81'	3.57'





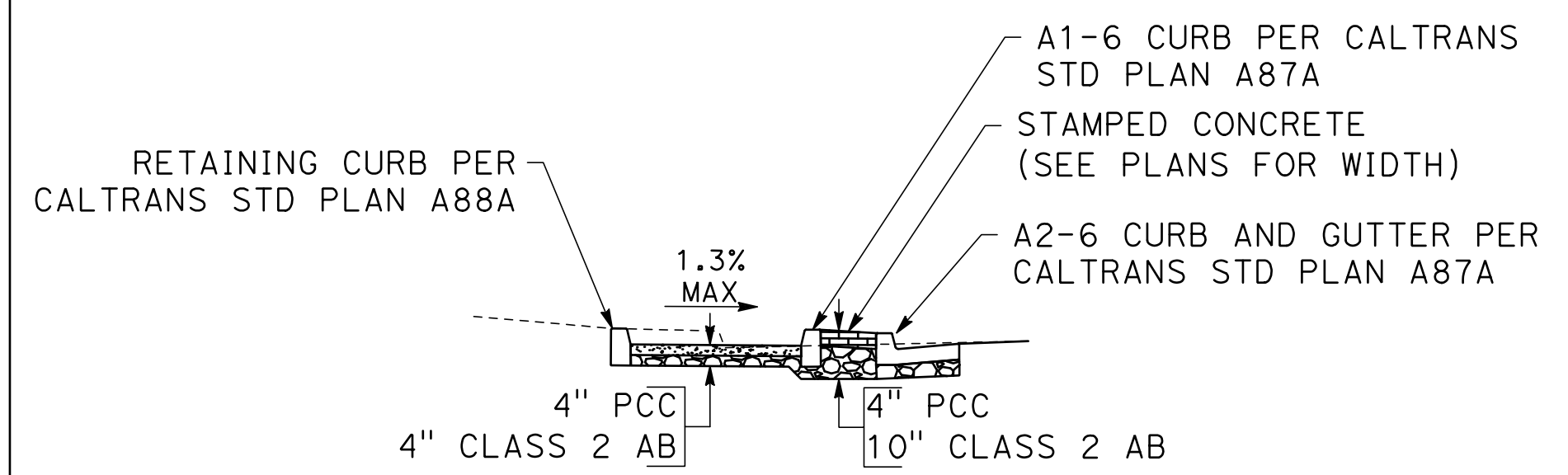


ROAD NAME: OAK St & F St  
 ROAD NO: CONTRACT NO: 321621 MILE POST:  
 DRAWING FILE NAME: HOF\_C-1.dwg PLOT DATE: 02/28/2023 REVISION DATE:

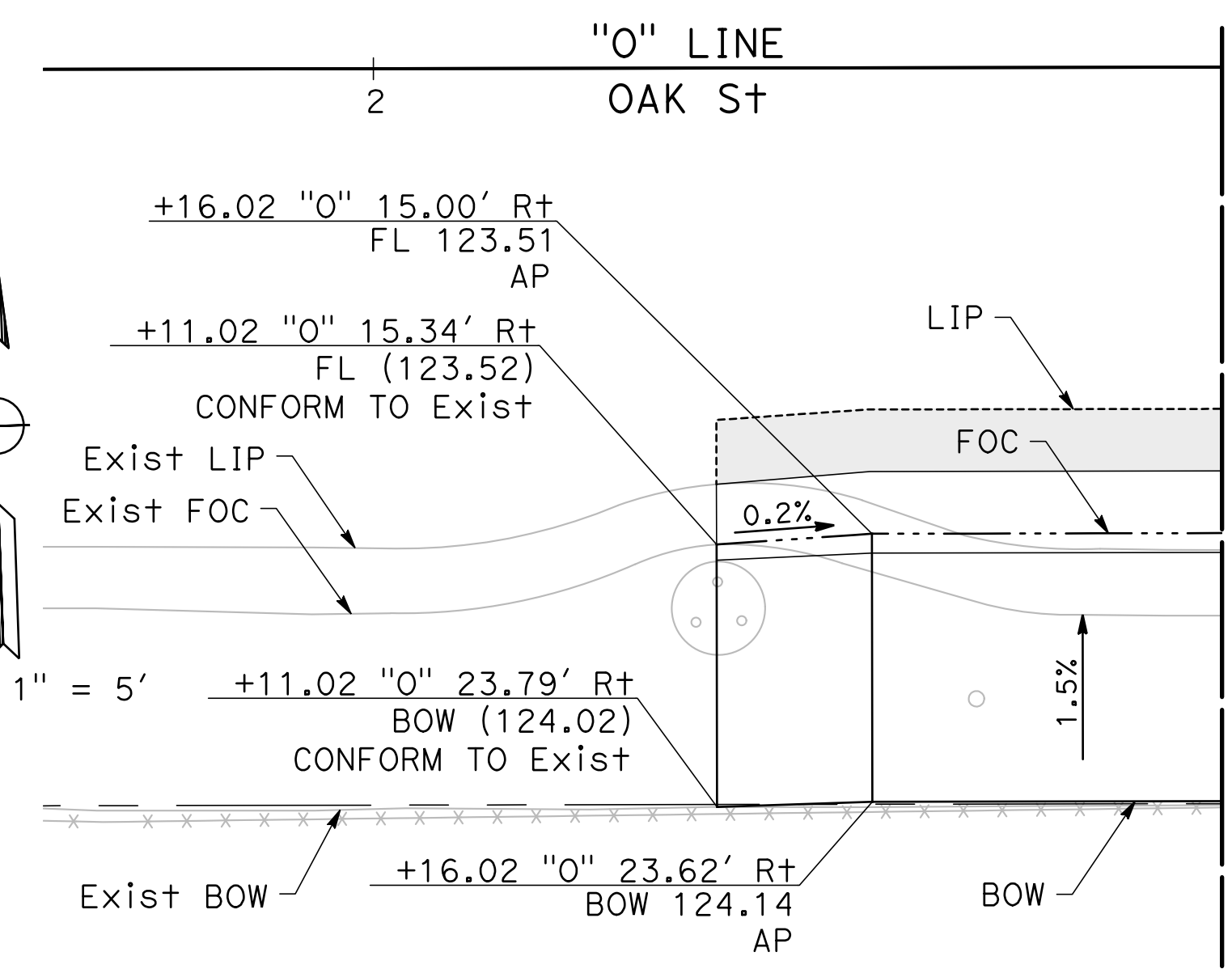
**MARK THOMAS**  
 DESIGNED BY: KD  
 DRAWN BY: JY  
 REVIEWED BY: DB  
 APPROVED BY: DB

COUNTY OF HUMBOLDT  
 DEPARTMENT OF PUBLIC WORKS  
**OAK St & F St TRAFFIC SIGNAL PROJECT**  
**CONSTRUCTION DETAILS**

SHEET  
**7**  
 OF  
**12**



**SECTION B-B**

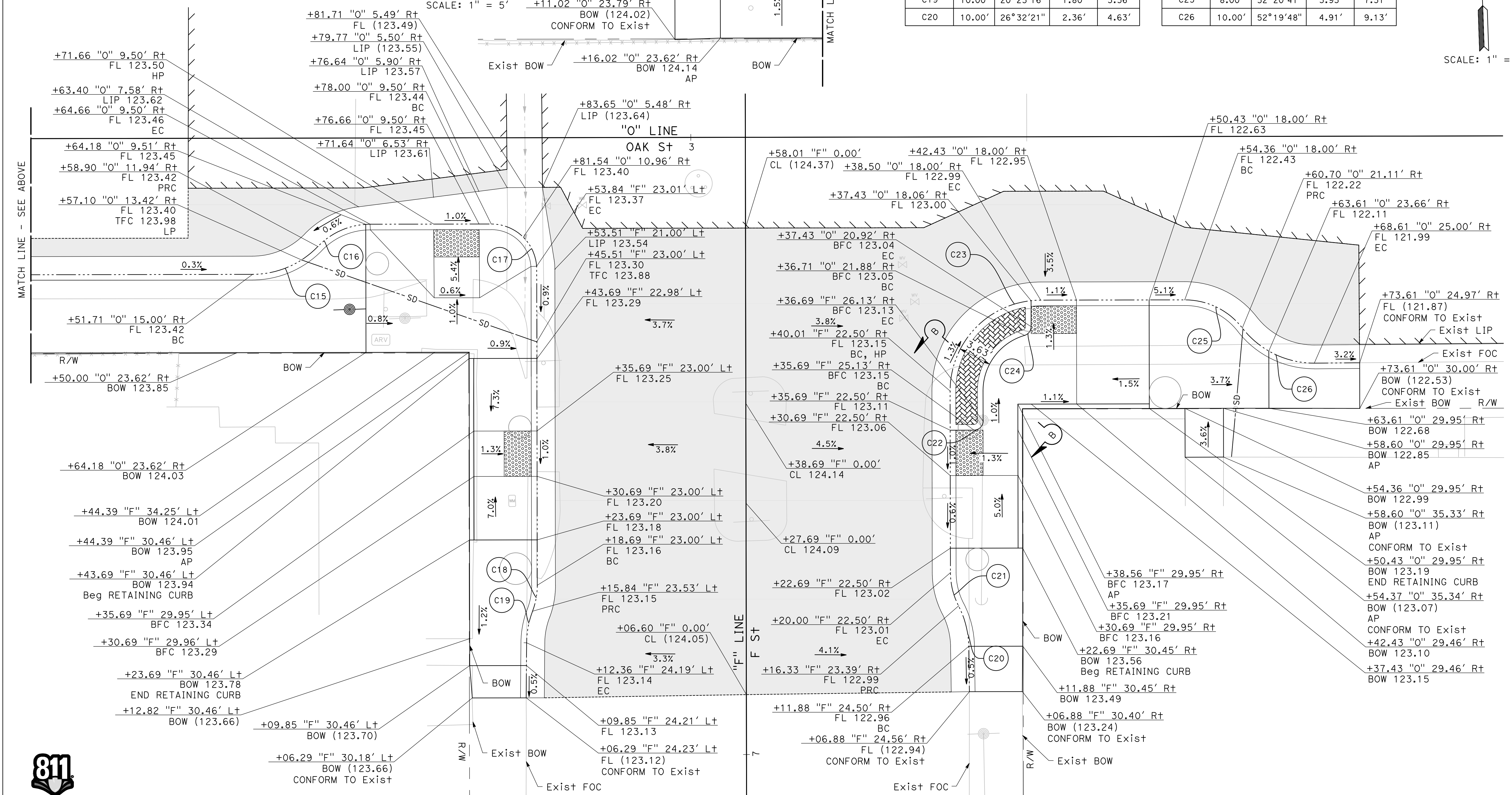
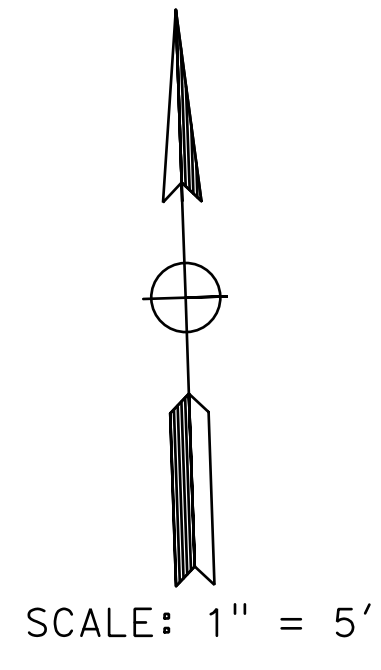


**CURVE TABLE**

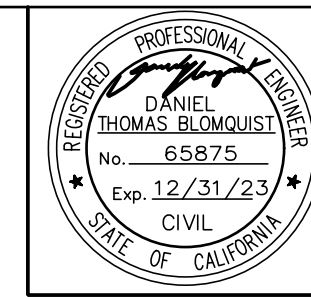
CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C15	10.00'	46°01'01"	4.25'	8.03'
C16	8.00'	46°01'01"	3.40'	6.43'
C17	5.00'	90°00'00"	5.00'	7.85'
C18	8.00'	20°55'58"	1.48'	2.92'
C19	10.00'	20°23'16"	1.80'	3.56'
C20	10.00'	26°32'21"	2.36'	4.63'

**CURVE TABLE**

CURVE #	RADIUS	DELTA	TANGENT	LENGTH
C21	8.00'	27°16'16"	1.94'	3.81'
C22	1.00'	90°00'00"	1.00'	1.57'
C23	10.00'	90°00'00"	10.00'	15.71'
C24	1.00'	73°43'49"	0.75'	1.29'
C25	8.00'	52°20'41"	3.93'	7.31'
C26	10.00'	52°19'48"	4.91'	9.13'







ROAD NAME: OAK St & F St	MILE POST:
ROAD NO:	
CONTRACT NO.: 321621	
DRAWING FILE NAME: HOF_D-1.dwg	
PLOT DATE: 02/28/2023	REVISION DATE:

<b>MARK THOMAS</b>
DESIGNED BY: KD
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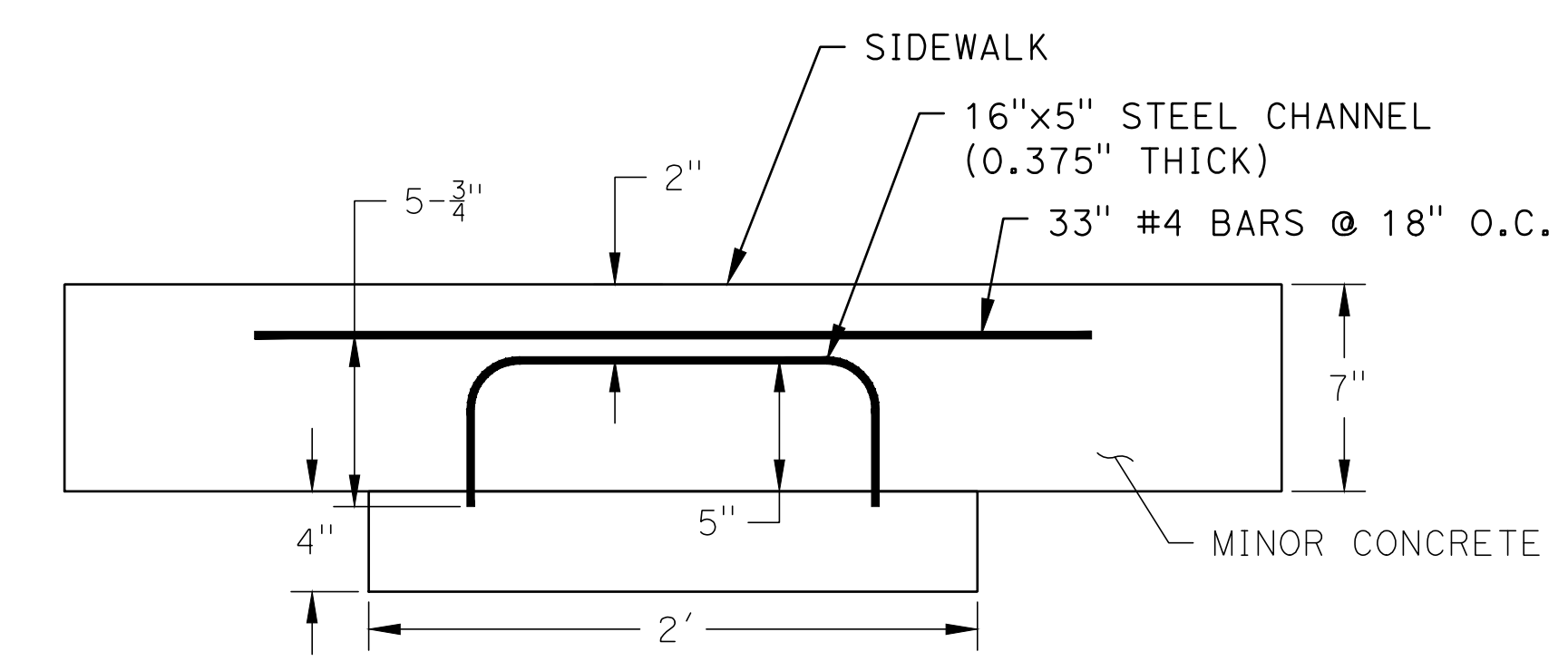
**NOTES:**

1. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBER OF U.S.A 48 HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER: (811) 642-2444. EXCAVATION IS DEFINED AS BEING 18 OR MORE INCHES IN DEPTH BELOW THE EXISTING SURFACE.
2. LOCATIONS OF MAPPED UTILITIES ARE APPROXIMATE. FIELD VERIFY UTILITIES PRIOR TO CONSTRUCTION.
3. SEE ELECTRICAL PLANS FOR TRAFFIC SIGNAL AND STREET LIGHT MODIFICATIONS.
4. TEMPORARY CONCRETE WASHOUT TO BE PROVIDED AND LOCATED BY THE CONTRACTOR.

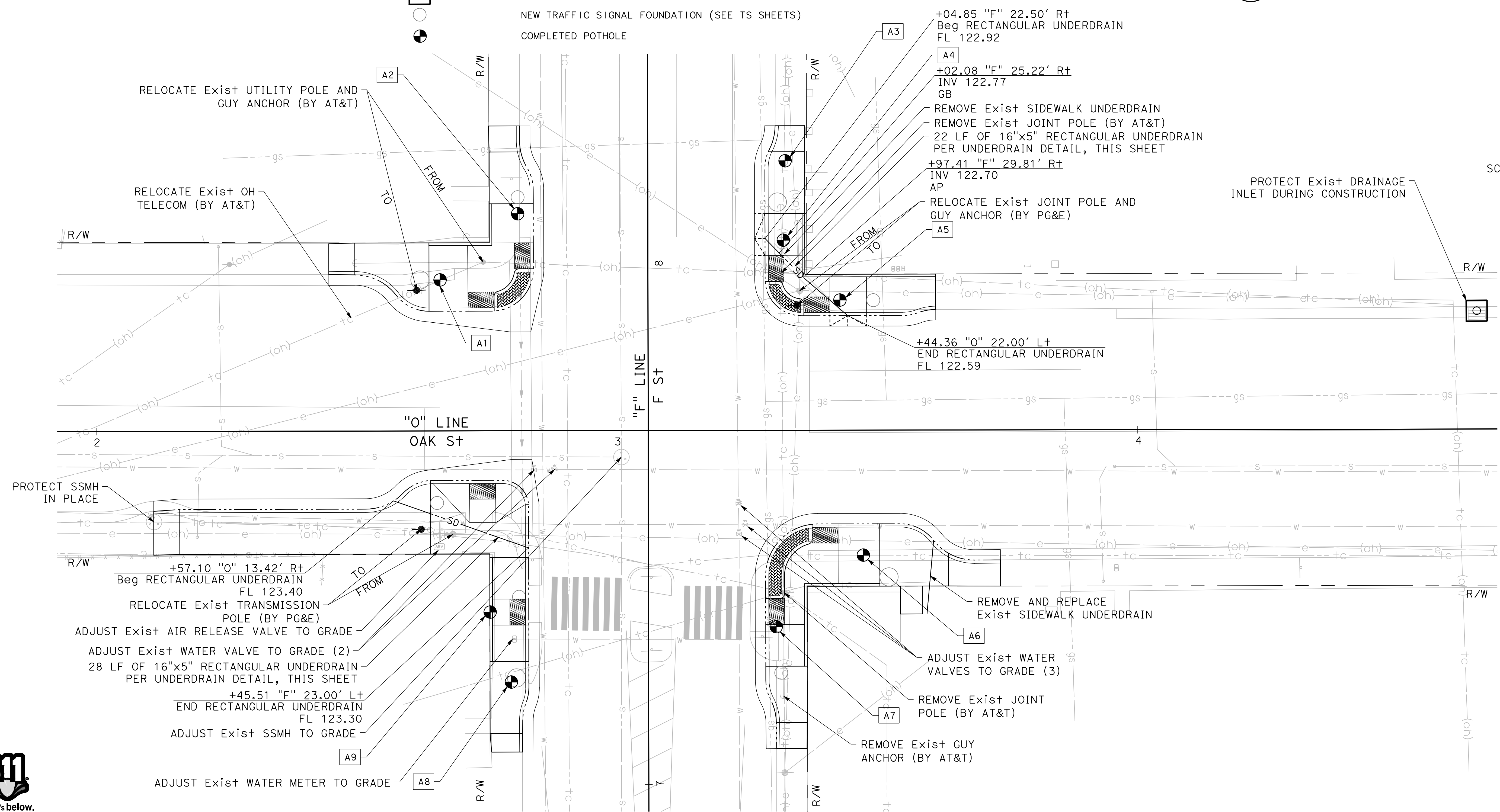
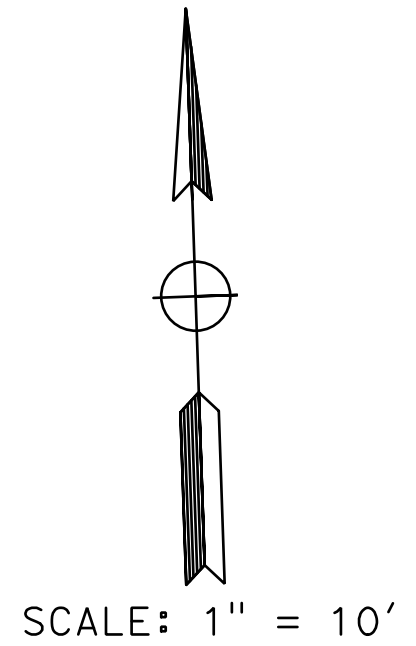
**LEGEND**

---	w	Exist WATERLINE
---	sd	Exist STORM DRAIN PIPE
---	s	Exist SANITARY SEWER PIPE
---	tc	Exist UNDERGROUND TELECOM LINE
---	e	Exist UNDERGROUND PG&E ELECTRIC LINE
---	e (oh)	Exist OVERHEAD PG&E ELECTRIC LINE
---	tc (oh)	Exist OVERHEAD TELECOM LINE
---		RIGHT OF WAY
●		Exist UTILITY POLE
●		PROPOSED UTILITY POLE
+o+		Exist FIRE HYDRANT
⊙		Exist MANHOLE
⊗		Exist WATER VALVE
⊕		Exist WATER METER
○		TEMPORARY DRAIN INLET PROTECTION
○		NEW TRAFFIC SIGNAL FOUNDATION (SEE TS SHEETS)
●		COMPLETED POTHOLE

#	UTILITY OWNER INFORMATION
A1	NO UTILITIES
A2	NO UTILITIES
A3	NO UTILITIES
A4	NO UTILITIES
A5	ABANDONED DRAIN/UNKNOWN WATER LATERAL; DEPTH: 2'.00
A6	TELECOM (3) (AT&T); DEPTH: 3.92'
A7	GAS (1) (PG&E); DEPTH: 4.17'
A8	NO UTILITIES
A9	NO UTILITIES



**1 RECTANGULAR UNDERDRAIN DETAIL**  
NOT TO SCALE



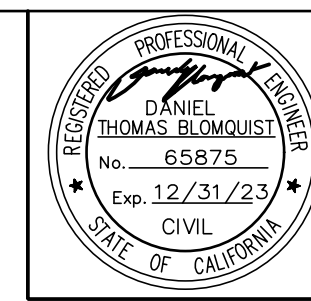


**LEGEND:**

- PAVEMENT DELINEATION DETAIL
- MARKER BEG/END OF TRAFFIC STRIPE DETAIL
- TRAFFIC STRIPE ANGLE POINT
- TRAFFIC STRIPE BC/EC
- REMOVE EXIST SIGN AND POST
- TYPE IV ARROW (L)(R)
- BIKE LOOP DETECTOR SYMBOL
- EXIST TYPE IV ARROW (L)(R)
- EXIST STOP PAVEMENT MARKING
- EXIST SLOW PAVEMENT MARKING
- EXIST SCHOOL PAVEMENT MARKING
- EXIST SHARED ROADWAY BICYCLE MARKING
- EXIST REMOVE STRIPE

**CONSTRUCTION NOTES:**

- 1 LIMIT LINE PER CALTRANS STD PLAN A24E
- 2 YELLOW SCHOOL ZONE CROSSWALK PER DETAIL 1
- 3 4" SOLID YELLOW AT 20' O.C.
- 4 REMOVE PAVEMENT MARKINGS AND STRIPES
- 5 RED CURB PAINT
- 6 REPAINT PAVEMENT MARKING AND STRIPES

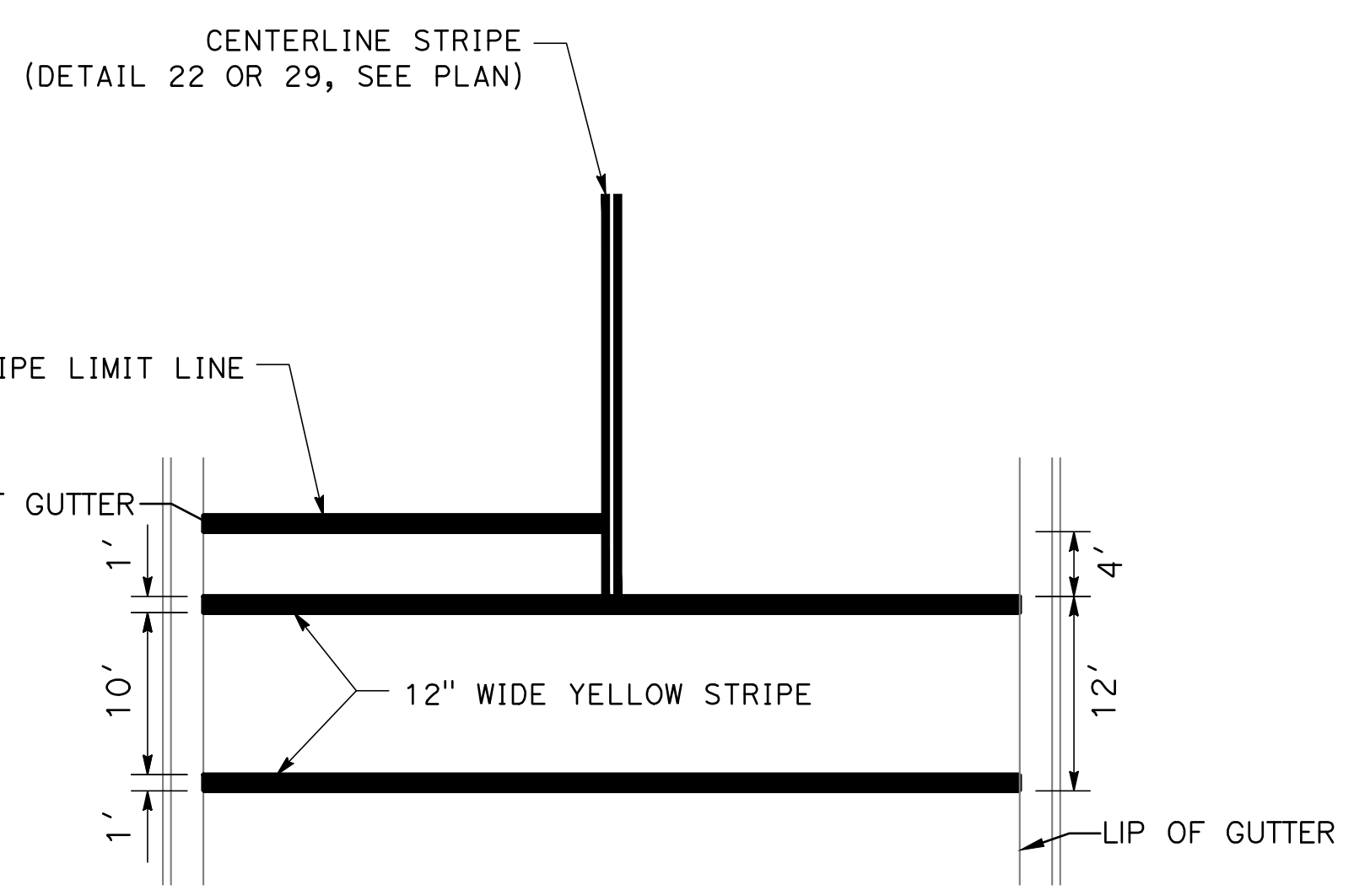
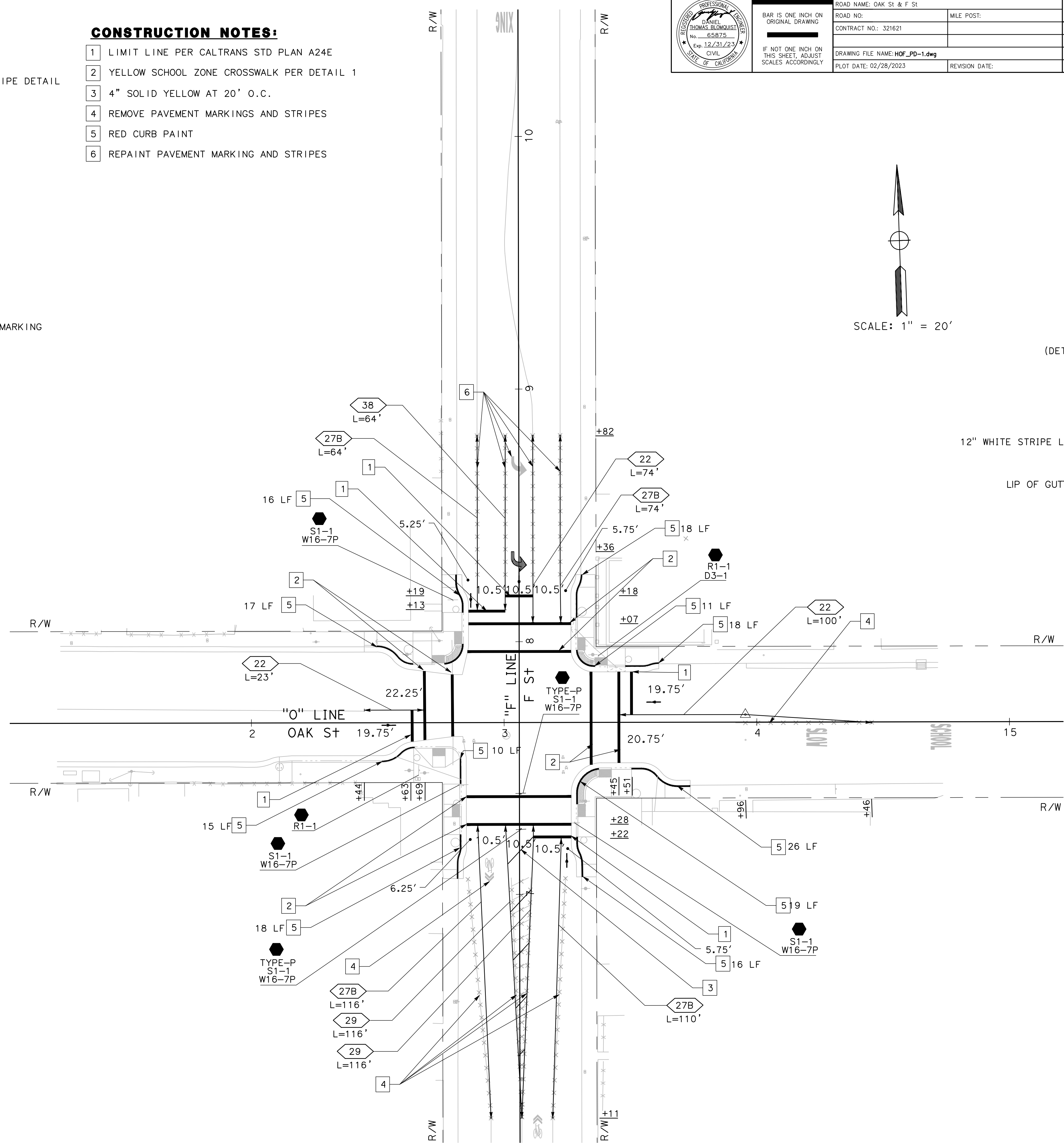
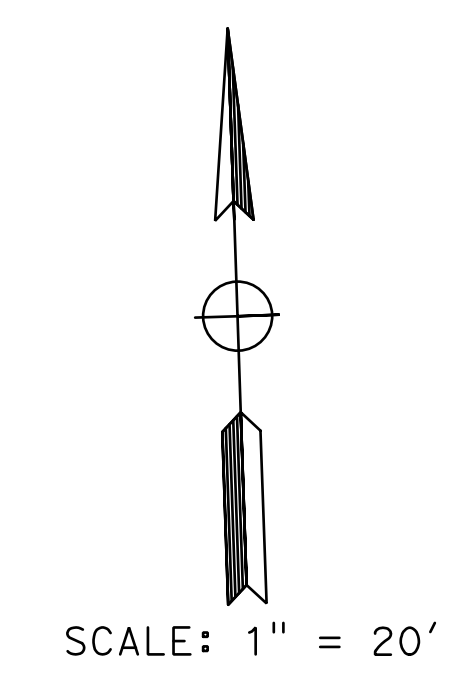


ROAD NAME: OAK St & F St	MILE POST:
ROAD NO:	
CONTRACT NO.: 321621	
DRAWING FILE NAME: HOF_PD-1.dwg	
PLOT DATE: 02/28/2023	REVISION DATE:

<b>MARK THOMAS</b>
DESIGNED BY: KD
DRAWN BY: JY
REVIEWED BY: DB
APPROVED BY: DB

<b>COUNTY OF HUMBOLDT</b> <b>DEPARTMENT OF PUBLIC WORKS</b>
<b>OAK St &amp; F St TRAFFIC SIGNAL PROJECT</b>
<b>PAVEMENT DELINEATION &amp; SIGN PLAN</b>

SHEET **9**  
OF  
**12**



**DETAIL 1**  
TYPICAL CROSSWALK STRIPING  
NO SCALE





**GENERAL NOTES:**

1. ALL WORK SHALL CONFORM TO THE LATEST CALTRANS STANDARD PLANS AND SPECIFICATIONS, 2014 CALIFORNIA MUTCD, SIGN SPECIFICATION SHEETS, AND THE PROJECT SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UNDERGROUND UTILITIES, WHETHER OR NOT THEY ARE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONTACT U.S.A. AND HAVE UTILITIES MARKED AT LEAST 48 HOURS PRIOR TO BEGINNING WORK. WHERE MARKINGS ARE NEAR PROPOSED FOUNDATIONS, THE CONTRACTOR SHALL LOCATE UNDERGROUND UTILITIES BY POT HOLING PRIOR TO EXCAVATING.
3. LOCATIONS OF SIGNAL STANDARDS, PULL BOXES, CONTROLLER, AND SERVICE PEDESTAL AS SHOWN ON THESE PLANS ARE APPROXIMATE. ACTUAL LOCATION SHALL BE CONFIRMED BY THE ENGINEER IN THE FIELD.
4. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL EQUIPMENT AND MATERIALS NECESSARY FOR THE SIGNAL TO OPERATE AS SHOWN IN THE PHASE DIAGRAM.
5. INSTALL 6" x 6" CONCRETE COLLARS ON ALL PULL BOXES INSTALLED IN LANDSCAPE AREAS.
6. ALL SIGNAL HEADS SHALL HAVE 12" LED SIGNAL INDICATIONS, BACKPLATES, TUNNEL VISORS, AND YELLOW RETROREFLECTIVE BORDERS.
7. THE CONDUCTOR SCHEDULE IS A GUIDE FOR THE CONDUCTORS REQUIRED FOR THE TRAFFIC SIGNAL. THE CONTRACTOR SHALL PROVIDE CONDUCTORS SHOWN IN THE CONDUCTOR SCHEDULE AND ALL CONDUCTORS NECESSARY FOR THE OPERATION OF THE TRAFFIC SIGNAL.
8. CONTRACTOR SHALL CONFIRM ADA LANDING AREAS AND REACH RANGE LIMITS WITH THE ENGINEER IN THE FIELD PRIOR TO THE INSTALLATION OF SIGNAL STANDARDS AND APS UNITS.

**INDEX OF ELECTRICAL SHEETS:**

- E-1 TRAFFIC SIGNAL GENERAL NOTES, LEGEND, ABBREVIATIONS, AND INDEX
- E-2 TRAFFIC SIGNAL PLAN
- E-3 CONDUCTOR AND EQUIPMENT SCHEDULES

**LEGEND:**

(SEE ALSO CALTRANS STANDARD PLAN ES-1A, ES-1B, AND ES-1C)

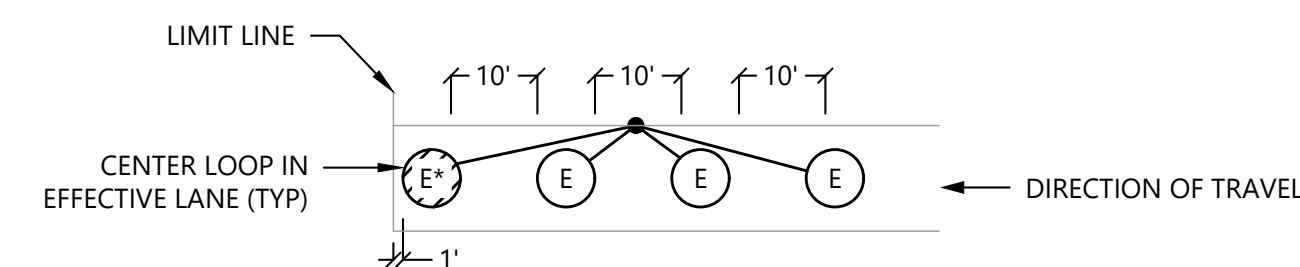
**ABBREVIATIONS:**

(SEE ALSO CALTRANS STANDARD PLAN A3A, A3B, AND A3C)

AWG AMERICAN-WIRE GAUGE  
 MUTCD MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES



ROAD NAME: OAK ST & F ST		<b>FEHR PEERS</b>	COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS		SHEET <b>10</b> OF <b>12</b>
BAR IS ONE INCH ON ORIGINAL DRAWING	ROAD NO:		MILE POST:	OAK ST + F ST TRAFFIC SIGNAL PROJECT	
	PROJECT NO.: RS22-4203		DESIGNED BY: KB		
			DRAWN BY: EM		
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	DRAWING FILE NAME: 4203-Signals.dwg		REVIEWED BY: DM		
	PLOT DATE: 3/9/2023	REVISION DATE:	APPROVED BY: KC		



**LEGEND**

E TYPE "E" LOOP  
 E\* MODIFIED TYPE "E" LOOP (COORDINATE WITH COUNTY)

**NOTES:**

- ALL LOOPS ARE WOUND CLOCKWISE.
- CENTER LOOPS IN EFFECTIVE AREA.
- HANDHOLES SHALL BE PLACED AS SHOWN.

**TYPICAL LOOP DETECTOR**  
NOT TO SCALE



**LEGEND**

E TYPE "E" LOOP  
 E\* MODIFIED TYPE "E" LOOP (COORDINATE WITH COUNTY)

**NOTES:**

- ALL LOOPS ARE WOUND CLOCKWISE.
- CENTER LOOPS IN EFFECTIVE AREA OR AS SHOWN.
- HANDHOLES SHALL BE PLACED AS SHOWN.

**TYPICAL LOOP DETECTOR (18' THROUGH/RIGHT TURN LANE)**  
NOT TO SCALE



PROJECT NOTES (THIS SHEET ONLY):

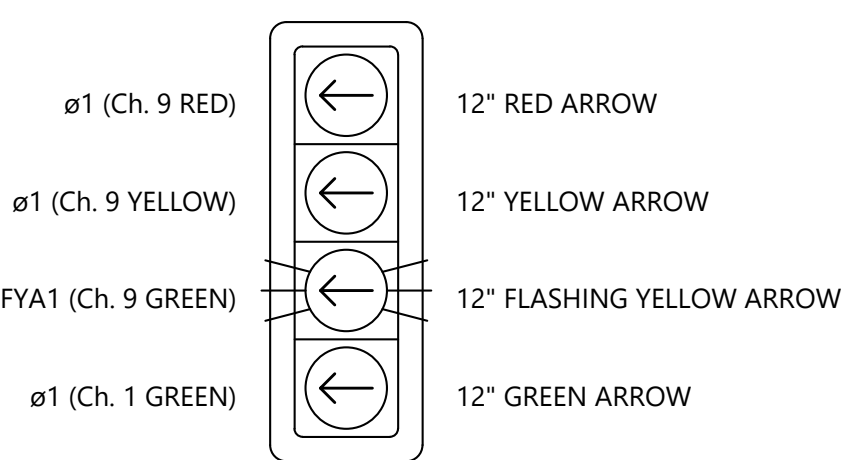
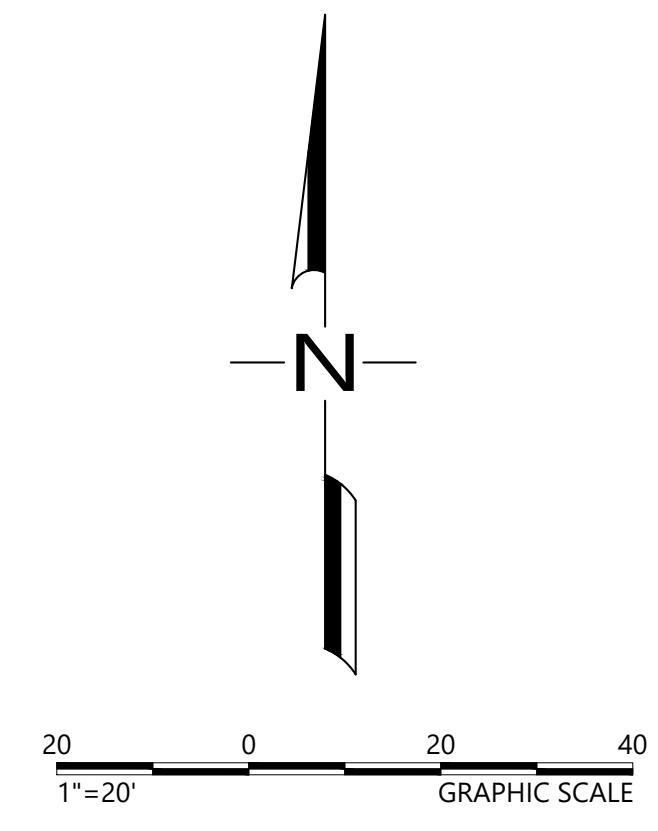
- 1 FURNISH AND INSTALL NEW MODEL 2070C CONTROLLER WITH McCAIN 2033 INTERSECTION CONTROL SOFTWARE IN NEW MODEL 332LS CABINET WITH BATTERY BACKUP SYSTEM. BATTERY BACKUP CABINET SHALL BE 1'2"x2'x4'8" MINIMUM PER CALTRANS STANDARD PLAN ES-3C. FURNISH AND INSTALL EVP PHASE SELECTOR(S) IN CONTROLLER CABINET.
- 2 FURNISH AND INSTALL TYPE III-AF SERVICE EQUIPMENT ENCLOSURE, SEE WIRING DIAGRAM ON SHEET E-3.
- 3 SEE SIGNAL CONTROLLER DETAIL ON SHEET E-3 FOR FOUNDATION DETAILS.
- 4 2"C, 3#2 (SERVICE), TO SERVICE POINT (TO BE DETERMINED)
- 5 2"C, 2#6 (CONTROLLER), 1#6G.
- 6 2"C, 2#8 (LIGHTING), 3#14 (PEU), 3#10 (FLASHING BEACON), 1#8G.
- 7 INSTALL 4-SECTION PROTECTED/PERMITTED LEFT TURN TRAFFIC SIGNAL PER DETAIL 'B' ON THIS SHEET.
- 8 2"C, 1 DLC.
- 9 2"C, 3#10 (FLASHING BEACON), 4 DLC.
- 10 2"C, 3#10 (FLASHING BEACON), 1 DLC.
- 11 3"C, PT (FUTURE TRAFFIC SIGNAL INTERCONNECT).
- 12 INSTALL No. 6 PULL BOX (FUTURE TRAFFIC SIGNAL INTERCONNECT).
- 13 EXISTING LUMINAIRE TO REMAIN ON RELOCATED WOOD POLE (BY OTHERS).
- 14 INSTALL 4'x4' MODIFIED TYPE E BICYCLE DETECTOR LOOP.
- 15 2"C, 3#10 (FLASHING BEACON), 6 DLC.
- 16 INSTALL 3.5'x3.5' MODIFIED TYPE E BICYCLE DETECTOR LOOP.



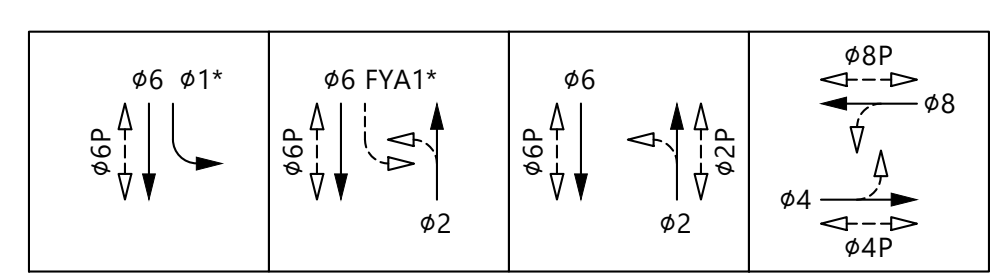
ROAD NAME: OAK ST & F ST	DESIGNED BY: KB
ROAD NO:	DRAWN BY: EM
PROJECT NO.: RS22-4203	REVIEWED BY: DM
MILE POST:	APPROVED BY: KC
DRAWING FILE NAME: 4203-Signals.dwg	
PLOT DATE: 3/9/2023	REVISION DATE:

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	
OAK ST + F ST TRAFFIC SIGNAL PROJECT	
TRAFFIC SIGNAL PLAN	

SHEET 11 OF 12



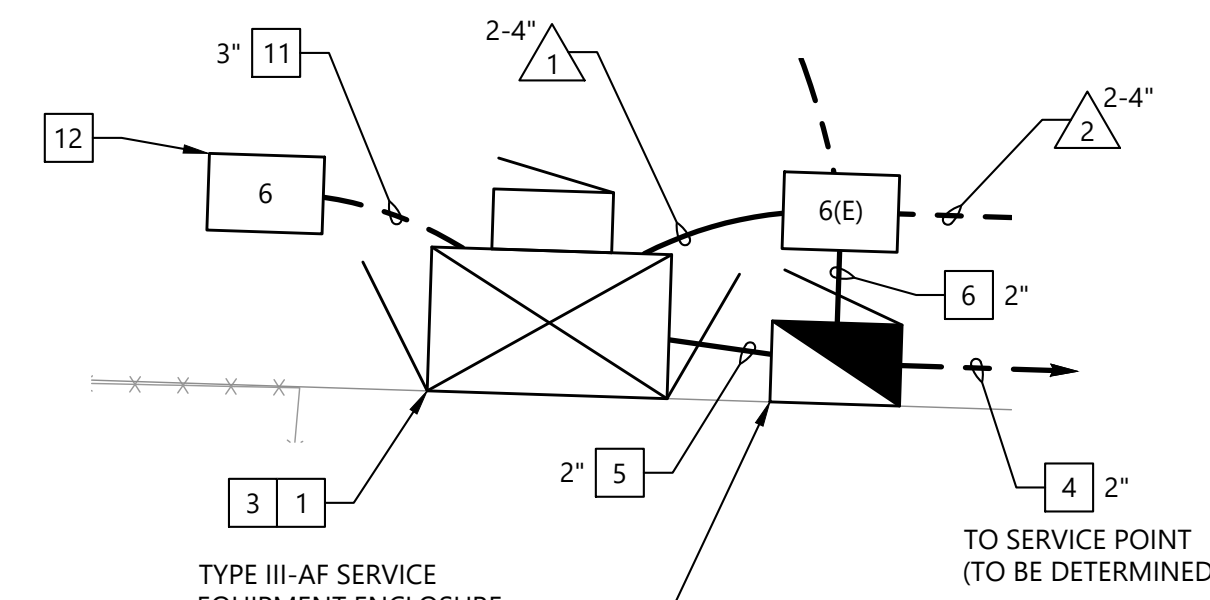
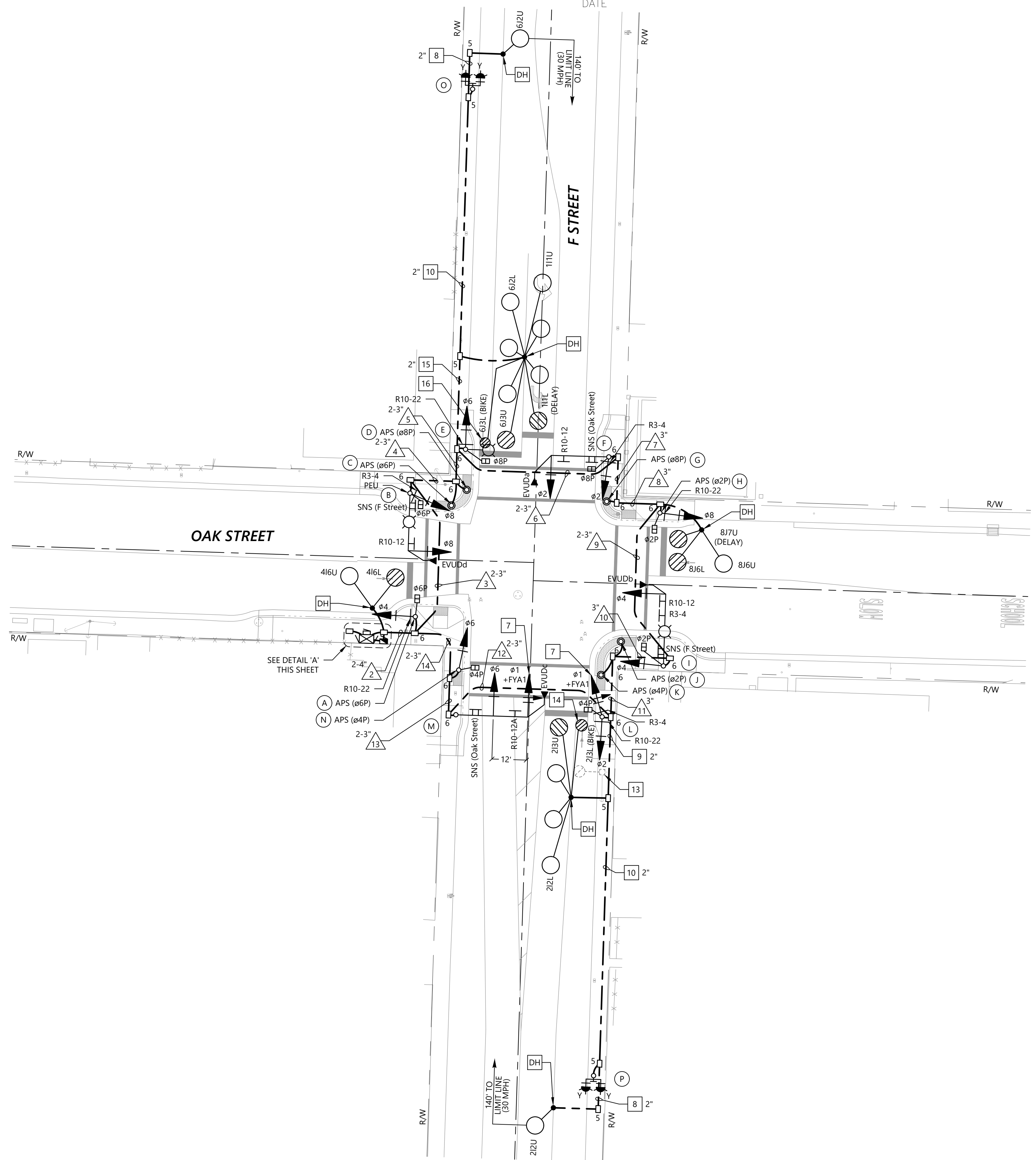
4-SECTION PROTECTED/PERMITTED TRAFFIC SIGNAL  
DETAIL 'B'  
NO SCALE



PHASE DIAGRAM  
STEADY DEMAND SEQUENCE --->

**EMERGENCY VEHICLE  
PREEMPTION**  
 EVUDa = ø2  
 EVUDb = ø4  
 EVUDc = ø1+ø6  
 EVUDd = ø8

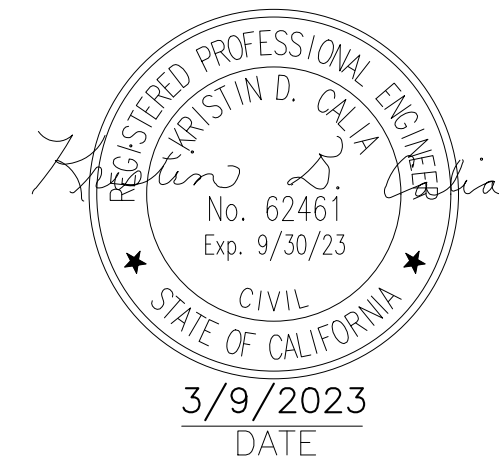
**POSTED SPEED**  
 F STREET = 30 MPH  
 OAK STREET = 25 MPH



TYPE III-AF SERVICE EQUIPMENT ENCLOSURE  
LOAD:  
1 - 1,000 W TRAFFIC SIGNAL  
2 - 200 W FLASHING BEACON  
3 - 50 W LED LUMINAIRE  
TO SERVICE POINT (TO BE DETERMINED)

DETAIL 'A'  
NO SCALE





ROAD NAME: OAK ST & F ST	DESIGNED BY: KB
PROJECT NO.: RS22-4203	DRAWN BY: EM
DRAWING FILE NAME: 4203-Signals.dwg	REVIEWED BY: DM
PLOT DATE: 3/9/2023	APPROVED BY: KC

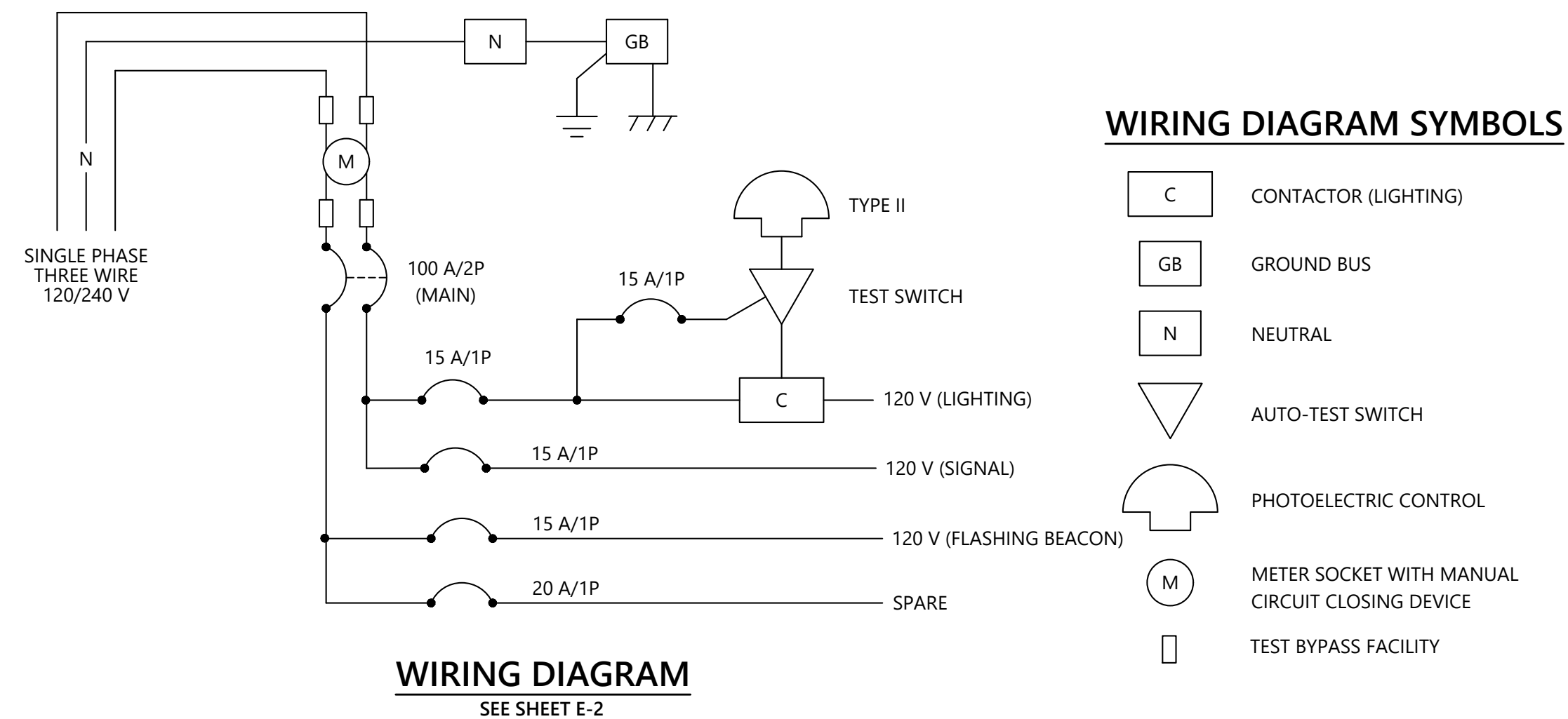
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	
OAK ST + F ST TRAFFIC SIGNAL PROJECT	
CONDUCTOR AND EQUIPMENT SCHEDULES	

CONDUCTOR SCHEDULE																
AWG OR CABLE	POLE/CIRCUIT	CONDUIT RUN														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
12 COND CABLE	A	ø4, ø6P	1	1												
	B	ø8, ø6P	1	1	1											
	E	ø6, ø8P	1	1	1	1	1									
	F	ø2, ø8P	1	1	1	1	1	1								
	H	ø8, ø2P	1	1	1	1	1	1	1	1						
	I	ø4, ø2P	1	1							1	1	1	1	1	
	L	ø1, ø2, FYA1, ø4P	1	1									1	1	1	
	M	ø1, ø6, FYA1	1	1										1	1	
	N	ø6, ø4P	1	1											1	
		TOTAL		9	9	4	3	3	2	1	1	0	1	1	2	3
3 COND CABLE	A	APS (ø6P)	1	1												
	C	APS (ø6P)	1	1	1	1										
	D	APS (ø8P)	1	1	1	1										
	G	APS (ø8P)	1	1	1	1	1	1	1							
	H	APS (ø2P)	1	1	1	1	1	1	1	1						
	J	APS (ø2P)	1	1								1	1	1	1	1
	K	APS (ø4P)	1	1									1	1	1	1
	N	APS (ø4P)	1	1												1
	TOTAL		8	8	4	4	2	2	2	1	0	0	2	2	2	3
NO. 14	PEU		3	3												
	TOTAL		0	3	3	0	0	0	0	0	0	0	0	0	0	0
NO. 10	FLASHING BEACON		3	3	3	3							3	3	3	
	TOTAL		0	3	3	3	3	0	0	0	0	0	0	3	3	3
NO. 8	LIGHTING		2	2	2	2						2	2	2	2	
	GROUND		1	1	1	1	1	1	1	1	1	1	1	1	1	
	TOTAL		1	3	3	3	3	1	1	1	1	3	3	3	3	3
DLC	ø1		2	2	2	2										
	ø2		4	4									4	4	4	
	ø4		2													
	ø6		4	4	4	4	4									
	ø8		3	3	3	3	3	3	3							
	TOTAL		15	13	9	9	9	3	3	3	0	0	0	4	4	4
	EVUC		4	4	2	1	1					1	1	1	2	2
	CONDUIT SIZE		2-4"	2-4"	2-3"	2-3"	2-3"	2-3"	3"	3"	2-3"	3"	3"	2-3"	2-3"	2-3"
	PERCENT FILL		23	24	22	19	17	10	14	11	1	10	14	11	15	18

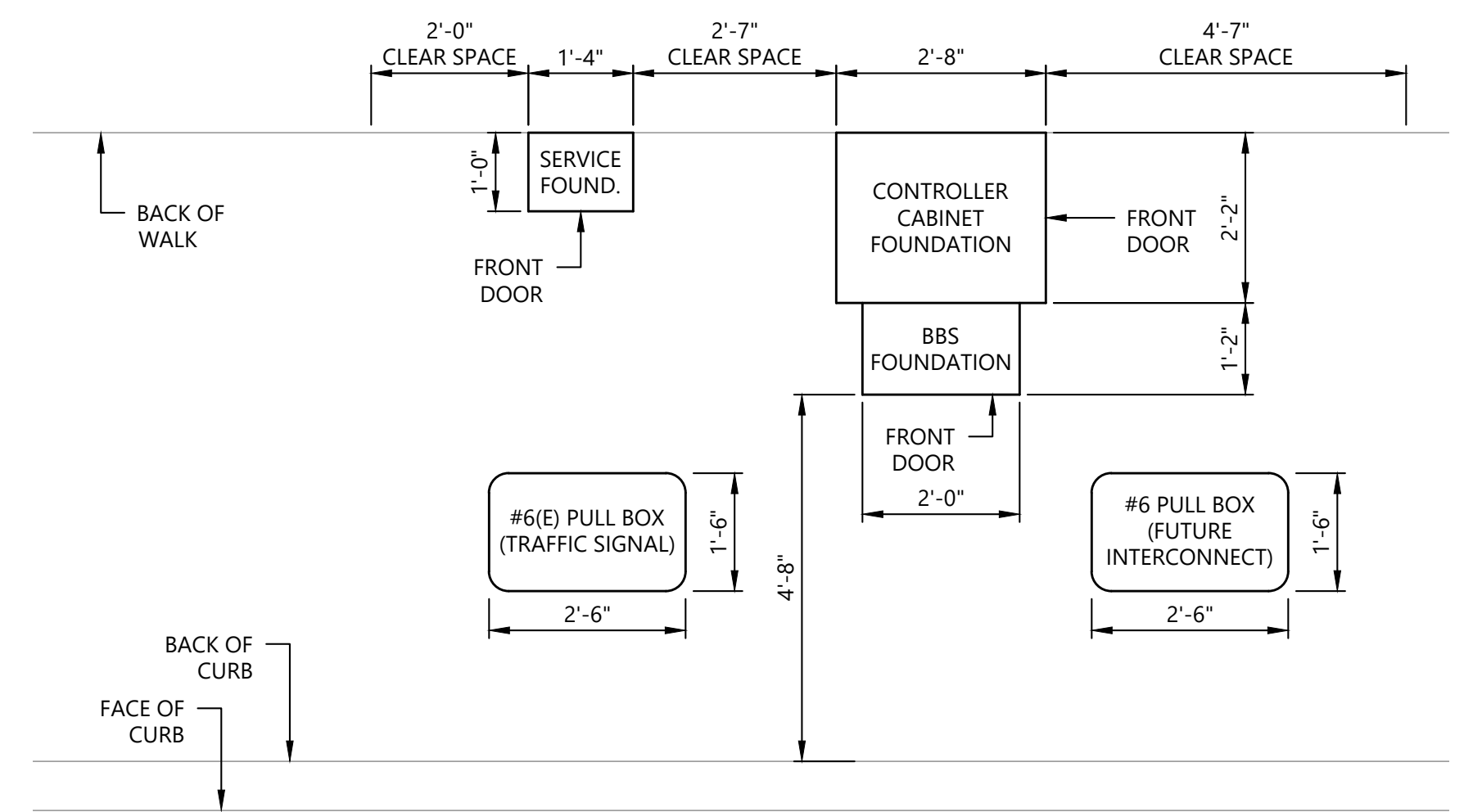
ALL CONDUIT AND CONDUCTORS SHALL BE NEW.

EQUIPMENT SCHEDULE											
LOCATION	STANDARD			LED LUMINAIRE <sup>1</sup>	VEHICLE SIGNAL MOUNTING		PEDESTRIAN SIGNAL MOUNTING	APS		SNS LEGEND	NOTES
	TYPE	SIGNAL MAST ARM	LUMINAIRE MAST ARM		MAST ARM	POLE		ø	ARROW		
A	1-B (10')	—	—	—	—	TV-1-T	SP-1-T	6	→	—	INSTALL R10-22 SIGN ON SIGNAL POLE FACING WEST.
B	17-3-100	20'	10'	50W	MAS	SV-1-T	SP-1-T	—	—	F Street	INSTALL PEU ON POLE TOP. INSTALL EVUDg ON SIGNAL HEAD FACING EAST. INSTALL R10-12 SIGN ON SIGNAL MAST ARM FACING EAST. INSTALL R3-4 SIGN ON SIGNAL POLE FACING EAST.
C	PBA POST (5'7")	—	—	—	—	—	—	6	→	—	—
D	PBA POST (5'7")	—	—	—	—	—	—	8	←	—	—
E	15TS	—	8'	50W	—	SV-1-T	SP-1-T	—	—	—	INSTALL R10-22 SIGN ON SIGNAL POLE FACING NORTH.
F	16-3-100	20'	—	—	MAS	SV-1-T	SP-1-T	—	—	Oak Street	INSTALL EVUDa ON SIGNAL HEAD FACING SOUTH. INSTALL R10-12 SIGN ON SIGNAL MAST ARM FACING SOUTH. INSTALL R3-4 SIGN ON SIGNAL POLE FACING SOUTH.
G	PBA POST (5'7")	—	—	—	—	—	—	8	→	—	—
H	1-B (10')	—	—	—	—	TV-1-T	SP-1-T	2	→	—	INSTALL R10-22 SIGN ON SIGNAL POLE FACING EAST.
I	19-4-100	25'	12'	50W	MAS	SV-1-T	SP-1-T	—	—	F Street	INSTALL EVUDb ON SIGNAL HEAD FACING WEST. INSTALL R10-12 AND R3-4 SIGNS ON SIGNAL MAST ARM FACING WEST.
J	PBA POST (5'7")	—	—	—	—	—	—	2	→	—	—
K	PBA POST (5'7")	—	—	—	—	—	—	4	←	—	—
L	1-B (10')	—	—	—	—	TV-2-T	SP-1-T	—	—	—	INSTALL R10-22 SIGN ON SIGNAL POLE FACING SOUTH. INSTALL R3-4 SIGN ON SIGNAL POLE FACING NORTH.
M	18-4-100	25'	—	—	MAS -4B MAS	—	—	—	—	Oak Street	INSTALL EVUDc ON SIGNAL HEAD FACING NORTH. INSTALL R10-12A SIGN ON SIGNAL MAST ARM FACING NORTH.
N	1-B (10')	—	—	—	—	TV-1-T	SP-1-T	4	→	—	—
O	15-FBS	—	—	—	—	SV SV	—	—	—	—	INSTALL TYPE 15-FBS WITH W3-3 SIGN FACING NORTH PER CALTRANS STANDARD PLAN ES-7J.
P	15-FBS	—	—	—	—	SV SV	—	—	—	—	INSTALL TYPE 15-FBS WITH W3-3 SIGN FACING SOUTH PER CALTRANS STANDARD PLAN ES-7J.

NOTES:  
1. LED LUMINAIRE SHALL BE CREE XSP B2MEA 40K, 50W, TYPE 2, OR APPROVED EQUAL PROVIDING ROADWAY 1 DISTRIBUTION.  
2. ALL EQUIPMENT SHALL BE NEW.



WIRING DIAGRAM  
SEE SHEET E-2



SIGNAL CONTROLLER DETAIL  
SEE SHEET E-2